

**The Friedman Collection:
An Analytical Guide**



Rose Mary Sheldon

In Memoriam

David Atlee Phillips

“It’s a dirty job, but somebody has to do it.”

Preface and Grateful Acknowledgements

No project of this size could be attempted or completed without the help of many other people. First and foremost I must thank Brian Shaw, President of the George C. Marshall Foundation and Paul B. Barron, Director of the Library and Archives for their permission to publish the collection. The staff of the Library, both past and present, was exceedingly helpful in getting the materials to me, especially JoAnn Hartog and Anne Wells, who arranged to have items delivered to the reading room before the Friedman Room itself was open to researchers. Peggy Dillard, now Director of the Woodrow Wilson Library in Staunton, Virginia, granted me unfettered access to the Friedman Collection and facilitated this publication in many ways. I thank my secretary Deneise Shafer for helping with the data input stage and helping to prepare the manuscript. Judy Rogers edited the final manuscript and the accuracy of the text is due entirely to her.

Paul B. Barron, in particular, has understood the importance of getting this guide online and out to the interested public. A printed manuscript would not only have been too long to publish, but also too cumbersome to use, not to mention the time it would have taken to index the work. Now, researchers can simply scan the complete catalogue for topics of interest. We plan to update the work if corrections need to be made or if missing items are found. Readers who may have information on the missing items or who may wish to donate copies of the missing items are welcome to contact the Marshall Library

The Friedman Collection would not be nearly as complete if it were not for the work of Megan Newman, the Inter-Library Loan officer at VMI. She provided us with duplicate copies of many articles that had disappeared from the collection and have now been replaced. She verified the bibliographical information on a good many more entries. The Staff of the Preston Library at the Virginia Military Institute has always been supportive of my projects.

**William F. Friedman:
A Man and His Collection**

William F. Friedman has always been famous among cryptographers. Since the publication of Ronald W. Clark's The Man Who Broke Purple: The Life of Colonel William F. Friedman, (London: Weidenfeld & Nicolson, 1977), however, he has become even better known to the general public. For anyone left not knowing about his work, Friedman was the U.S. Army cryptographer who ran the research division of the Army's Signal Intelligence Service (SIS) in the 1930s, and parts of its follow-on services into the 1950s. In the late 1930s, subordinates of his led by Frank Rowlett broke Japan's PURPLE cipher, thus disclosing Japanese diplomatic secrets beginning before World War II. William F. Friedman was married to Elizebeth Smith Friedman a cryptanalyst and author, and a pioneer in U.S. cryptography. Too often referred to only as William Friedman's wife, she is credited with numerous contributions to cryptology, and she enjoyed many successes in her own right. It was Elizebeth who first introduced her husband to the field.

Together, these superbly talented people collected a library of books on cryptography and actual cryptographic machines that included everything from a Captain Midnight decoder ring to an actual Enigma machine. As they served the military, worked for various departments of the government, and raised a family they continued to add to the collection until William Friedman's death in 1969. Mrs. Friedman sent the collection to the Marshall Library in 1970 consisting of 74 boxes, 3 items (desk, file cabinet, card file), author file by author and decimal number, contracts, and donation papers.

WFF (as he will be referred to hereafter) was a collector of information not a collector of rare books. He was happy to have Xerox copies of originals. Unlike Charles Jastrow Mendelsohn, who built the largest collection of antiquarian books on cryptology in the world, the Friedmans

did not have that kind of expendable cash for collecting purposes. WFF was interested in the content of the book and its importance in the history of cryptology. The Mendelsohn Collection is now housed in the Rare Books and Manuscript Department of the Van Pelt-Dietrich Library of the University of Pennsylvania. Fortunately for the Marshall Library, WFF became Mendelsohn's literary executor and many of the items that are now in the FC are copies of Mendelsohn's originals.

WFF's library helped him to write the many public and classified lectures he gave over the years. His knowledge of the history of cryptology was so immense and his collection so replete with materials, that when the NSA commissioned him to write the history of cryptology in six lectures, he found it immensely difficult. The scope of the lectures he planned did not include World War II, which he wanted to leave for a new contract.

The first thing one notices about the Friedman Collection (hereafter referred to as the FC), is that there are some items missing. This had nothing to do with the efficiency of the Friedmans or the Marshall Library. Because of a little known statute passed in 1957, some of the material was reclassified by NSA and removed. When the "Restricted" classification used during World War II had been lifted by Executive Order No. 10503, effective 15 December 1953, it meant many of the items in the FC could be made public. However, five years later, DOD Directive 5200.1, dated 8 July 1957, made all material related to cryptologic systems previously classified Restricted upgraded to Confidential. At first WFF did not even know about the DOD directive until told by NSA. WFF wrote in a document dated October 22, 1969: "What to do about those early writings of mine which are still held in the vaults of the NSA and copies of which I was not permitted to retain? I have practically given up hope of being able, at long last, to get those things released so that they might be integrated with the things included in my gift to

the Marshall Library.” All of the old Signal Corps Bulletins were affected and WFF was unable to republish some of his earlier articles on topics such as the Zimmermann Telegram. The law also applied to his Elements of Cryptanalysis and his technical brochures.

There is an NSA transmittal form for the classified documents taken from his house on June 26, 1959. They included:

1. An envelope with his lecture cards.
2. COMINT hard facts on the Cold War
3. Machine identification of words
4. Envelope of misc. memos, regulations, etc.
5. First three lectures of his contract
6. Marine Corps lecture series. Draft and final copies
7. Lectures given at SCAMP 1958. 6 folders and cards.
8. The Zimmermann Telegram lecture
9. One folder marked NSA Consultant
10. Folder of receipts
11. One folder marked NSA Scientific Advisory Board.

WFF also sent back the Principles of the Solution of Military Field Codes used by the German Army in 1917. German Military Ciphers from February to November 1918, Studies in German Diplomatic Codes employed during the World War. American Army Field Codes in the AEF Forces during the First World War, Field Codes Used by the German Army during the World War and General Solution for the ADFGVX Cipher System, Statistical Methods of Cryptanalysis, Statistics for Cryptology, The Zimmermann Telegram of January 16, 1917 and

its cryptographic background, Military Cryptanalysis pts 1-4. All of these had previously been in WFF's collection. These documents have now been returned to the FC by NSA.

WFF was not a great fan of the classification system used by the U.S. Government. In **Item 1102**, for example, he cites an article on cryptography in the American Civil War that was marked "Unclassified" and yet an article on cryptography in Greek and Roman times is labeled "restricted"! Why the NSA would classify codes from WWI was incomprehensible to him. WFF himself wrote in **Item 1405.1** that "The days when hand ciphers were all that were available are gone." Automation in cryptography had already been used for over a dozen years when he wrote those words. "Even the smallest nations," he said, "don't care a fig about them." Yet the NSA hung onto all of the material. It seemed bizarre that NSA took copies of certain books from the FC and yet they remained available in the Mendelsohn Collection and from the Library of Congress.

In a letter of September 10, 1991, Glenn S. Cook, Archivist Librarian at the Marshall Library sent Ms. Jean Schable of the National Archives Declassification Bureau, 34 folders of material in three boxes marked "Classified." Cook wrote: "This is all of the classified material that had been held in security . . . at the Marshall Library. Much of the material consisted of microfilm reels. Of those items marked "From the Friedman Collection" 34 are letters between Lester Bensinger and WFF (1942). There are also numerous letters between WFF and Boris Hagelin (1945), letters between Hedden and WFF and vice versa. Letters between Yves Gylden and WFF (1938, 1945), letters between General Canine and WFF, and Qvarnstrom. There is an oral history interview with Wm. G. Foster (August 5, 1964); A memo from Ch. Morrissey to Ned Nordness, Letters to General Canine from Penny, and audio cassette interview with Mrs. Friedman (80 page transcript), and a Xeroxed memo from W.B. Smith to Tokyo dated October

1950), and a French Govt. report from the Ministère de la Marine, Notice succinct d'emploi de la machine à chiffrer. Over a thousand pages in material, The Manual to Converter M-209, 209A and 209B, The Communications Security Manual, Analysis of the Hagelin Cryptograph, a Cryptanalysis Manual S-700, Elementary Course in probability, Traffic Analysis Manual, HB Book General Solution for Double Transposition Cipher, analysis of mechanical-electric Cryptograph. We are still trying to get these materials back to the Marshall.

In a letter of December 12, 1969 ESF wrote to Lt. Gen. Marshall S. Carter, President of the George C. Marshall Foundation, saying that NSA should send everything back to Lexington except for the papers in connection with WFF's patents. She also mentions 14 items originally classified Restricted which were declassified by President Eisenhower's Executive order that wiped out that classification. She also mentions fifteen texts in black binders that were on the technical aspects of cryptography. Of the fifteen classified texts, three of them were marked secret and 12 Confidential. The items on the list she attached have now been returned to the FC.

Since thirty-years have passed since then and some of these items have since been declassified. The entire four volumes of Friedman's Elements of Cryptanalysis are now available online from the NSA website. Other items have been obtained by the VMI Department of History under the Freedom of Information Act and this process continues. Unfortunately, when we have no descriptive cards and no items we have no idea of what to ask NSA for. The index cards were sanitized, not just the collection itself. When items could be identified, but the original number was unknown, I took an unused number from the end of the series and added it. These numbers are in square brackets. John Friedman, WFF's son shared a story with me about his father's collection. He said that when he was a young boy and wanted to read a book in his father's collection, he was required to sign it out on a card just to take it from the second floor to

the first floor of his house! A man this careful about his books would allow nothing to go missing, and he certainly would not have numbered 3,000 items only to have 2,000 sent to the Marshall Library. My goal has been to liberate as much of this material as possible.

Even more disturbing than the NSA excisions were cases of vandalism. **Item 1506**, Samuel Pepys Diary is incomplete because some vandal has excised not only a facsimile of a sheet of the Pepy's diary itself, but also a reproduction of a portrait of the Reverend J. A. Smith, who deciphered the diary. Sometimes things were purloined and returned. ESF tells us in **Item 413** that the contents of two envelopes were purloined and then were anonymously returned by "a mysterious lady employed on the Hill."

There are so many gems in the FC, and they reflect WFF's far-ranging interests. One of the most important is the Friedmans' book, The Shakespeare Ciphers Examined. It is a classic in the field and pretty much sounded a death knell for the Baconians who had created a home industry in literature claiming Sir Francis Bacon had written Shakespeare's plays. **Item 1319** notes that Baconians often attacked WFF, but he never attacked them. He disagreed with them but he was always polite.

Also in the FC are original code books from the Civil War which are among the precious few to survive. There are copies of a book written entirely without the letter E. Photostat copies of the Voynich Manuscript, Friedman's study of the famous Beale Treasure, and of course, the many crypto devices the Friedmans collected over the years which are now in the Marshall Museum. Friedman was interested in writing systems like Minoan Linear A, and the Phaistos disk which have never been decoded. There are works on Egyptian hieroglyphic codes and Greek and Roman cryptography that first lured me into the collection. WFF worked in his spare time on cracking the code of Mayan glyphs but never succeeded. The glyphs were deciphered

after he died, and I have updated these sections to guide the reader to the new literature on the decipherment. I have done this with several major developments that occurred after WFF's death.

The 1,500 descriptive cards, sent with the collection to the Marshall Library in 1966, show a full range of opinions on a variety of subjects. WFF and ESF were both people of staunch principles. They saw Senator McCarthy for what he was and despised witch hunts. They describe McCarthy as "a man who flouted the authority of the Senate, who overrode the Constitution while his followers cheered. Outside of America he was a gift to Russian propaganda." (See **Item 1642**) As brilliant a man as WFF was, in the field of code-breaking, when it came to modern art or poetry, he was a traditionalist with a major blind spot. The writings of James Joyce or Gertrude Stein were incomprehensible to him. He lumped all such works together into a category he called "The Cult of Intelligibility." Both the Friedmans could be scathingly critical of people they considered amateurs in the field of cryptology or cryptologic history. Their comments could range from a simple dismissive comment to a charge of "derangement" (see **Item 1382**) on the part of someone who had claimed to have the solution to a cipher but did not use "scientific method." In **Item 1400** he wrote that "the naivete of some college professors is astounding." One of the targets of WFF's disapproval was David Kahn, a man whose doctoral dissertation was turned into the monumental book, The Codebreakers. WFF was livid after its publication, but refused to review it or comment publicly on the book. It is a great irony that the one book the FC does not contain is the standard work on the history codebreaking. Part of WFF's disapproval comes from that eternal dialectic between professional cryptographers who have access to the classified material but cannot write about it, and the "amateurs" who write the history but do not have access to the insider's information. The Friedmans refer to Kahn as a

“devoted amateur.” (See **Item 1552**). They gave little credit to people who had no professional codebreaking experience. One can only ponder whether part of Friedman’s anger was generated by the fact that Kahn wrote the book he should have written himself. WFF’s comments on the work of Ladislas Farago, however, were probably valid. He did sloppy work and I have listed reviews by professional intelligence people supporting this view. (See **Item 1550.1**).

I have left the comments of the Friedmans in their descriptions and have not edited them in any way. It has not been my job to censor their comments nor to defend or malign anyone’s reputation. In the rare place where I have added a personal comment, I have added my initials: RMS, to distinguish my opinions from those of the Friedmans. My only other addition was to cross-reference the entries with David Kahn’s books, The Codebreakers and Reader of Gentlemen’s Mail, my own Espionage in the Ancient World: An Annotated Bibliography, and Galland’s Bibliography of the Literature of Cryptography which was dedicated to WFF.

One should not go looking through this collection for hints about what WFF did for the government. He knew his work was classified and he intended to keep it that way. Even when asked by his own son, he would shake his head “no” and say: “I gave my word.” One immediately notices there is no mention of the Enigma machine or the Japanese Purple code, except that which had gone into print by 1964. There are only a handful of mentions to Arlington Hall but nothing about what went on there. Bletchley Park is never mentioned at all. And yet it was Friedman’s work, in effect, that directed the course of the naval battle at Midway, the most decisive of WWII. On Pearl Harbor, WFF indicates which books on Pearl Harbor he found reliable, like **Item 901**. It was the cracking of the Purple code that told us the Japanese were going to attack the U.S. The most revealing comment made in the FC by WFF on the subject of Pearl Harbor is: “But they knew, they knew!” WFF seems to have exonerated both Roosevelt

and George Marshall of any duplicity in respect to the Purple warnings received before Pearl Harbor. It is clear he was not a fan of the revisionists.

WFF was equally terse about matters concerning NSA. One will find items autographed to WFF from Solomon Kullback, Frank B. Rowlett, and Abraham Sinkov, but nothing about their activities. WFF had a falling out with the NSA. His heart sickened over the new order to spy on allies, the world of tricks and the CIA. WFF was disgusted when NSA started using lie detectors (see **Items 1757.1 & 1757.2**). Ronald Clark writes in his biography: “a clearer picture of the significance of the secret missions of 1957 and 1958 is now emerging. These were the operations which appear to have turned WFF against the NSA. The NSA turned sour, impounded his papers and harassed him with petty humiliations. He found himself directed by “officials who were either so obsessed with security that they would hardly let him talk to his own wife” (herself an expert cryptologist) “or so pig-headed that they failed to use the priceless intelligence he provided.”

No one knew WFF better than his wife Elizebeth Smith Friedman. In her correspondence she wrote: “Next to his passionate devotion to his country, the ruling precept of his life was KNOWLEDGE IS POWER.” His collection is a reflection of this motto. ESF also wrote: He [my husband] took all learning as his province. He loved and knew music - - played the violin and mandolin; he read fluently and spoke colloquially German and French and was able to work in several other languages because of a fine Latin base.” His collection reflects his love of languages, codes and the many mysteries connected with both.

Keeping so many secrets took a great toll on WFF’s health both mental and physical. On the moral issue of reading other people’s mail he wrote: “I have often wondered whether a good portion of my psychic difficulties over the years are not attributable in part, at least, to that

ambivalence.” Having been asked whether it was necessary to be insane in order to be a cryptographer, WFF quipped to the Swedish cryptographer, Boris Hagelin: “it is not necessary but it helps.” John felt his father’s depression came over being “continually put down and ripped off by his superiors.”

WFF died on November 2, 1969 and is buried in Arlington National Cemetery. He was truly a giant in his field and a hero whose work saved the lives of countless Americans and their allies. He should be remembered for “his unflagging dedication to his country’s welfare and his unshakeable integrity.”

My fascination with WFF and his collection comes from four things.

1) As a life-long researcher, I am always grateful for access to personal libraries and the treasures they hold. WFF was an avid collector, a wide-ranging scholar and a polyglot. His daughter Barbara writes of: “his deep ties to his early Jewish upbringing especially his great love and respect for his own father the “Talmudic Scholar” who spoke nine languages.” It has been my great pleasure to help in making the FC more accessible to scholars everywhere.

2) WFF was, as his son, John Friedman, described him, “a charming old-world type.” In our modern age of anti-heroes, reality t.v. and an ever-present deluge of vulgarity on the airwaves, it is nice to contemplate someone who remained a true scholar and gentleman. WFF had an overbearing sense of uprightness and honesty. He never swore and he didn’t allow children to. And in spite of his great achievements, he remained, till the end, a modest man. Herman Wouk, the Pulitzer Prize-winning novelist wrote of him: “His effect on world history was incalculable, greater than kings and captains. Yet what a modest man.”

3) In a world of moral ambiguity and relativism, the Friedmans had a clear vision of the difference between right and wrong. Fred Friendly said that WFF had a ruthless, almost

mathematical honesty. He could also keep a secret – another lost art. He never revealed what he did for the government. And it pained him greatly when he thought the government did not trust him.

4) WFF refused to ever take the easy way, and in an age where “near enough” seems to be considered a high standard, it is nice to read about a man who did not cut corners.

This project has been a labor of love to re-construct the original FC by replacing lost open-source articles and books with replacement copies and to “liberate” from the NSA the material taken so many years ago and which no longer need be hidden from the public. I am eternally grateful that Forrest Pogue’s attempt to sell the Friedman books, referred to in a letter of September 7, 1970, failed. The FC is here in Lexington for future generations of scholars, and I hope that this guide to the collection will be of use to students and researchers.

One of the great things about publishing a guide like this online is that one can add items, correct mistakes, and otherwise improve the manuscript. Since finishing the guide, I have been working with the Center for Cryptologic History at NSA to find some of the missing items. I particularly want to thank Betsy Rohaly Smoot for her ongoing help and I hope that by early 2014 we will see more items declassified. I also thank the many people who have written to me pointing out possible corrections. I am adding a date to the bottom of this introduction that will show the last time this manuscript was edited. I have kept the Marshall Library supplied with copies of the most updated copy for use on their website.

Updated: October 2013.

Abbreviations

BM – British Museum

EAW – R.M. Sheldon, Espionage in the Ancient World; An Annotated Bibliography, (Jefferson, NC: McFarland, 2003).

ESF – Elizebeth Smith Friedman

FC – The Friedman Collection

Galland = An Historical and Analytical Bibliography of the Literature of Cryptology by Joseph S. Galland.

LC – Library of Congress

Ms - manuscript

NSA – National Security Agency

NYPL – New York Public Library

TSCE – The Shakespeare Ciphers Examined by W.F. & E.S. Friedman,

WFF – William F. Friedman

The Friedman Collection

Item 1

Nikolaieff, A.M., "Secret Causes of German Successes and the Eastern Front," Coast Artillery Journal, (October, 1935), pp. 373-377.

Photostat of one of the first detailed accounts of the poor Russian cryptography which led to their losing the Battle of Tannenberg in World War I. This article, written by a former colonel in the Imperial Russian army, discusses the reasons for German successes on the eastern front in World War I. By examining the memoirs and accounts of the war written by Generals Ludendorff, Hindenberg and Hoffman, the author picks out references to intercepted messages. Were they unciphered? They contained much useful information about troop dispositions, troop movements and intentions. He goes on to explain the remarkable results obtained during the war by the Austrians in the deciphering of intercepted messages. The Austrian cipher service (*Chiffredienst*) got good experience before the war. The Russians made mistakes in the employment of their ciphers. The secret of the Russian cipher was disclosed to the generals two days after World War I began. Among the Russian mistakes:

- 1) They sent their messages only partly in cipher.
- 2) They used two ciphers. An old one and a new one, for identical dispatches. With both examples in hand, the new code could be broken.

The wireless telegraph proved to be a great disadvantage. Their army orders and reports were sent by radio and were intercepted by the other side. The author served on the Russian general staff during World War I and was a former military attaché at both Washington and Tokyo. For more on the Battle of Tannenberg and the cipher war, see David Kahn, The Codebreakers, pp. 622-27.

Item 2

Gylden, Yves, "Mémoires Originaux: Chiffres Autoclaves avec Réglettes de Saint-Cyr," Revue Internationale de Criminologie 1 (1933), pp. 8-30; 2 (1933), pp. 72-89.

Autokey method using a variant of the Vignère cipher. For more on autokeys, see David Kahn, The Codebreakers, pp. 143-44, 147, 206, 754.

Item 3

A folder containing works which discuss the Greek *skytale*. No other cryptological method from the ancient world has been more discussed or more misunderstood. Traditionally described as a method of encrypting messages used by the Spartans, in the standard interpretation it consisted of a stick of known diameter around which a piece of leather or paper was wound. A message was written along the length of the stick. When the leather or paper was unwound, the message became unreadable until it was wound around an identical stick kept by the recipient. There is debate as to whether it was meant to conceal the content of a message that fell into

enemy hands or prove the authenticity of the delivered message. Many later authors used the term to describe any secret or hidden message, even without the use of sticks.

The file contains an excerpt from Plutarch, Life of Lysander, 19, the Dryden translation. Two typescript copies of the passages in Plutarch describing the message sent by *scytale* to Lysander by the Spartan ephors. At the time of Friedman's writing, classicists still accepted this definition. For a more skeptical view, see: Stephanie West, "Archilochus' Message Stick," Classical Quarterly 38,1 (1988), pp. 42-48 and 221, and Thomas Kelly, "The Spartan Skytale," in J. Ober & J. Eadie (eds.), The Craft of the Ancient Historian: Essays in Honor of G. Starr, Lanham, Md. 1985, pp. 141-169.

The file also contains a typescript copy of Aulus Gellius, Attic Nights 17.9.6-16. John C. Rolfe translation, Loeb Classical Library edition. The first part of the passage is about the substitution ciphers found in the letters of Julius Caesar. These include letters addressed to Gaius Oppius and Cornelius Balbus. Gellius mentions a commentary by the grammarian Probus called On the Secret meaning of the Letters appearing in the Epistles of Gaius Caesar. Cf. Leighton, (no. 42). The second part of the passage concerns other secret forms of writing taken from ancient history. These include the Spartan *skytale*, Hasdrubal Barca's disguising letters written on wax tablets, and Histaeus and the tattooed slave. A relevant article about this passage, published too late to be included in this collection is J.A. Foucault, J.A. de, "Histée de Milet et l'esclave tatoué," Revue des Études Grecques 80 (1967), pp. 181-86. Another item in the file is a Latin passage from Trithemius, Exposition, pp. 86-87 on Archimedes of Syracuse. It refers to the Aulus Gellius passage 17.9 above. Trithemius was one of the most famous intellectuals of his day and he wrote the first printed book on cryptology in 1518. For a discussion of his works, see David Kahn, The Codebreakers, pp. 130-137.

Another item in the folder is an extract from John Wilkins, Mercury or The Secret and Swift Messenger, p. 20. A section of the poem which quotes from a letter from Ausonius to Paulinus (XXVIII) in Latin. Bishop John Wilkins was the only person to have been head of a college in both Cambridge and Oxford. He was Master of Trinity College, Cambridge, but was deposed at the Restoration in 1660; he had married Oliver Cromwell's sister and this did not endear him to the monarchy. He is of interest to cryptographers because he wrote a book in 1641 called Mercury, or the Secret and Swift Messenger. The book is described by David Kahn, The Codebreakers, p. 155 as "The first book in English on cryptography." It is much more than that. The book is a treatise on the state of the art in seventeenth century telegraphy. Wilkins describes a number of optical and acoustic techniques. He explains how the letters of the alphabet can be represented as five bits each and then transmitted using any available means - such as two different bells, or a musket shot for "O" and a cannon shot for "1." He goes on to what may be the first systematic treatment of coding in different number bases (binary and ternary). This technology evolved into the chains of semaphore stations used by both Britain and France in the Napoleonic wars, and they in turn stimulated the development of the electric telegraph in the

mid-nineteenth century. He also speculates on whether a universal language could be constructed. This inspired Roget's thesaurus, and (much later) Esperanto. Wilkins goes on to explain how to protect telegraph messages against being understood by hostile observers. As well as showing how to break simple substitution ciphers, and introducing various geometrical enciphering schemes, he proposes the use of nulls to make cryptanalysis harder. He not only launches the subject of cryptology into English literature, but introduces the words "cryptographia" and "cryptologia" to the English language. On the Napoleonic Codes, see John R. Elting, Swords Around a Throne, New York: Macmillan, 1988, pp. 112-113, 690 n. 14, and David G. Chandler, The Campaigns of Napoleon, New York: Macmillan, 1966, pp. 365-66, 390, 678-79.

Item 4

U.S. Army Signal Corps. Serial No. 1, Prearranged Message Code, World War II. Effective 1 January 1942. AF, AF, SOI.

One example of the type of simple codes used in operations of landing for and in similar brief operations. William F. Friedman had two of these in 1966. There is only one in the folder. There is a definite sports motif running through the series:

Touchdown [time]	Landing successful on beach [time]
Foul [due to]	Unable to approach beach [due to]
Track meet	No resistance encountered
Thin ice	I cannot hold my present position
Huddle	Consolidate your position
Upper cut []	We're being attacked by []
Kick off	(Continue to) advance
Last Quarter	Hold your position at all cost

Item 5

Rhodes, John Kidder, "He Solves the Secrets of Cipher Writing," The American Magazine, 99 (January, 1925), pp. 37-39, 60-62.

Two photostat copies, one positive, one negative. This particular article was about a trial held in San Francisco in 1916 of a political conspirator. A royal prince of India had cast in his lot with revolutionaries who aimed at overthrowing the British government. Berlin was implicated in the plot. Secret Service operatives in two countries had pursued the plotters on a globe-encircling trail. Some of the conspirators were arrested in San Francisco. Among the evidence submitted was a document in cipher. When cipher was translated and read in the courtroom, a Hindu in the back of the courtroom pulled out a gun and shot the witness through the head. He died instantly. The irony is that the murdered man had not given away the secret of the cipher. It had been

deciphered by Col. George Fabyan in his laboratory at General, Illinois. Fabyan headed up Riverbank Laboratories, and during World War I, he trained most of the men who decoded enemy messages for the government. Cryptography was only one phase of his work. Cf. the article in The Washington Post 24 April 1914 concerning the Indian revolutionary Ram Chandra receiving information in specially marked copies of the Koran. The article goes on to discuss other methods of secret communications including engraving secret messages microscopically on the heads of pins and the bilateral cipher of Sir Francis Bacon. See David Kahn, The Codebreakers, ch. 12, pp. 371-374.

Item 6

Friedman, William F. Cipher Devices in the Friedman Collection. See **Items 6.1** through **6.16**.

Over the course of more than 35 years services, WFF acquired a very few cipher devices but the majority of the ones he did obtain are of great significance. They are briefly described under the succeeding **Items 6.1** through **6.16**.

Item 6.1

U.S. Army Signal Corps, Cipher Disk.

This was the only cipher device available to the American Expeditionary Force in World War I. It had been used for a good many years in field exercises. It is extremely slow in operation and presents hardly any security. Even during World War I, it was recognized that this device was insecure and there was no record that it was actually used in that conflict in actual combat operations. Item is in The George C. Marshall Museum.

Item 6.2

Cipher device – disk.

Outer dial is in capital letters. Inner dial is lowercase letters. Device was proposed for use in connection with a book for children. The book was never completed. The item is in the George C., Marshall Museum.

Item 6.3

Wheatstone, Sir Charles, “The Cryptograph.”

For some details concerning this very important item in the FC, see **Item 165**. This exemplar of the original Wheatstone cryptograph invented about 1875 is now perhaps the only one in the world. Engraved on the face is “The Cryptograph. . . Wheatstone, C., Inv.” An exquisite and striking device of display is a sealed glass case as it was even when WFF rescued it in 1921 or

1922. When the Signal Corps, having been ordered to move from a temporary World War I building which was to be torn down, thousands of papers and other items were tossed into the trash and ordered burned. Dozens if not hundreds of articles of great historical value were destroyed at that time. Sir Charles Wheatstone constructed an electric telegram long before Morse did. He also invented the concertina, improved the dynamo, studied underwater telegraphy, and published half a dozen papers on acoustics. For more on this extremely remarkable man, see David Kahn, The Codebreakers, pp. 196-202, 404, 776, 860. Item in the George C. Marshall Museum.

Item 6.4

Wheatstone Device.

Round object with two dial faces, the inner of which moves. Outer dial is key, the inner the plain. White dial faces with pencil lettering. This device is the actual one used by the British Army. It was proposed for use in the front line areas. For a detailed description of the device and the principle of solution, see FC **Item 165**: Several Machines and Methods for their Solution. Riverbank Publications no. 20, Geneva, IL, 1918. Item held in the George C. Marshall Museum.

Item 6.5

Wheatstone, Sir Charles, Modification of the Wheatstone Cryptograph.

Various experimental models of the Wheatstone Cryptograph as built at the Signal Corps Laboratories at Fort Monmouth, New Jersey. Some of these attempted to try out the experiment for improving indecipherability by advancing the inner wheel an irregular and varying number of steps. It was never proved to accomplish the intended purpose, but the idea was deemed still worthy of study by WFF. A Friedman descriptive label is on the back. This is an experimental model of the Plett version of the Wheatstone.

Cf. David Kahn, The Codebreakers, pp.195-196. Item is in The George C. Marshall Museum.

Item 6.6

Various modifications of the Wheatstone crypto principle made by or for WFF for experimental purposes. Items are in The George C. Marshall Museum.

Item 6.7

Mauborgne, J.O., The U.S. Signal Corps version of the cylindrical cipher device. This was designated as cipher device M-94. See **Item 154.3**. Item is in The George C. Marshall Museum.

Item 6.8

Friedman, William F., The Game of Secrecy or Spy and Counterspy.

A game devised by WFF which employs certain elementary principles of cryptanalysis. Full description of the game and how it was to be played is included with the items. The proposed game, simple in its operation as far as WFF was concerned, was much too complex to interest game manufacturers in the 1930s. Includes Kriptor of pressed wood. The two rotating disks are ivory colored. Item is in The George C. Marshall Museum.

Item 6.9

Anonymous. A sliding strip device.

Steel board with paper and steel slides that are numbered. Marked: Made by the National Elec. Machine Shops. Item in the George C. Marshall Museum.

Item 6.10

Crypto device.

A device proposed for use by the Guarantee Trust Company in authenticating messages transferring money to other banks, or for the credit of private individuals or business firms. This device was not successful, being too complicated for the bank. Item is in The George C. Marshall Museum.

Item 6.11

Captain Midnight cipher device.

Round gold-colored metal object with red plastic backing. On top is embossed: "Captain Midnight's SS 1948. By moving the red lever on the back, disks (w/alphabets) rotate inside the device. This was one of several "cipher devices" given away by cereal manufacturers to children for promotional purposes. Item is in The George C. Marshall Museum.

Item 6.12

Sky King Spy Detecto Writer.

One of several cipher devices given away by the makers of breakfast foods for children or for similar promotional purposes. Item is in The George C. Marshall Museum.

Item 6.13

Hagelin, Boris C.W.

A copy of the first of the Hagelin cipher machines using pin wheels and cage. This is the C-35 machine and was copy No. 600. This machine was presented to WFF by Mr. Hagelin. The machine was manufactured in Stockholm and was the first of the mechanically-operated cipher machines invented by Mr. Hagelin. The “35” stands for the year in which the machine was first manufactured and marketed. In this model, there are only five pin wheels (17-19-21-21-25). There are only twenty-five slide bars in the cage. The slide bars have only one fixed lug each. Each of the bars presented to pin wheel number one has a lug; only two of the twenty-five bars have lugs affecting number four, and finally ten of the bars have one lug each which affect wheel number five. Therefore, it will be seen that the number of possible displacements or “kicks” affecting the print wheel comes to a total of twenty-five plus one. (O, that is when no pin on any of the five pin wheels is in active position), making a total of twenty-six possible displacements varying from 0,1,2,3 . . . 25. On the C-36 machine, see David Kahn, The Codebreakers, p. 426. Item is in The George C. Marshall Museum.

Item 6.14

Hagelin, Boris C.W., Converter M-209.

This American-make six-wheel copy of the Hagelin C-36 (first marketed in 1936) is one of over 100,000 copies manufactured at the L.C. Smith-Corona Typewriter Company plant at Groton, New York, for the Signal Corps, U.S. Army, for use in World War II. In the summer of 1950, WFF learned that the J.J. Glass Company of Los Angeles, CA (a military equipment surplus sales company) was selling a number of these machines which the firm had acquired from the surplus sales of the Signal Corps U.S. Army. WFF purchased two of the machines from that company through another firm named The Riley Technical Service, also of Los Angeles. The cost of these machines was \$18.52, including 62 cents tax. Considering that the unit cost to the U.S. of the last large order placed with Smith Corona Co. was approximately \$35.00 each, the two surplus machines were obviously acquired at a bargain price. When WFF related this incident to Mr. Stuart Hedden, who was the contractor through whom the Signal Corps placed the orders for these machines with Smith Corona, Mr. Hedden presented WFF with a gift Converter M-209 in pristine condition, complete with canvas carrying case and instruction booklet. WFF now had three machines, and upon earnest solicitation of his two co-workers Mark Rhoads and L.D. Callimahos, he sold the two machines he had purchased in Los Angeles to them. In this transaction, WFF, without embarrassment, made a small profit, since he sold two of his three for \$12.50 each, with the knowledge of the purchasers that a small profit was being made out of the whole transaction. All the correspondence together with the bill of sale from Stewart Hedden contained in a second file marked Item 6.14, along with 2 copies of the War Department Technical Manual for the Converter M-209 dated April 27, 1942. For more on the M-209 machine, see David Kahn, The Codebreakers, pp. 427, 428-32, 460, 540. Item is in The George C. Marshall Museum.

Item 6.15

Converter Model M-325T. Otherwise known as “Friedman’s Folly.”

This cryptograph is dry-cell powered and embodies a novel and compact keyboard, with three 26-point electrical rotors and an input-output plugboard, and was manufactured by the L.C. Smith-Corona Typewriter Company. About 12,000 machines were made. No service tests were made to insure elimination of defective design or parts. This was a serious error, although the pressure from possible using agencies seemed to justify issuance of the machine without extensive service tests. Several hundred were transferred to the Department of State, with the plan that at embassies and important legations, an automatic printing machine, compatible with the M-325, would be used. It came to be dubbed “Friedman’s Folly” but without bringing any embarrassment to WFF. He still believed it to have been an excellent cryptogram but the utility of it was destroyed by unforeseen deviations from specifications and by a desire to meet a pressing need for a small machine having the highest practicable degree of crypto-security, considering the size and low power requirements. In the machine, in the FC, the plugboard was removed- -for security considerations- -since the few machines left after destroying the largest part of the original 12,000 were used for training purposes. Item is in The George C. Marshall Museum. See article by Louis Kruh, “Cipher-Equipment Converter M-325,” Cryptologia 1 (1977), pp. 143-149.

Item 6.16

Cryptoteknik Company, B-211.

One of six B-211 crypto-machines made for Ivor Krueger’s offices in Buenos Aires. When Mr. Boris C.W. Hagelin became a Director of the firm known as Cryptoteknik in Stockholm, that firm was manufacturing a crypto-machine known as the B-211. The FC contains brochures put out by the Cryptoteknik Company. (See **Items 438.19** and **438.20**). Originally the B-211 was a battery-operated non-printing machine. In place of a printer there was only a bank of small indicating lamps covered by letters of the alphabet. Later on, the B-211 was mechanized by connecting it to an electrically-operated Remington typewriter. The machine in the FC was presented to WFF as a gift by Mr. Hagelin in the autumn of 1953 when WFF visited Mr. Hagelin in Zug, Switzerland. The machine had an added interest in that it is one of six which had been made especially for Mr. Ivor Krueger, the Swedish match king, who committed suicide after having over-extended himself greatly in his endeavors to build a financial empire. The machine which Mr. Hagelin gave to WFF bears on its inside cover a label which indicates that it was intended for use by a Buenos Aires office of the Krueger Company. The machine shows no signs that it was ever used. It was intended to be connected to a typewriter as indicated above. For more on the B-211, see David Kahn, The Codebreakers, pp 426, 691. Item in the George C. Marshall Museum.

Item 6.17

A Space-O-Gram birthday card which sends coded messages. Received 24 September 1956 on the occasion of WFF's 65th birthday from L.D. Callimahos.

Item 6.18

Hagelin, Boris C.W., Pocket Cryptographer CD-57.

Ingenious small portable device. This is the latest of the Hagelin cryptographic devices in the FC. A gift from Mr. Boris Hagelin. On the CD-55 see David Kahn, The Codebreakers, p. 433. Item in the George C. Marshall Museum.

Item 6.19

Chex Agent, Little Orphan Annie Ring.

Small plastic ring with paper disk on top of it with letters on the paper. Offered in cereal boxes in the 1930s. Item is in The George C. Marshall Museum. See also Major Jet's Magic Decoder.

Item 6.41

Wheatstone, Sir Charles, U.S. Signal Corps Manufacturer.

The British proposed a modified version of the Wheatstone cryptograph to be used in World War I. Upon the entry of the U.S. into the war, the Signal Corps proposed to join with the British Army and the French Army in adopting the British modification of the Wheatstone cryptograph for front-line use. When WFF assisted by ESF, solved a set of five challenge messages, the entire project was abandoned by the Allied forces. Object in the George C. Marshall Museum.

Item 6.5

Modification of Wheatstone Cryptograph

This is an experimental model of the Plett version of the Wheatstone cryptograph as built by the Signal Corps laboratories in Ft. Monmouth, N.J. Some of the models attempted to try out the experiment for improving indecipherability by advancing the wheel an irregular and varying number of steps. Never proved to accomplish purpose intended, but WFF thought the idea worthy of study. Item is in The George C. Marshall Museum.

Item 6.71

Mauborgne, J.O., Original Model of the Cipher Device Type M-94.

Heavy metal cylinder with moveable bands of type. The letters are engraved on the bands. For more information on the M-94 see David Kahn, The Codebreakers, pp. 325, 385, 585. The Item is in the Marshall Museum.

Item 7

Archer Plastics, Scarab -O-Gram.

During the early 1950s, the American public was introduced to the mania for the game Scrabble. It involved a type of transposition cryptography which fascinated the public. The Scarab-O-Gram is a small device which represents a modification of this game. Item in the Marshall Museum.

Item 8

Friedman, William F., "Codes and Ciphers," Encyclopedia Britannica, New York and London, Volume 5, 1929, 14th edition, pp. 954-959.

There are two folders containing the correspondence leading up to the publication of the article, the original typescript copy, the tear sheets, and a photostat (positive) of the article as it appeared. The correspondence shows that Walter B. Pitkin had written to WFF saying that they already had an article on "Cryptography" but wanted WFF to write about "modern, highly scientific codes." He agreed. Judging by the correspondence between WFF and Britannica, the publishing process was no less rocky in 1929 than it is now.

Item 8.1

Friedman, William F. "Codes and Ciphers (Cryptology)," Encyclopedia Britannica, New York and London, 1954.

This separate folder also contains a handwritten draft of the article, and carbon copies with corrections, and the editor's page proofs. Prepared in 1954 and uses most of the material in the 1929 original. This revision, however, includes a very brief section devoted to the history of cryptology which was prepared with the intention of eliminating the article "Cryptography" in the next volume of the Encyclopedia Britannica when that volume will undergo revision in the near future. Contains author's rough drafts, printers, paste-ups, and printed article in pamphlet form. (2 file envelopes).

Item 9

Childs, J. Rives (1st Lt. N.A.) "The History and Principle of German Military Ciphers 1918," Part I, Chapters 1 - 6, pp. 1-110. On Childs see David Kahn, The Codebreakers, ch. 11.

First 110 pages of a photostat copy (positive) of a large (unclassified) paper on German military ciphers in World War I. Folder contains Introduction and chapters 1-6. There is also

correspondence between WFF and the author re the mechanical solution of ADFGX. See **Item 10**. Also on the ADFGX code, see David Kahn, The Codebreakers, ch. 11.

Item 10

Childs, J. Rives (1st Lt. N.A.) “The History and Principle of German Military Ciphers” 1918, Part II, Chapter 7-40, pp. 112-212.

Part two of the article in **Item 9**. “The ADFGX Cipher, A Second Method of Solution.”

Item 11

French Government, Carnet Réduit - “Olive.”

Photostat (negative) of four pages. See also **Items 12** and **21**. A very small 3-letter code used by the French for telephone, telegraph, and wireless correspondence.

Item 12

French Government, Carnet Réduit “Urbain,” Photostat (negative) of 15 pages.

See also **Items 11** and **21**.

Item 13

Mirrielees, Lucia B. “John Wyclif’s Freudian Complex,” University of California Chronicle, (October 1930), pp. 492-97.

In the section designated “Phrontisery” appeared this satire on the Bacon-Shakespeare Controversy wherein the author “demonstrates” that the author of certain of the Canterbury Tales is none other than the 14th-century divine, John Wycliff rather than Geoffrey Chaucer.

Item 14

Wharton, FNU Revolutionary Diplomatic Correspondence, U.S. Extracts from volumes 4 and 5. These extracts refer to passages in cipher which had not yet been deciphered in 1956.

Item 15

Ciphers; also A Diagram of Cipher Analysis, Fort Leavenworth Kansas: The Army Service Schools Press, 1917, 6 pages with chart.

When ESF and WFF became students, workers and teachers during WW II, Mauborgne was one of the three people in the United States who had any knowledge of ciphers and their solutions. His lectures at the Army Service Schools and Parker Hitt, Manual for the Solution of Military Ciphers comprised the sole, readily-available (and at that date) modern material for study in English. There is an interesting note inside the front manila cover by WFF. “The

diagram of cipher analysis was not original with Captain Mauborgne. He copied one WWF prepared without credit.” The “data for solution” he copied also without credit from Fleissner. For more on J.O. Mauborgne, see David Kahn, The Codebreakers, pp. 6, 21, 321, 389, 397-98, 401, 563. On Hitt’s publications see Galland p. 90.

Item 16

Porta, John Baptista, On Secret Notations for Letters Commonly Called Ciphers, English translation of **Item 119**, Porta’s de furtivis literarum notis, Naples, 1563.

When George Fabyan began collecting the books on cryptography he acquired two or three editions of the Porta book. He employed Professor Keith Preston of Northwestern University to translate the first edition. This file contains a carbon copy with index. Giovanni Battista della Porta (1535?-1615) along with Trithemius and Vignère is generally regarded as one of the founders of modern cryptography. De Furtivis Literarum Notis is his encyclopedic work on the subject which includes historical sections on deciphering and on cryptography in the ancient world. Porta is known chiefly for his invention of a series of twelve alphabet ciphers in which letters of the second half of the alphabet are made to stand for letters of the first half, a key word indicating which substitutes are used. The earliest known cipher of its kind, its chief value lies in its compactness and convenience to prepare. Porta’s work may have been known by Vignette and is acknowledged by Matte Aragonite, cryptographer of the Paper State, as the chief source of his own work. Porta is also known for proposing the sympathetic telegraph, a device whereby a magnetized needle may be used to activate another at a distant point. For further information, see Galland, pp. 146-147; Guyot, p. 435, Stojan, p. 652, Westby-Gibson, p. 181, Adams, p. 1924, Kahn, pp. 137-143 with diagrams on pp.139 and 141.

Item 17

Yardley, Herbert Osborne, Theory and Practice of Enciphered Codes, 1916. Two photostat copies (positive) of a typescript of 21 pages, written in March 1916.

On the front page of the manuscript is the following note: “The following was written in March 1916, and so far as I can learn, is the first successful attempt to solve a problem in enciphered code.” Yardley, a novice at the time, was not in a position to know how highly inaccurate this statement was. The State Department assumes that the moment a code book is printed it is in the hands of the enemy, and therefore that the confidential messages should be sent in enciphered code. He went on to a brilliant career with The American Black Chamber. After trying out various methods, they constructed a 64 two-letter substitution tables - 32 consonant-vowel tables, 32 vowel-consonant, all of them having in addition a single consonant substitution alphabet. He gives the skeleton construction of the tables. Also included in the folder: Yardley, Herbert Osborne, A New Principle and Its Relation to the Ideal Secret Code. Carbon copy of typescript. This was written by Yardley about 1925. The principle which is

proposed is the use of a super encipherment system which disguises the lengths of the original or unciphered code groups. It is not believed that Yardley “invented” this new principle. It is almost certain that it grew out of some of the work done on the cryptograms of a foreign nation studied by the American Black Chamber. The article is unsigned and was given to WFF by Yardley, but WFF adds the note that it is “of little consequence in modern cryptology.” For more information on Yardley’s career, see David Kahn, The Codebreakers, pp. 351-360, 368-69, 403, 492, 846, 867, and David Kahn, The Reader of Gentleman’s Mail.

Item 18

Kelly, Fred C., “Which Words Do You Use Most?” American Magazine (c. 1920), pp. 45-47 and 156.

List of the 1,000 most frequent words, compiled by Leonard F. Ayres. Photostat (negative) of the article and a typescript copy of the words arranged in order of frequency. A journalist discourses on education and word frequency. The Ayres list of the 1,000 most commonly used words arranged in the order of frequency. The list is compiled from business and personal letters. 368,000 words were analyzed. “E” is the most frequently used letter followed by T, A, O, I, N. The word list begins with: the, and, of, to, I, a, in, that, you, for, it, was, is.

Item 18.1

An IBM run of the Ayres list of the 1,000 most frequently used words in English as contained in the article, **Item 18**, listed alphabetically. This was one of the cryptographic aids of the early days of the Signal Intelligence Service of the U.S. Army Signal Corps.

Item 19

Bogel, Claus, Study of Solution of Mexican Ciphers.

Carbon copy of an unclassified manuscript written in June 1920 by Mr. Bogel, a World War I member of the so-called American Black Chamber under the direction of Herbert O. Yardley. This manuscript sets forth many types of ciphers then used by the Mexican government. Part I contains single alphabet ciphers, Mexican numeral wheels, mixed multiple numeral ciphers, cipher systems used by immigration and the Postal and Telegraph Bureaux of Mexico, and multiple alphabet ciphers. There is also a special cipher code used by the Secretary of War and Navy. Part II contains: 1) the date of each intercepted message; 2) the key and type of cipher used; 3) reference to a description of cipher used; and 4) name of sender and receiver of each message. The folder contains details concerning Mr. Bogel’s life. Bogel died in 1950 in St. Elizabeth’s Hospital, Washington, DC, where he spent the last few months of his life. He was let out of MI 8 in 1920 or 1921. He reappeared as a member of Navy Code and Signal Section until 1926. He was let out of the Navy in 1926 because of a nervous breakdown. He worked in the reference room of the Library of Congress until age 70 (c. 1945). At one time he became “Mr.

Fact Finder” with the Radio Station WTOP in Washington until 1949-50 when he was sent to St. Elizabeth’s. For more information on Yardley and Mexico, see David Kahn, The Reader of Gentlemen’s Mail, pp. 11, 20, 23, 30, 35, 38-42, 44, 62, 101.

Item 20

Hooker, Charles W.R., O.B.E., M.A., B.Sc., “The Jules Verne Cipher,” The Police Journal, 4, 1 (January 1931), pp. 1078-119.

A photostat (negative) of the article. The October 1928 issue of police journal also contained cryptograms, but this particular one earned its own article. Jules Verne wrote a novel The Cryptogram around a secret message. The system is sometimes called “Count Gronfeld’s cipher.” In the novel, a man’s life depends upon the solution of such a cryptogram. Such messages are most difficult to decipher unless one has the key. The author explains how to solve such puzzles and gives examples in English, French and Spanish for the reader to attempt. Cf. Galland, pp. 91-92.

Item 20.1

Photostat negative of “The Jules Verne Cipher.”

Item 21

[French Government] Carnet Réduit “Narcisse,” No. 764, Abbreviated French Army front-line code from World War I.

A *carnet* is literally a small notebook. The folder contains a photostat (negative) of 21 pages. See also **Items 11** and **12**. See David Kahn, The Codebreakers, p. 314.

Item 22

Pingaud, Albert, “Les dessous de la Grand Guerre: “La Guerres de Chiffres.” Revue des Deux Mondes, Paris: 27 (June 15, 1935) S. 8, pp. 897-909.

Photostat (negative) of the article. **Item 35** is the English translation. A Frenchman points out the lessons to be drawn from cryptology in World War I.

Item 23

Yardley, Herbert Osborne and Charles J. Mendelsohn, Universal Trade Code, New York: Code Compiling Co., Inc. 1921, 634 pp. Plus 25,000 blank code-words for private supplements.

This is a “circulation edition” of a code which proved to be quite popular for a number of years after World War I for commercial purposes. It is interesting only because of its having

been produced by the authors indicated above. Its code equivalents consist of both five-letter groups and five-figure groups. The five-letter groups include the feature of the two-letter differential. The Code Compiling Company was the “cover” for the activities of the so-called American Black Chamber. An interesting feature is the permutation table inside the rear cover. Yardley and Mendelsohn made a personal profit each on the considerable number of copies sold, both in the large office edition (\$25.00 and this “circulation” edition \$20.00). In the back of the book is a chart which contains “Possible Mutilations in Transmission of Continental and Morse Code.” For more on the Universal Trade Code, see David Kahn, The Codebreakers, pp. 359, 846, and David Kahn, The Reader of Gentlemen’s Mail, pp. 56-57, 83.

Item 24

Cary, R.T.O., (Major) M.B.E. Royal Corps of Signals, “Signal Security,” The Journal of the United Institution of India, July 1932 pp. 305-312. Photostat (positive) of the article.

Friedman believed this might be the first occurrence in publicly-available literature of the use of the term: “Signal Security.” It goes without saying that the Signal Service of an army equipped with reasonably modern apparatus for the transmission of orders, reports, etc. is under two very definite obligations to the commander: 1) to provide for the accurate and speedy handling of its signal traffic; 2) to guarantee that, as far as is humanly possible, the subject matter of its signal traffic shall when necessary, be denied to the enemy. A reasonable degree of signal security must be provided. He goes on to discuss the four main systems of military communication (c. 1932) Visual Signaling, Line Telegraphy, Line Telephony and Wireless Telegraphy and Telephony.

Item 25

Beard, William E., “YIYKAEJR GZQSYWX,” Proceedings of the United States Naval Institute, Annapolis, MD 44,8 (August, 1918) No. 186. Photostat (negative) of the article.

The deciphered title of this article is “Military Ciphers.” The key phrase to cracking the code is “Manchester Bluff.” This was one of the keys used by the Confederate Army Signal Corps and it is used as the basis for the title which is enciphered on the so-called “Vigenère system.” The article describes codes used by the Confederate Signal Corps, the Johnson-Beauregard cipher, and the Beauregard-Anderson cipher. Such simple systems were superseded by one described by J.B. DeVoe, U.S. Navy in 1865. He describes the cipher - keyword “Complete Victory.”

Item 26

Powell, J.A. (Captain)

Important material re the Wheatstone cryptograph. A former editor of the University of Chicago Press became a captain in Military Intelligence in WWI and in the capacity of liaison

officer for a brief period visited the British and French Cipher Bureaux. This correspondence contains material concerning, among other cipher devices, a modification of the Wheatstone cryptograph, a device proposed by the British for adoption on the western front, and considered undecipherable by the British, the French, and the American Cipher Bureaux. When test messages were submitted to WFF at Chicago, they were deciphered and returned to Washington by telegraphy within two hours although he had never seen the device. Correspondence to Col. Van Deman, Chief of Military Intelligence Section, War College, Washington, D.C. dated 29 Dec. 1917 (photostat neg). Powell correspondence to Van Deman, etc. On WWI cryptography, see David Kahn, The Codebreakers, ch. 10 and 11.

Item 27

Brown, J. Willard, "Signaling in Cipher" Excerpts from the Signal Corps, U.S.S., Boston: U.S. Veterans Signal Corps Association, 1896, pp. 99-102, 118-119, 210-215, 274-276, 279, 281, 286, 377, 527.

Photostat (negative) of an extract of twenty pages as listed above. Six excerpts describing ciphers of the Federal and Confederate Armies of the Civil War, as well as rules and explanations for the use of signal disks. Among the methods discussed are: the signal disks with rules for making them and an explanation of their use. See figure three on page 119 [photo] There is a picture of a confederate cipher machine on page 212. Cf. David Kahn, The Codebreakers, pp. 214-229.

Item 28

Larrabee's Cipher Code,

Two copies of the code (different printings) with instructions. This is an extremely interesting and valuable historical item which sets forth a secret system issued for use by the U.S. Army, Navy, and diplomatic service. **Item 28** is believed to be the only surviving copy of that printing.

Item 28.1

Defective copy of **Item 28**.

Item 28.2

Letter to Major R.E. Wylie from the Adjutant General describing the Larabee cipher code, dated November 10, 1913.

Item 28.3

One 3x5 hand-written card with pertinent information.

Item 29

Arensberg, Walter C., "Others for 1916." Photostat (negative) of eight pages.

Modern verse composed by Walter C. Arensberg, a man who devoted his life and much of his fortune in pursuit of what WFF called "a chimera," that is to say, his belief that Bacon was the author of the works attributed to Shakespeare by history and by authorities in the field of Elizabethan literature. Judging by the comments on the entry card, WFF was not a great fan of Arensberg's poetry either.

Item 30

Locard, Edmund, "Dechiffrement des écritures secretes," Chapter VI of L'enquête criminelle et les méthodes scientifiques, Paris, 1925, pp. 205-235.

One photostat (positive); one photostat (negative). The author was at one time in the French Black Chamber during World War I. Locard, a French police officer, writes about ciphers of criminals and concealment systems in general. There is a section on codes used by gypsies. It is particularly interesting on criminal argot.

Item 31

Army Security Agency. Army Regulations 10-125, 23 February 1949.

This document was originally issued in the usual form of Army regulations, i.e. unclassified. It was later reissued as a classified publication and then still later unclassified. It outlines the organization and responsibilities of the Army Security Agency with regard to cryptology. This is an item of much historical interest.

Items 31.1, 31.2, 31.3 (Bound together)

Army regulations and Training regulations having to do with signals and signaling.

One of these regulations, AR 335-5, entitled: "Signal Communication and Cryptographic Security" dated June 10, 1936 is of special interest in that it was prepared by WFF. The superceding regulation dated July 1937 was also prepared by him. Section XI of training regulation 160-5 entitled "Military Codes and Ciphers" dated November 7, 1923 was also prepared by WFF. A superceding revision dated June 28, 1929 contains a Section X entitled "Military Cryptography." Training Regulation 160-10 dated June 28, 1929 entitled "Signal Communications: Message Center Procedure" contains paragraphs with references to cryptography. Training Regulation 162-5, dated April 20, 1926 contains paragraphs dealing with code communications by means of panels. These paragraphs were also prepared by WFF.

Item 31.2

War Department, Signal Communications for all arms. TR-160-5, Washington: War Department, November 7, 1923, 73 pp.

This training regulation bearing, as noted above, the date 7 November 1923, represents one of the earliest, if not the first, edition of this manual. It contains a detailed description of the double transposition cipher prepared by WFF and is probably the first such description in training literature of the U.S. Army, Paragraphs 96 to 106, inclusive, are especially to be noted and are of considerable historical value.

Item 32

Dickson, S.B., Coded Limericks, New York: Simon & Shuster, 1925, 125 pp.

Subtitled: Fifty laugh-provoking limericks presented in secret cipher, to be decoded by the reader, together with full instructions explaining the technique of unraveling these verbal mysteries. Accompanied by The Gold Bug of Edgar Allan Poe. The book contains simple substitution ciphers for non-professionals interested in the subject. It contains a full text of Edgar Allan Poe's The Gold Bug which holds the key to the ciphers.

Item 33

Extracts from: Locard, Edmond, Policiers de roman et de laboratoire, Paris: Payot, 1924, pp. 263-274. Two photostats (one positive, one negative) of twelve pages of Locard's work.

A handwritten translation by John Hurt is enclosed in the folder. The distinguished French Inspector of Police writes about criminal ciphers. Police ciphers are far more difficult to solve than the one's found in Edgar Allan Poe's Gold Bug or Sherlock Holmes' The Valley of Fear, or The Dancing Man. Locard gives examples from an actual case solved by the Surété. He also tells of cases solved during the First World War.

Item 34

Hooker, C.W.R., O.B.E., M.A., B.Sc., "The Deciphering of Cryptograms," The Police Journal, London, 1 (December, 1928), pp. 621-633.

Photostat (positive) of an article by a much-decorated police officer who writes briefly on the many facets of cryptograms. He starts with general theory and then gives examples from WW I.

Item 34.1

Hooker, C.W.R. O.B.E., M.A., B.Sc. "The Deciphering of Cryptograms," The Police Journal London, 1 (December, 1928), pp. 621-633.

Item 35

Pingaud, Albert, "The Cipher War," Littell's Living Age (1935), pp. 62-66. A condensed version of an article from Revue des Deux Mondes, Paris, June 15, 1935.

The original French version is **Item 22**. "Les dessous de la Grande Guerre; la guerres de Chiffres." This Frenchman points out lessons to be drawn from cryptology in WW I. He comments on the Russians sending their messages over the wireless in plain language on the German front. After the Battle of Tannenberg, they began to cipher, but so carelessly, it was child's play for the Germans to read it. On the same subject, see **Item 1**. Photostat (positive) of the article with WFF's signature.

Item 36

[Navy, U.S.] Navy Department, Office of the Chief of Naval Operations, Code and Signal Section, Washington: Pamphlet of the Navy Department 1930, Elementary Cipher Solution. The first of the Navy's textbooks for training.

WFF felt this and the succeeding items were of great historical significance. See also **Items 307, 308, 1530**.

Item 37

Pratt, Fletcher, "A Plea for Ciphers," Proceedings of the United States Naval Institute, (May 1933), pp. 692-696.

Photostat (negative) of five pages. An article on the real or supposed advantages of codes over ciphers for military and naval communication. His argument rests on three points:

- 1) A code message can be sent and received in less time than a cipher message
- 2) Codes are less liable to misrepresentation resulting from operators' errors
- 3) Codes are safer

He discusses these issues in the context of WWII examples.

Item 38

March, Peyton C. (General), The Nation at War, New York: Doubleday, 1932, pp. 225-227. Photostat (positive) of three pages.

Excerpts from a book containing brief comments by the chief of Staff of the U.S. Army about cryptography in WW I. He discusses captured spies, deciphered codes, wiretaps and false information. See also **Item 465**.

Item 39

Hammond, John Hays, The Autobiography of John Hays Hammond, New York: Farrar & Rinehart, 1935, Vol. 1, pp. 326-327.

Photostat [negative] of a two-page extract from the autobiography of a great industrialist. He describes how an impromptu “open code” was devised for the shipment of ammunition in South Africa in his youth. They used Standard Oil drums containing guns stored on different mining properties. He staged a raid on a Boer arsenal at Pretoria to obtain 15,000 Martini rifles, 3 or 4 Maxim guns and ammunition for them all. He enlisted fifty “hard-boiled Americans of an adventurous spirit” in the caper.

Item 40

Holland, Hjalmar R., The Kensington Stone, New York: Duell, Sloan & Pearce, 1940, Photostat (negative), pp. 6, 34-37, 86, 123 and three photographs.

The Kensington stone supposedly contained Runic inscriptions. It was found in Minnesota and led some people to believe Scandinavians had explored that state in 1362. If authentic, it was certainly one of the longest Runic inscriptions - 220 characters. But the fact is that the stone later proved to be a forgery, although there are still amateurs who believe in its authenticity. See for example Alf Mongé and O.G. Landsverk, Norse Medieval Cryptography in Runic Carvings, Glendale, CA, Norsemen Press, 1967, 224 pp. (**Item 1157**). For criticisms of her work see Aslak Liestol, “Cryptograms in Runic Carvings - A Critical Analysis,” Minnesota History 41 (1968), pp. 34-42, who points out among other things, that certain markings on the stones they discuss were the result of working from bad xerox copies, and do not appear in the original inscription. See also Hans Karlgren, “Review of Mongé and Landsverk,” Scandinavian Studies 40 (1968), pp. 326-330, who reviews the work that proved the Kensington stone a forgery and dismisses Mongé and Landsverk as a couple of amateurs. The circumstances of the discovery were documented by affidavits. It was discovered by Mr. Olof Ohman, a Swedish immigrant of Solem, Douglas County, Minnesota. In August of 1898, while digging on his property, he discovered the stone with the unintelligible writing. He kept it until August 1907 when he presented it to H.R. Holland who wrote “The History of the Norwegian Settlements in America.” Most recently (November, 2005) appeared *The Kensington Runestone: Compelling New Evidence* published by Richard Nielsen and Scott F. Wolter. RMS note: There are still people who try to resurrect the authenticity debate. See the article in *Archaeology Magazine* (May/June 2010), p. 20 where the debate continues.

Item 41

Burnett, Edmund C., “Ciphers of the Revolutionary Period,” American Historical Review, 22 (January, 1917), pp. 329-334.

The only published article up to that date, despite its brevity, dealing with the ciphers of the revolutionary period. Folder also contains two type-written pages of sources from revolutionary war ciphers taken from footnotes of this article.

Second folder. Duplicates number of previous folder. Contains a different item for which there is no card. Jack Levine, "Some Further Methods in Algebraic Cryptography," Journal of the Elisha Mitchell Scientific Society 74, 2 (November, 1958), pp. 110-113.

Professor Levine, then in the Department of Mathematics, State College, Raleigh, NC, had written a previous paper which presented several methods of algebraic encipherment: Jack Levine, "Variable Matrix Substitution in Algebraic Cryptography," American Mathematical Monthly 65 (1958), pp. 170-178. In this article he discusses two new methods of this kind of encipherment. On the same subject, see L.S. Hill, "Cryptography in an Algebraic Alphabet." American Mathematical Monthly 36 (1929), pp. 306-312 and L.S. Hill, "Concerning Certain Linear Transformation Apparatus of Cryptography," American Mathematical Monthly 38 (1931), 135-154.

Item 42

Ford (editor). Extracts from The Writings of Thomas Jefferson

These extracts contain some code groups which have never been decoded. Letter to James Madison February 14, 1783. Letter to Governor of Virginia March 18, 1784. Contains notes by Friedman on possible values of various 3-number codes.

Item 43

Moorman, Frank (Major USA), A.E.F. Special Transposition Cipher

Major Frank Moorman was the head of G-2, A-6 - The German Code and Cipher Solving Section at GHQ in France in World War I. Memorandum from Major Moreno dated March 15, 1918. Five pages explaining the transposition cipher which he recommended as being "easy to handle, not liable to become unintelligible through small mistakes of operators, and quite difficult of solution by one not having the key." Friedman notes that it would not be a great problem for a "trained cipher man."

Item 44

Barnes, Howard R., (Captain), Casualty Code A.E.F. 1918.

A single typescript sheet setting forth the brevity code to be employed for telegraphic reporting of battlefield casualties. Compiled by Captain Howard R. Barnes, Signal Corps. Covered all eventualities: Accidentally killed, killed in action, died of wounds, died of disease,

missing in action, severely wounded, slightly wounded, body recovered, body not recovered, death in the line of duty, result of own misconduct, not result of own misconduct, entitled to wound chevron, and not entitled to wound chevron.

Item 45

Bacon, Roger, De l'admirable puissance de l'art, et de nature. Extract from pp. 58-63, 78-79. Photostat (negative) of eight pages. Also a hand-written translation.

Roger Bacon (1214-1294) was perhaps the first Englishman who had anything to say about cryptography. This item is an extract from one of his books (1557 edition) and deals specifically with cryptography. It is, of course, in Latin but the folder contains the translation into French and one in English.

Item 45.1

Keyser, Cassius Jackson, "Roger Bacon," Scripta Mathematica 5, 3 (July, 1938), 177-180.

Brief study material for those who believe the Voynich manuscript to have been the work of Roger Bacon's hand. Notes were taken from Lynn Thorndike, A History of Magic and Experimental Sciences, Vol. II, Macmillan, 1923. Bacon was imprisoned for teaching "suspected novelties" (1277-1292) shortly before his death. Master of the art of caustic speech, it is said Bacon "attacked the dead and living worthies tactlessly, fatuously, and unfairly."

Item 45.2

Bacon, Roger, "De occultando secreta naturae et artis," Extract from Epistola, pp. 327-330. Photostat (positive) of four pages in Latin, also four pages of typescript translation.

Another very brief treatise by the thirteenth century scientist, Roger Bacon, which deals with concealed writing together with the translation. Date unknown "I believe, as do Socrates and Aristotle, that the secrets [of Nature] are not handed down to us on the skins of goats and sheep to be understood by just anybody." ". . . he who makes common knowledge the secrets of nature and of art is a breaker of the seal of Heaven, [and] that many evils pursue the man who uncovers the occult and reveals that which is hidden." He quotes Aulus Gellius: "it is stupid to place lettuce before an ass when thistles would do just as well for him." "He who divulges mysteries lessens the majesty of the subject matter, nor do secrets remain secrets long when they are a matter of common knowledge." Four types of concealment are discussed:

- 1) writing without consonants
- 2) an admixture of letters from different types of alphabets. Writing with a Hebrew letter a Greek letter, a Latin letter, etc.
- 3) riddles
- 4) enigmatic and figurative words.

- 5) substitution ciphers
- 6) geometrical shapes substituted for letters
- 7) the art of stenography, i.e. shorthand. [*ars notoria*]

“Mankind may be divided, so it would seem, into the common herd on the one hand wisemen on the other.” “All wise men makes us a method of concealment from the crowd because the crowd makes fun of the wise and it neglects the secrets of wisdom and does not know how to make use of a lofty topic, and if anything very noble should happen to come to its notice by chance, it perverts it, and the fact that many people share the common knowledge causes the topic to deteriorate in value.

Item 46

Millis, Walter, The Road to War: America 1914-1917, Boston Houghton, Mifflin & Co., 1935, extract from.

(See **Item 901**) the complete book. Newspaper clipping - condensation of the Millis book in The Washington Daily News, October 1, 1935.

This military historian, in his volume on World War I, covers the Zimmermann telegram and something of the cryptology of that conflict. Folder also contains a copy of Mills obituary in The New York Times, Monday March 18, 1968. Mills was an editorial and staff writer for the New York Herald Tribune for thirty years (from 1924-1954) then joined the staff of the Center for the Study of Democratic Institutions. He wrote eight books and edited several others. He includes a text of the Zimmermann Telegram, one of the most important cryptographic intercepts in American history. Dated January 16, 1917, it was addressed to the German ambassador in the United States, Count Johann Heinrich Andreas von Bernstorff. It was encoded in a German diplomatic code called 0075. It was signed by the German Foreign Minister, Arthur Zimmermann. It was to be handed on to the Imperial Minister in Mexico. On February 3, Wilson announced to Congress that he was breaking diplomatic relations with Germany. “We intend to begin on the 1st of February unrestricted submarine warfare. We shall endeavor in spite of this to keep the United States of America neutral. In the event of this not succeeding, we make Mexico a proposal of alliance on the following basis: make war together, make peace together, generous financial support and an understanding on our part that Mexico is to reconquer the lost territory of Texas, New Mexico and Arizona. You will inform the (Mexican) president of the above most secretly as soon as the outbreak of war with the United States is certain and add the suggestion that he should on his own initiative invite Japan to immediate adherence.” For more details on the decryption process and the historical significance of the Zimmermann telegram, see David Kahn, The Codebreakers, 287-297. WFF’s original study taken by NSA and reclassified.

Item 47

Manly, John Matthews, "The Most Mysterious Manuscript in the World," Harper's Magazine 123 (June 1921), pp. 186-197. Two copies, both bound. One contains a book plate and is signed by WFF. [Cf. **Item 102**, The Cipher of Roger Bacon].

A very interesting and authoritative account of the Voynich manuscript and Newbold's alleged decipherment thereof. One of the great literary mysteries of all times is the origin of the Voynich manuscript. In 1912, a well-known bibliophile and dealer in ancient books purchased a manuscript. It contained strange writing and illustrations and for years scholars have argued over its meaning and authenticity. This is one of the best articles on the origins of the manuscript.

The ms. is a small volume 8 1/2 by 5 3/4 written on vellum and illustrated with colored drawings of whole plants, roots, astrological diagrams, realistic and symbolic representations of cell development, and strange pictures of nude women. The manuscript originally had 272 pages but six were lost between the 15th and 17th centuries. Twenty more have been lost since. The history of the manuscript for the last three centuries is vaguely known. It came from a collection of books belonging to the princely House of Parma. A letter written to Johannes Marcus Marci in 1665 accompanied it when he sent the volume to Athanasius Kircher (1601-1680). Experts in languages say that it is not any known language. Experts in cryptography say that it is clearly some otherwise unknown system of cipher. Some have linked it to the Shakespeare-Bacon controversy. See **Item 102**. Others connected it to Roger Bacon. An interesting note about the power of the "unknown" to be connected to the occult. One poor old woman came a hundred miles to Professor Newbold to ask him to cast out the demons that had taken possession of her. A portion of the last page of the manuscript contains a Latin sentence in which Professor Newbold believes is the key to the cipher.

Item 48

Conder, Everett, Phonetic Alphabets, 11 February 1952.

This item is of interest only because it contains some of the many phonetic alphabets which may have been tried and discarded by the military signaling authorities. The present phonetic alphabet, which is international in character, is an outgrowth of these earlier versions. In the opinion of WFF, progress in this direction has been retrograde. The first alphabet is British, 1931; second is from the 1939 edition of Signal Communications; the fourth is the 1945 U.K. edition; the fifth from the American Radio Relay League, 1947. In 1947, the International Civil Aviation Organization adopted the ARRL phonetic alphabet. There is also a Chart of Phonetic alphabets 1931-1952.

Item 49

U.S. Government, Laws Relating to Espionage, Sabotage, Etc. Washington, D.C.: GPO, 1955.

This document was compiled by the Superintendent of the Document Room of the House of Representatives. Of particular interest are Public Law 513- 81st Congress (p. 53) and Public Law 110 - 81st Congress (See page 46). The first of the above-mentioned acts deals specifically with the protection of the cryptologic activities of the United States. The second one deals with the establishment of the Central Intelligence Agency. This document, however, fails to list another act of considerable interest and historical importance, namely "An Act for the Protection of Diplomatic Codes." This legislation was passed in great haste in 1933 when it was learned that H.O. Yardley was about to publish another book entitled Secrets of Japanese Diplomacy. This legislation was effective in preventing the publication of that book and further disastrous revelations dealing with the U.S. cryptologic activities. From the document: "To enhance further the security of the United States by preventing disclosures of information concerning the cryptographic systems and the communication intelligence activities in the United States." See David Kahn, The Reader of Gentlemen's Mail, pp. 159-172.

Item 50

Miller, James E., "How Newton Discovered the Law of Gravitation," American Scientist 39,1 (January, 1951), pp. 134-140.

A satire on the difficulties of scientists doing research for the U.S. Government circa 1951. Sir Isaac Newton, is portrayed as Director of the Subproject for Apples of the Fruit Improvement Project, sponsored by His Majesty's Government of Great Britain in cooperation with a syndicate of British fruit growers. His research had to pass through the office of the Secretary for HMP/BRD/CINI/SSNBI, his Majesty's Planning Board for Research and Development, Committee for Investigation of New Ideas, and Subcommittee for Suppression of non-British Ideas.

Item 51

War Department, Washington, DC, War Technical Bulletin, TB SIG 2, Think Next Time, 15 December 1943. Army, U.S., Instructions for Avoiding Stereotypes in Classified Messages. Washington, D.C.: War Department, October, 1944. 10 pp. Marked restricted.

This document outlines several rules for obviating weaknesses in certain types of crypto systems.

Items 51.1

War Department, Washington, DC TB SIG-2, Think Next Time , 15 December 1943.

Pamphlet dealing with the subject of communications security and transmission security. Contains interesting incidents from the war, each pointing out a lesson. See also **Item 51**.

Item 51.2

Violations of Transmission Security. Distributed by Transmission Security Group. Preliminary edition of **Item 51.1**

Contains examples from WWII. A typical story occurs during the British stand at the Alamein line. Two British brigade commanders were talking on the air with the Germans listening in. One asked: "Can you do anything about closing the 3,000 yard gap between your left and my right flank?" The second replied: "No, I can't. Can you?" "No, I can't either." Twelve hours later the Germans did something about it.

Item 51.3.

Notes on Transmission Security. Office of the Chief Signal Officer, Washington, DC, January, 1944.

Pamphlet which further attempts to train communications personnel. Contains an Abridged Glossary of Traffic Analysis Terms. AFSA – 411, 4 June 1951. [Restricted]

Item 51.4.

Armed Forces Security Agency, Washington, DC, Abridged Glossary of Traffic Analysis Terms, 23 May 1951, 17 pp.

This glossary is of considerable importance in any study of the principals and procedures used in traffic analysis. The folder also contains a three-page comment on the glossary written by an anonymous reviewer.

Item 52

"German Codes and Ciphers," Part of an article "Fighting Germany's Spies" in The World's Work [Magazine], New York: 36 (June 1918), 143-153. Photostat negative of eleven pages.

A description of certain concealment systems used by German agents before and during WWI. Among them are:

- 1) The Bolo Pasha Messages and how the Hindus convicted spies in San Francisco. When some Hindus in New York, subsidized by Berlin, wished to write their plans to some other Hindus in San Francisco concerning their common purposes of fomenting revolution against British rule in India, they wrote out messages that consisted entirely of groups of Arabic numerals. The messages were in cipher. See **Item 5**.
- 2) The Cohalan and Derry Messages concerning the Roger Casement Revolution in Ireland.
- 3) Enciphered Code used to direct German Cruiser operations in the West Indies. Cf. **Item 406**.

Item 53

Anonymous. Film Strip Course in Cryptography, Arlington Hall Station, Training School. n.d. but probably around 1942. Written script which accompanies the Film Strip (location?).

This file contains four units of instruction in the simpler types of cipher and was probably addressed to the lower-grade newcomers to the Signal Security Service soon after it was established at Arlington Hall. This item is useful only as an indication of the low-level of instruction that had to be devised in a hurry to meet wartime demands. Topics covered include simple columnar transposition enciphering, double transposition deciphering, cipher alphabets, and polyalphabetic substitution.

Item 54

Sperry, Earl E., German Plots and Intrigues in the U.S. During the Period of Our Neutrality, Washington, D.C.: The Committee on Public Information. Red, White and Blue Series, No. 10, July 1918, 64 pp.

A pamphlet published by the U.S. Government during World War I which details German plots, intrigues and secret communications. It includes descriptions of German attempts to prevent the export of military supplies to allies, attacks on Canada, Germany's efforts to incite revolution in India, German co-operation with Irish revolutionaries in America, pro-German propaganda, and the financing of German agents in America.

Item 55

U.S. Government, Dictionary of the United States Military Terms for Joint Usage. First revision, Washington, DC: Joint Chiefs of Staff, June 1950, 98 pp. Restricted.

Pamphlet which includes a few terms which are employed in cryptology: crypto-security, cryptosystem, encrypt, decrypt, cipher, and code. Inside the front cover is written: "This document contains information affecting the national defense of the United States within the meaning of the Espionage Act, 50 U.S.D. 31 and 32, as amended. Its transmission or the revelation of its contents in any manner to the unauthorized person is prohibited by law."

Item 56

Trebitch-Ignatius, Timothy Lincoln, Revelations of an International Spy, New York: Publisher McBride and Company, 1916, pp. 250-255, 321. Photostat (negative) of seven pages.

A spy from WWI days reveals alleged ciphers of German agents and other pertinent cryptographic information. There is mention of a “family code,” an “oil code,” and the “Secret Services Dictionary Code.”

Item 57

McAdoo, William G., “The Secret Service and Dr. Albert,” and “America Enters the World War,” Extracts from: Crowded Years, New York: Houghton Mifflin Co., 1931, Chapter 21 pp. 317-330, 367-368. Photostat (negative) of 16 pages of William G. McAdoo’s memoirs.

He was Secretary of the Treasury, and a branch of his department was the U.S. Secret Service. The German propaganda system in World War I radiated from a Dr. Heinrich F. Albert who had his office on Lower Broadway, New York City. By intercepting radio messages sent from Germany to Dr. Albert, the U.S. learned that he was receiving large sums of money which he used to further the German espionage work in America. He was followed by a Department of Justice agent one day on an elevated train when he fell asleep and his briefcase was “stolen.” This proved to have much interesting information and enabled the government to ask that Dr. Albert be declared *persona non grata*. In August, 1915 in New York, the documents found in the briefcase became public. It was a startling disclosure of what was going on and proved that German officers, while outwardly professing friendship for the U.S., were plotting against this country and were deliberately violating our neutrality. This book contains much interesting information about the Zimmermann telegram, and German secret agent ciphers.

Item 58

U.S. Army Field Basic Manual FM 24-5. First edition. Item missing.

Copy 2 is **Item 272.2**, 2nd edition.

Item 59

Churchill, Winston S., “The Battle of Tannenberg - the Unknown War,” Extract from a chapter in The World Crisis 1916-1918 New York: Scribner’s, 1932.

The dramatic incident of the events immediately preceding the Battle of Tannenberg in WWI, as viewed by Winston Churchill, who tells of the part played by inept Russian cryptographers. “The Russians had inadequate telegraph and signal arrangements and all their communications were awkward and tardy.” pp. 201. They broadcasted over their radio in two uncoded messages, exactly what Sansonov and Rennenkampf would or would not do on the 25th and 26th. The German wireless station in the fortress at Königsberg listened to these amazing disclosures. The first message told them that the Russian First Army would not reach the line Gerdauen-Allenburg-Wehlau until the 26th, thus making it certain that Rennenkampf’s army could not take part in Samsonov’s battles. In the afternoon, the second message revealed all

Samsonov's projected movements. It showed that Samsonov's attack on the XXth Corps would probably not take place until the 26th.

Item 60

Anonymous. Documentary History - Naval. Extract from: The London Times Documentary History of the War, London: 1917, Volume 3, pp. 51-54. [photostat negative].

This item contains information having a bearing upon the escape of the two German ships, Göben and Breslau, which were *en route* to Constantinople. British men-of-war were pursuing them in the Mediterranean. The Göben was on patrol intending to wire the movements of the British Fleet. It contains the texts of wireless messages from the Kaiser to the Admirals. The wireless receivers had deciphered the signal of the British cruisers.

Item 61

Anonymous, German Operational Intelligence; a study of. Produced at GMDS (German Military Documents Section) of the U.S. Army by a combined British, Canadian, and U.S. Staff. April, 1936, 164 pp., 2 charts. Item missing. NSA?

Item 62

U.S. Government, The Communications Act of 1934 with Amendments and Index Thereto. Washington, D.C.: GPO, Published by the Federal Communications Commission. Revised to September 1, 1948, 85 pp.

This is the basic document which governed the use of electromagnetic emissions in the U.S., section 605 "Unauthorized Publication of Communications," is of particular interest for the cryptologist since it deals with the prohibition against divulging or publishing the existence or contents of communications except to authorized recipients thereof.

Item 63

Eastman, Max, "Poets Talking to Themselves," Harper's Magazine, (October 1931), pp. 563-574.

A well-established literary figure in America rebels against the "modern" literature. For further items on this subject, see **Item 63.2**.

Item 63.1

One photostat (positive) and one photostat (negative) in two envelopes. Eastman, Max, The Literary Mind, extracts from, New York: Scribner's, 1931. Chapter One, "The Cult of Intelligibility," pp. 57-78. Chapter II: "The Tendency Toward Pure Poetry," pp. 79-92. He was not a great admirer of James Joyce or Gertrude Stein. See **Item 63.2** for further items.

Item 63.2

Folder No. 3 in the series. Contains various items on the subject of modern poetry. "Notes on a talk on the Shakespeare-Bacon Ciphers," Text of a talk given at the Folger Shakespeare Library. January 19, 1948. Huntington Hartford, "The Public Be Damned," The Wall Street Journal, Monday, May 16, 1955, p. 13.

Another editorial attacking poetry that does not cater to the public's taste. John Ciardi, "Dialogue with the Audience," Saturday Evening Post, November 22, 1950. Anti-Picasso article entitled: "Red Propagandist, Pablo Picasso." Article by Francis Reitman: "Psychotic Art. Oliver St. John Gogarty, "They Think They Know," Washington Post, October 29, 1951. Ben Lucien Burman, "The Cult of Unintelligibility," Saturday Review, November 1, 1952. Edith Hamilton, "Words, Words, Words," Saturday Review, November 19, 1955. Edith Hamilton, "Private Idiom," Vogue, September 15, 1951. "Modern Art for No Sake," Washington Post, October 29, 1951.

Item 64

Signal Corps, U.S. Army, Division Field Code: Training Edition No. 1, 1936, 136 pp.

This was a two-part code with both four-letter groups and four-digit groups. The four-letter groups embodied the principle known as the two-letter differential which facilitated the correction of errors in transmission. This code was widely used in maneuvers and in instructional classes. Prepared under the direction of WFF when he was Chief of the Signal Intelligence Service, Office of the Chief Signal Officer, Washington. An important historical item.

Item 64.1

Signal Corps, U.S. Army, Divisions Field Code, training edition No. 2, May 18, 1942, 157 pp. A revision of **Item 64**. War Department Technical Manual, TM 11-460. Two copies.

Item 65

Army Security Agency S-700, Glossary of Terms, September 1946, Cryptanalyst's Manual, Section 1-3. Has definitions of all terms in cryptography.

Item 65.1

Army Security Agency, Cryptanalyst's Manual S-700. Headquarters, Army Security Agency, February 11, 1947.

This edition of the Cryptanalyst's Manual is a revision and extension of the manual of the similar name produced by the signal intelligence service in the Office of the Chief Signal Officer in the year 1940. See **Item 65.2**.

Item 65.2.

CM 20-20 War Department, Office of the Chief Signal Officer, Cryptanalyst's Manual, Washington, DC: GPO, 1940. See comments on **Item 65.1**.

The manual originally outlined by WFF in 1937-39 was carried through to completion by members of his staff and assistants. The manual contains data, including word patterns and word frequencies, of very great utility in the solution of cryptograms in the most common modern languages. The greater part of the manual, however, is devoted to the English language. This item is of much historical interest. Lists of words used in military texts arranged alphabetically and according to word length. Declassified July 24, 1975. Two copies German, three copies French, Italian, Spanish, Japanese.

Item 65.3

U.S. Government, Cryptanalyst's Manual. Cryptanalytic data, general. Prepared under the direction of the Chief Signal Officer, 1940. Two files. Cryptanalytic data for various languages, English, German, French, Rumanian. See **Item 826** for other languages.

CM 10-10 Cryptanalytic data for English letter frequency. Declassified 7/24/75

CM 20-21 German words used in military texts.

CM 30-21 French words used in military texts.

CM 30-22 French words used in military texts.

CM 10-12 English statistical charts.

CM 10-21 English military texts.

CM 10-23 English commonly used English word combinations arranged by word length and frequency.

CM 10-25 1,000 commonest words in English arranged by word length and frequency.

CM 10-26 1,000 commonest words in English arranged by word length and frequency.

CM 10-27 1,000 commonest words arranged alphabetically.

Item 66

Gonzales, Ramon (Coronel de Caballos), "Servicie des Eschuchas," Revista del Ejereito de la Marina (February 1933), pp. 60-62. Photostat (negative) of three pages of a short paper on the subject of radio intercepts in Mexico.

Item 67

[Signal Corps, U.S. Army], An Introduction to German Military Cryptanalysis, Part I. Monoalphabetic substitution problems, Red Bank, N.J. The Cryptographic Division, Enlisted Men's Department, The Signal Corps School, Ft. Monmouth, NJ, January, 1942, 8 pp.

An example of the type of instructional material put out by the Cryptographic Division of the Signal Corps School early in the U.S. participation in WW II. The manual familiarized students with basic German cryptanalytics and the vocabulary and phraseology used in military messages.

Item 67. 1

Signal Corps, U.S. Army, Outline of Cryptographic Courses, Red Bank, NJ, The Cryptographic Division, Enlisted Men's Department, The Signal Corps School, Fort Monmouth, NJ, n.d., pp. unnumbered.

This is a very interesting outline of the cryptographic courses conducted at the Signal Corps School for the training of enlisted men in the field of cryptography. Possibly by this time a unique item.

- 301 Safeguarding military information
- 302 Army and Staff Organization from a Signal Intelligence Service Viewpoint
- 303 Cryptographic Systems
- 304 Typing
- 305 Military Cryptography
- 306 Military Cryptanalysis Part 1
- 307 Military Cryptanalysis Part 2
- 308 Military Cryptanalysis Part 3
- 309 Military Cryptanalysis Part 4
- 310 Basic IBM Instruction
- 311 Cryptanalytic IBM Instruction
- 312 Code Compilation IBM Instruction
- 313 French Instruction
- 314 French Cipher Cryptanalysis
- 315 German Instruction
- 316 German Cipher Cryptanalysis
- 317 Italian Instruction
- 318 Italian Cipher Cryptanalysis
- 319 Japanese Instruction
- 320 Japanese Cipher Cryptanalysis
- 321 Portuguese Instruction
- 322 Portuguese Cipher Cryptanalysis
- 323 Spanish Instruction
- 324 Spanish Cipher Cryptanalysis

Item 68

Mendelsohn, Charles Jastrow and William F. Friedman, "Notes on Code Words," The American Mathematical Monthly 39, 7 (August-September, 1932), pp. 394-409.

This article discusses the regulations governing the construction of code words, as adopted in 1928 by the International Telegraph Conference in Brussels. Two types of code languages are permissible under those regulations. The article describes both Category A and Category B words. Folder also contains one offprint copy. Mathematical considerations on the number of code words which can be produced within the 5-letter-word limitations with proper percentage of vowels and consonants or with the 3-letter differential, etc. The earliest and perhaps the only scientific and technical disquisition on the proper construction of code-groups to conform with the protocol adopted by the 1928 International Telegraph Conference. Several copies of reprints in the FC. Very important for its time and therefore for its historical significance.

Item 68.1

See **Item 68**. Five more copies of the same item.

Item 69

Friedman, William F., "Security of Radio Traffic," 17 pp. Marked Restricted.

Typed manuscript of a lecture given at the U.S. Army Signal School, Fort Monmouth, N.J. on January 14, 1935, by Major William F. Friedman, Signal Reserve. Folder also contains a carbon copy of the same lecture.

Item 70

Friedman, LTC William F., Signal Reserve, The Use of Codes and Ciphers in the World War and Lessons to be learned There from, 24 pp.

Typed manuscript of two lectures given at the Signal School, Fort Monmouth, New Jersey, January 15, 1935. WFF gives examples from the Revolutionary War, the Civil War, WW I, WW II where codes and ciphers were of crucial importance.

Item 71

Signal Corps, U.S. Army, Technical Manual: Converter M-209, April 27, 1942, 33 pp.

This is believed to be the first edition of the series of technical manuals produced for instruction in setting up the keys and using Converter M-209. This is the Army version of the Hagelin C-38, manufactured by L.C. Smith-Corona Typewriter Company, Groton, New York. The contractual arrangement with the Hagelin Cryptography Company (owned by Mr. Stuart Hedden, New Milford, Connecticut) included the production of this document. The text for the document was provided by the Signal Intelligence Service of the Signal Corps. Historically, a

very important item. The Item is located in the case with the cipher device. (Khaki-covered carrying case). Item in Museum?

Item 71.1

War Department. Converter M-209-A, M-209 B (Cipher), Technical Manual TM-11-380. Washington, DC: GPO, May 1947, 170 pp.

A much later edition of the instructions for using the M-209 cipher machine, including Changes No. 1 and 2. It is obvious that the Army Security Agency had learned much about the proper operation of this machine between the time the first edition (**Item 71**) was published and when this one was published. The new document runs to 170 pages. Item was missing but a replacement copy was provided by the Cryptologic Museum at NSA.

Item 72

Combined Communications Board, Combined Field Code, October 1, 1944, 131 pp.

This 4-digit code with encoding and decoding sections was produced in Washington and in format followed very closely the field codes put out by the Signal Corps. U.S. Army, except that the code groups consisted of 4-digit groups in deference to the desires of our British allies. It was also intended to be used in connection with a super encipherment system, an example of which will be seen in **Item 72.2**. Declassified 10/28/81.

Item 72.1

Combined Communications Board, Combined Field Code, November 1, 1944, 131pp.

This is merely another edition of **Item 72**. Register No. 13052. Originally marked Restricted. Declassified 10/28/81.

Item 72.2

Combined Communications Board, Subtractor Table for Use with the Combined Field Code, June 1, 1944, 55pp. CCBP-0121-D10, Pacific and Australian Edition.

This is an example of the type of Subtractor Table that was used to super encipher the 4-digit groups of the combined field code. U.S. Army practices never included a two-step principle of the type embodied in this system. The Subtractor Table used with the Combined Field Code provided a means of secret inter-communication between the U.S. and British forces operating together. How much use was made of it is problematical. WFF felt sure that the Signal Corps personnel resisted this system which was a favorite of the British allies.

Item 73

Funston, Frederick, "The Capture of Emilio Aguinaldo," Extract from Memories of the Two Wars, New York: Scribners, 1911, Chapter 7, pp. 384-391.

Photostat (negative) of eight pages concerning a cipher used in the Philippines insurrection. The story involves the discovery of the hiding place of the rebel, Aguinaldo, and his capture by means of a false flag operation and the forging of bogus documents.

Item 73.1

Negatives of Photos of the 5-Rotor Hebern Machine. Slides 1-73, 23 envelopes. There is no Hebern machine in the collection.

Item 74

Locard, Edmond, Manuel de Technique policière (enquête criminelle) avec 43 figures," Paris: Payot, 1923, 291 pp. Extract from Locard's book. Chapter VI: "Les écritures secrètes," pp. 193-213. For the first edition of this book see **Item 450**.

The author was at one time in the French Black Chamber in World War I. The chapter includes sections on deciphering cryptograms, monoalphabetic substitution, polyalphabetic substitution, and invisible ink.

Item 75

Pepys, Samuel, Diary of Samuel Pepys, London: J.M. Dent & Co., 1925, Photostat (positive), pp. 90-91 and the corresponding page in shorthand.

The diary of Samuel Pepys was believed to be cryptographic and was deciphered with great labor. Fifty years later, the system of shorthand in which the diary was actually written was identified and deciphered. The folder also includes the facsimile of a page from Pepys Diary in shorthand and the transcription. See also **Item 1506**. For other shorthand systems see R.M. Sheldon, EAW on Tironian Notes, pp. 90-94.

Item 76

U.S. Army, Military Security, Safeguarding Military Information, Army Regulation 380-5, 15 November, 1949, 52 pp.

Pamphlet AR 380-5, which defines the terms secret, top secret, confidential, and restricted. This item was included in the FC as an item of interest pertaining to the safeguarding of data of military importance. This regulation went through a considerable number of changes but the collection does not contain the earliest versions of this very important document. WFF assisted in the preparation of certain portions of this regulation. This regulation, pertaining to the safeguarding of data of military importance, went through a considerable number of changes, but

the collection does not contain the earliest versions of this very important document. WFF assisted in the preparation of certain portions of this regulation.

Item 77

Elizebeth Smith Friedman, The "I'm Alone" Case.

Set of seven documents published by the State Department in the arbitration case between Canada and the United States concerning the vessel "I'm Alone" sunk in the Gulf of Mexico by the U.S. Coast Guard in 1929. ESF explained the process she used to decode the wireless messages connected with the "I'm Alone" boat going from Louisiana to Belize. The file contains seven documents published by the State Department in the arbitration case between the U.S. and Canada concerning the vessel "I'm Alone" sunk in the Gulf of Mexico by the U.S. Coast Guard in 1929:

- 1) Hearing on the Claim of the British Ship "I'm Alone," Washington, DC: December 29, 1934, Vol. 1, pp. 1-93, Vol. 2, pp. 94-239, Vol. 3, pp. 240-389.
- 2) Joint Final Report for the Commissioners dated January 5, 1935 and note of the Secretary of State of the United States to the Minister of the Dominion of Canada, dated January 19, 1925. (2 copies).
- 3) "I'm Alone Case." Claim by His Majesty's Government in Canada Under the Provisions of Articles IV of the Convention Concluded January 23, 1924 between the United States and Great Britain.
- 4) "I'm Alone Case." Answer of the Government of the United States of America to the Claim of His Majesty's Government in Canada in Respect of the Ship I'm Alone.
- 5) "I'm Alone Case." Brief Submitted on Behalf of His Majesty's Government in Canada in Respect to the Claim of the Ship "I'm Alone."
- 6) "I'm Alone Case." Answering Brief of the Government of the United States of America to the Claim of His Majesty's Government of Canada in Respect of the Ship "I'm Alone."
- 7) Joint Interim Report of the Commissioners and Statements of the Agents of Canada and the United States Pursuant there to with Supporting Affidavits.

Four typescript pages with the summary of the case and handwritten comments by ESF. A 183-page book entitled Rum War at Sea by Commander Malcolm F. Willoughby, USCGR. Chapter VIII "Airs to Information" deals with the work of the radio intelligence units under ESF and WFF. The "I'm Alone" case achieved more or less fame in the textbooks of International Law. It is the only arbitration case resulting from claims incident to rum-running during the period of Prohibition in the U.S. The case went through five years of hearings, conferences, and preparation of documents between the two governments. The final arbitration hearing (called a Tribunal) was held in Washington, DC in December of 1934. The "I'm Alone" was a vessel ostensibly under Canadian registry which operated as a carrier loaded with liquor from Belize, then British Honduras, and unloaded to small boats in the Gulf of Mexico. The vessel was

sighted by the U.S. Coast Guard within the three-mile limit and when accosted, hove anchor and fled to sea. She was pursued by the Coast Guard vessel and ordered to stop for searching, and when this request was refused the Coast Guard vessel fired across her bow in an attempt to force her to submit to search. Unfortunately, the blow was fatal, and the vessel sunk. The Coast Guard picked up the crew from the waters and took them into New Orleans. Within a few hours, His Majesty's government in Canada had filed a damage suit against the U.S. for \$250,000. The investigative officers of the U.S. Customs Service into whose jurisdiction the case fell once the "I'm Alone" crew were landed at New Orleans, felt convinced from the start that the "I'm Alone" was not actually owned by Canadian citizens but U.S. citizens who were operating under a false Canadian registry as a blind. The problem, therefore, became one of proving that the vessel was actually owned by the U.S. citizens and therefore the claim of the Canadian government was based on a misconception. For many months the search went on by customs investigators for the actual owners of the vessel with no real results. In November 1929, ESF was working through a trunk full of code and cipher messages having been subpoenaed in connection with numerous rum-running cases then pending in court in Texas. Among this large volume of messages were a series of enciphered codes which, when solved by her plainly, had no connection whatsoever with the Texas cases. This series of messages had passed between British Honduras and cable addressed in New York City. ESF ascertained that the New York cable addresses were registered in the name of Joseph H. Foran, Hotel McAlpin. ESF turned over the solved messages with such information as she had assembled to Mr. Edson J. Shamhart, Supervising Customs Agent at New Orleans. This was done on her way home to Washington from Texas, the last week in November 1929, Mr. Shamhart puzzled over the messages a few days and then an inspiration led him to compare the quantities of smuggled contraband named in these messages with the manifests procured from the port of Belize for the successive loadings of the vessel "I'm Alone." The quantities in the message and the quantities in the manifest were identical almost without exception. Mr. Shamhart went to New York City and ascertained that the cable addresses belonged to a resident of an uptown apartment, the messages, however, having been filed and received always by telephone through the Western Union office in the Hotel McAlpin. Mr. Shamhart obtained a description of the personal appearance and habits of the occupant of the uptown apartment, and he was identified as Dan Hogan, a man prominent in the rum-running business on the Atlantic coast, and who had served a prison sentence for smuggling. Armed with a warrant for his arrest and a bodyguard, Mr. Shamhart took up watch in the lobby of the hotel and Hogan was arrested. Hogan was transferred to Louisiana to stand trial and was convicted. He appealed however and was released on \$40,000 bond. Authorities later identified the radio operator from the operation who was willing to testify in court and who identified the other members of the operation. (One of them was murdered for turning state's evidence). The final hearing in this arbitration took place in the Department of Justice. The claim of the Canadian government was denied except for \$25,000 with an apology for sinking the Canadian flag and small sums to reimburse the crew for personal property. This case saved the U.S. a considerable sum of money although not as much as others cracked by the Cryptographic

unit of the Treasury Department, however, this case provided the greatest number of dramatic incidents. Among the facts that ESF did not discover until after the case was over, was that various Customs Agents acted as body guards for ESF because Dan Hogan was considered a threat to her life. See David Kahn, The Codebreakers, pp. 802ff also Lt. Eric S. Ensign, Intelligence in the Rum War at Sea, 1920-1933, Washington, D.C.: Joint Military Intelligence College, January 2001.

Item 78

Friedman, William F., Special Solution for Monalphabetic Substitution Ciphers Involving Keyword-mixed Alphabets. Typed article of eleven pages written around 1925.

A very interesting case of a solution of a single message without recourse to frequency tables but using slide alphabets when the alphabet sequence is unknown. Even at this date (1966) this is a rather ingenious solution for a unique problem.

Item 79

Army War College, Codes and Ciphers. Notes and Problems. October 1917, 22 pp.

Mimeographed book of problems containing codes and ciphers to solve as training. Instructions include: "before beginning work, read carefully chapters I-IV of Hitt's Manual." On Hitt's publications see Galland, p. 90.

Item 80

Wemyss, Reid, Memoirs of Lyon Playfair, New York: Harpers Bros., 1899.

Photostat (negative) of an extract (pp. 158-159) from a book on Playfair which, among other things, shows that he did not invent the cipher which is named after him. Sir Charles Wheatstone is credited with the invention. Cf. David Kahn, The Codebreakers, pp. 198-202.

Item 81

Friedman, William F., The Index of Coincidence and Its Application in Cryptography, 87 pp., plus addendum of four pages and three pages of table.

A mimeographed edition prepared by the New York Intelligence Unit, U.S. Coast Guard, October 1933. Publication No. 22, Riverbank Laboratories, Department of Ciphers, Geneva, IL: 1922. It discusses the Vogel Cipher and the Schneider cipher. Additional copy in black binder returned from NSA.

Item 82

German Government, Code Used by German Agents. Photostat (negative) of an eight-page memo stamped "Received, GHQ, A.E.F., G-2-B 1 November 1918.

Item 83

Cartier, General François, "La service d'écoute pendant la guerre," Radio Electricité, Paris: No. 4, 16 (1 November 1923), pp. 453-460, No. 17, 1 December 1923, pp. 491-498.

Photostat (negative) of an article of 16 pages in two parts. There is also a carbon copy of a typescript English translation. The article deals with the French intercept service of World War I. The translation was done by the Military Intelligence Division 9/22/33. Cartier was former Chief of the Central Wireless Bureau and the Coding Bureau. It discusses enemy communications of the German army on the French front, the Russian front, the Austrian army on the Italian and Russian fronts and the Bulgarian and Turkish armies. For other Cartier publications, see Galland pp. 37-38.

Item 84

Burnett, Professor M., La Criptografía o arte de cifrar y descifrar textos: el caso Luxburg. Buenos Aires: Privately published, 1917.

Photostat of a 29-page pamphlet and a carbon copy of a typescript of an English translation of 22 pages. ESF describes this as a "completely imaginary" account of the solution of the German Government's telegrams involved in the so-called Luxburg case during World War I. A note from John M. Manly also calls it: "purely a work of imagination." The Luxburg case involved the deciphering of the telegrams of the German Minister in Buenos Aires.

Item 85

Anonymous, "Iets over Spionnage en Geheimschrift," ["Something about Espionage in Cipher Codes"] Report of M/A, The Hague (#86). Clipping from The Hague Journal Panorama, January 10, 1916 and January 17, 1916.

A newspaper article in two installments containing information of interest to the average reader who wanted to know something about cryptography and, as noted, it was published midway during the four years of World War I in a country which was not involved in that war. English translation by the Army War College accompanies the file along with several charts and illustrations.

Item 86

Otis, James, The Signal Boys of '75, A Tale of Boston During the Siege, Boston: Estes and Lauriat, 1897, 99 pp.

This book was written for young people having an interest in the American Revolution. A gift from WFF's classmate, Dr. Ramsay Spillman. It deals with the signal communications by lantern in the American Revolution.

Item 87

Falconer, John, Cryptomenysis patefacta, or the art of secret information disclosed without a key, London: 1685.

Galland, p. 62 says that William Stone Booth calls this work: "technically unimportant." According to WFF, this is a completely erroneous statement because this small volume is the earliest detailed *cryptologica* treatise in English and contains methods for solving various types of ciphers including those written by means of a cyclic or repeating key. It is curious to note that chapter three has as its heading "of cryptology, or that secrecy consisting in speech." In other words, in Falconer's day, the word cryptology had the much more limited meaning, being applicable only to that form of secret communication which uses metaphors, allegories, parables, etc. On the title page, the author appears only as J.F. because of its date. ESF considered this a very important item. That Falconer was the author is proved by the signature of Falconer in the "Epistle Dedicatory." Section 5 discusses the Lacedaemonian *scytale*, on which, see R.M. Sheldon, EAW, pp. 72-76.

Item 88

Lacroix, Paul, (Pseud. Bibliophile Jacob), Les secretes de nos peres: La cryptographie ou l'art d'écrire en chiffres, Paris: Adolphe Delahays, 1858, 251 pp.

The history of cryptography and some methods of writing in cipher. This is one of those "tiny little book" of which the French used to be so fond. WFF's copy is in excellent condition. One of a series by Bibliophile Jacob on various subjects. Cf. Galland, p. 107.

Item 89

Bentley, E.L., Complete Phrase Code.

First American edition 1906, Pocket-sized 213 pp. with a private supplement appendix of 65 pages. Also a list of "Bentley's telegraph ciphers arranged in terminational(*sic*) order." This is a pocket-sized edition of a code which was, for many years, the most widely used for commercial cablegrams and general business in the entire world. The dainty size of this pocket edition appealed to smugglers and law-breakers of other kinds. See the "I'm Alone Case" **Items 77.1-77.6** and the Ezra Case.

Item 90

[British Government] Manual of Cryptography. Prepared by the General Staff, War Office, London, 1911, 96 pp.

Date of Publication was ascertained from internal evidence and examination. Marked “For Official Use Only.” The Friedmans considered this an absolutely unique item in the U.S. and a very rare one in the world. The manual was written in anticipation of the outbreak of WW I. The manual, for its day, was an excellent treatise of a general nature on cryptography and cryptanalytic methods. It is in the FC as a souvenir of his military service in World War I. See in this connection ELLIS. The Secret Office in the Post Office and the Office of Decipherer, **Item 952**. The latter explains why the “Secret Office” was closed in 1844 and not re-opened until World War I. The Manual of Cryptography was probably the first treatise on the subject prepared against the contingency of the outbreak of war, which came in August 1914. Signed by WFF, 1st Lt. M.I.D., Gs H6, GHQ, AEF, 191. The book discusses, in order, Hebrew transposition ciphers, Zig Zag transposition ciphers, permutation ciphers and the nihilist’s cipher, Caesar’s substitution cipher, the Wolsey or Sudan cipher, the sliding alphabet cipher, the Beaufort cipher, the Playfair cipher, diagonal transposition ciphers, stencil ciphers, the Federal army cipher, Bacon’s cipher and vowel ciphers.

Item 91

Vesin de Romanini, Charles François, La Cryptographie Dévoilée, ou l’art de déchiffrer tous les écritures in quelques caratères et en quelques langues que ce soit quoique l’on ne connaisse ni ces caratères ni ces langues. Appliqué aux langues Française, Allemande, Anglaise, Latine, Italienne, Flamanade et Hollandaise. etc. Bruxelles: Librairie de Deprez-Parent, 1840, 331 pp.

A general book on cryptology of not much technical importance although very frequently cited in the literature. Contains frequency data which have been reproduced in other books. See Galland, pp. 190-191.

Item 92

Meister, Aloys, Die Geheimschrift in Dienste der Papstlichen Kurie von inhren Anfängen bis zum Ende des XVI Jahrhunderts, Paderborn: Druck und Verlag von Ferdinand Schöningh, 1906, 450 pp. from the series: Quellen und Forschungen aus dem Gebiete der Geschichte in Verbindung mit Ihrem Historischen Institut in Rom, XI Band.

This German writer continues his treatment of medieval cryptology. He discusses Pope Sylvester, Bellasco, Thrithemius, Vignère, Porta, Piccolomini, Alberti and Argenti. This volume concerns papal cryptographic communications and is of great importance in the history of cryptology. Valuable and rather rare book. Contains a photostat of the original Latin treatises of Alberti, Piccolomini, and Argenti, the code systems of various Papal states, reproductions of

several original manuscripts in Latin and Italian. Copy in the Mendelsohn Collection no. 282. For a description see Galland, pp. 122-123 [**Item 617**]. Cf. David Kahn, The Codebreakers, pp. 106-124.

Item 93

Kasiski, F.W. (Major), Die Geheimschriften und die Dechiffrekunst; Mit besonderer Berücksichtigung der Deutschen und der Französischen Sprache. Berlin: Druck und Verlag von E.S. Mittler und Sohn, 1863, 95 pp.

The greatest of the German cryptologists of the 19th century writes on ciphers and the art of deciphering. Important because it contains the first clear description of the principle of “factoring” to discover the length of the key in periodic or repeating –key ciphers. Very rare. See Galland, pp. 100-101. Cf. David Kahn, The Codebreakers, pp. 207-213.

Item 93.1

Kasiski, Major F.W., Secret Writing and the Art of Deciphering, 2 copies.

Translation of **Item 93**. Translated by Professor Ray W. Pettengill, a German translator employed by the Armed Forces before and during World War II. Copyright 1954 by R.W. Pettengill. Kasiski’s book has attracted much attention because it contains the first published cryptanalytic study of polyalphabetic systems of substitution involving the Vigenère square. Since no translation into English has been found, this one was prepared at the suggestion of WFF. Cf. David Kahn, The Codebreakers, pp. 207-213.

Item 94

Merz, Charles H., The House of Solomon of Francis Bacon, Baron Verulam, Viscount Saint Alban, and the influence it is said to have exercised upon the Freemasonry of the seventeenth century. Sandusky, Ohio, privately printed.

During George Fabyan’s campaign to have Mrs. Gallup’s bilateral cipher accepted as authentic, he interested this physician of Cleveland, Ohio in the subject. Since Dr. Merz was a prominent Mason, he became particularly interested in the lore concerning Bacon and Freemasonry and connecting them with the Rosicrucians. Discusses secret writing, numerology, and *gematria*.

Item 95

Begley, Rev. Walter, Biblia Cabalistica, or The Cabalistic Bible . . . London: David Nutt, 1903, 158 pp. For the full title of this work, see Galland, p. 20 who also makes the comment: “The Biblia Anagrammatica and Biblia Cabalistica contain instructive remarks concerning letter-devices and numerous extra-ordinary specimens of them.”

This book is also of interest in connection with the theory of the Baconian authorship of Shakespeare, since some of the proponents of that theory use methods quite similar to those found in this Begley work. A scarce item and unique subject. Shows how the various numerical cabalas have been curiously applied to the Holy Scriptures with numerous textual examples ranging from Genesis to the Apocalypse and collected from books of the greatest rarity, for the most part, not in the British Museum or any public library in Great Britain. With Introduction, Appendix or Curios and Bibliography. Discusses *gematria*, (on which see David Kahn, The Codebreakers), works from the Old Testament and New Testament in Latin.

Item 96

Langie, André, De la cryptographie, Étude sur les Écritures secrètes, Paris: Payot & Cie, 1918, 254 pp.

Author states in the preface that he writes from extended experience as a decipherer. WFF finds this a highly exaggerated claim. It contains historical examples of cryptography among the Greeks including the Spartan *scytale* on which see Sheldon, EAW. He discusses the Romans Carthaginians including Caesar's cipher. Finally he discusses the Old Testament and *atbash*, *sheshak* and *albam* (see David Kahn, The Codebreakers, pp. 79ff).

Item 96.1

Langie, André, Cryptography, Translated from the French by J.C.H. Macbeth, New York: E.P. Dutton & Co., 1922, 192 pp.

A popular treatise on general cryptography for the average reader. The translator became interested in cryptography through his association with the Marconi Corporation for whom he compiled a commercial code which proved to be unsuccessful. For many years following World War I, the Langie book was almost the only item available in English on this subject, although it is a mediocre and inferior book according to WFF.

Item 97

Murray, Margaret Alice, The Witch-cult in Western Europe - A Study in Anthropology, Oxford: The Clarendon Press, 1921, 302 pp.

This book was a gift from Walter Arensberg who somehow or other connected the thesis of this book with the dispute over the authorship of the Shakespeare plays. WFF believed this Arensberg theory to be a figment of his imagination.

Item 98

Margoliouth, D.S., The Homer of Aristotle, Oxford: Blackwell, 1923, 245 pp.

Purely subjective decipherments based upon fallacious anagrammatic methods. Prof. Margoliuth was a distinguished authority on Semitics at Oxford. WFF's copy contains a brief biographical sketch of Professor Margoliuth extracted from the British Who's Who. Correspondence with a colleague of WFF's in London and reviews of these two Margoliuth books in the Times Literary Supplement. More correspondence is contained in a second folder also marked **98**.

Item 98.1

Margoliuth, D.S., The Colophons of The Iliad and Odyssey, deciphered by D. S. Margoliuth, with a reply to some criticisms by Herr v. Wilamowitz Mollendorf, Oxford: Basil Blackwell, 1925, 31 pp. Further decipherments by Oxford University Professor Margoliuth.

Photostat positive of article. Described by ESF as "sad case of a great scholar who permitted himself to be deluded. See entry in Sheldon, EAW.

Item 99

Theobald, R.M.,(ed.) Dethroning Shakespeare, London: Publisher , 1880, 231 pp.

A selection of letters from The Daily Telegraph, the author was a prominent of the theory that Bacon wrote Shakespeare. Much attention to the work of Ignatius Donnelly. See I. Donnelly, The Great Cryptogram. Theobald was Hon. Sec. of the Bacon Society.

Item 100

Greenwood, George G., Is There a Shakespeare Problem? With a Reply to Mr. J.M. Robertson and Mr. Andrew Lang, London: The Bodley Head, New York: John Lane Co., 1916, 613 pp.

A detailed book by one of the firm believers in the non-Shakespearean authorship of the plays. Mr. Greenwood was a member of Parliament. The author emphasizes Shakespeare's learned use of the law. See **Item 1311**.

Item 101

Arensberg, Walter Conrad, The Cryptography of Shakespeare, Part I. Los Angeles: Howard Bowen, 1922, 280 pp.

The first of Arensberg's volumes in which he applied cryptology to the Bacon-Shakespeare controversy. This was to be followed by a second volume, with further "decipherment" by means of the same methods, but the author changed his studies thereafter to pursue different methods and Part II was never published. See TSCE, (See **Item 1691**) Chapter 10, a work by WFF and

ESF devoted to a critical examination of all the many attempts by Arensberg and others to employ cryptology to establish the authorship of Shakespeare. None of these theories have been accepted by authorities in the literary field. The FC includes all of Arensberg's published (and one or two unpublished) works relating to cryptology as he applied that science in his attempts to prove Bacon the author of the Shakespeare plays.

Item 101.1

Arensberg, Walter Conrad, "The Bacon Collection in the Francis Bacon Library," The Claremont Quarterly 9, 2 (Winter, 1962), pp. 43-47.

Reprint of the catalogue of items in the Arensberg Library built in 1961-62 at Claremont, California by Elizabeth Wrigley. The file also contains correspondence between WFF and Elizabeth Wrigley.

Item 102

Newbold, William Romaine, The Cipher of Roger Bacon edited with Foreword and notes by Roland G. Kent, Philadelphia: University of Pennsylvania Press; London: Oxford University Press, 1928, 24 pp.

Newbold believed he had deciphered the Voynich Manuscript and that it was written by Roger Bacon. See related correspondence in folder. WFF in a letter dated 26 January 1925 to Professor Roger E. Spiller, University of Pennsylvania writes that he would not recommend any university buy the Voynich manuscript, especially not at the asking price of \$100,000 in 1925. Until it has been deciphered and the contents ascertained, the value is questionable, and WFF's opinion that even when deciphered he did not think it would "increase the world's stock of knowledge." See David Kahn, The Codebreakers, pp. 863ff.

Item 103

Owen, Orville W., Sir Francis Bacon's Cipher Story. Discovered and Deciphered by Orville Ward Owen, M.D., New York and Detroit: Howard Publishing Co., 1893, 198 pp., Vol. I, Book I-IV.

The first edition of the first volume of Orville W. Owens work disclosing his "word cipher" which he believed was proof of Bacon's authorship of Shakespeare. See TSCE (Item 1691). WFF believed that if this author deserves any immortality, it would arise from the fact that Elizabeth Wells Gallup was, for a time, his collaborator.

Item 103.1

Owen, Orville W., Sir Francis Bacon's Cipher Story, Discovered and Deciphered by Orville Ward Owen, M.D., New York and Detroit: Howard Publishing Co., 1893, 198 pp. Vol. II, pp. 801-1001. See **Item 103**.

Item 104

Donnelly, Ignatius, The Great Cryptogram, Francis Bacon's Cipher in the So-Called Shakespeare Plays, London: Sampson, Low, Marston, Searle & Rivington, 1888, 2 Vols.

This was the first of many attempts to "prove" by cryptography that Bacon was the author of Shakespeare's works. An amazing and monumental document reflecting the mental gyrations of a person afflicted with an *idée fixe*. Donnelly was a member of Congress, lectured widely on this subject and was seriously acclaimed and derided in newspapers of the time. Card entry has wrong publishers: Chicago, New York, and London: R.S. Peak & Co. 1888. Cf. Galland, p. 57.

Item 105

Arensberg, Walter C., The Magic Ring of Francis Bacon, Pittsburgh, PA: privately printed, 1930, 64 pp.

Another example, according to WFF, of the author's involved reasoning which he believes yields proof of Baconian authorship of Shakespeare. Many references in the document to cryptography. Abstruse and unclear as to his concept of "the magic ring." See The Cryptologist Looks at Shakespeare. **Item 1691**. When published by Cambridge University Press, this item became The Shakespeare Ciphers Examined.

Item 106

Arensberg, Walter C., The Burial of Francis Bacon and His Mother in the Litchfield Chapter House, An Open Communication to the Dean and Chapter of Litchfield Concerning the Rosicrucians, Pittsburgh, PA: privately printed, 1924, 46 pp., 20 plates.

The Rosicrucians believe the grave of Francis Bacon and of Lady Ann Bacon, his mother, are in the Litchfield Chapter House and guard their belief in the existence of this grave as a secret. See **Item 105** on Arensberg's obsession with Bacon.

Item 107

Feely, Joseph Martin, Deciphering Shakespeare, Work Sheets in the Shakespearean Cypher, Rochester, NY: Wegman-Walsh Press, 1934, 146 pp.

The author, a practicing attorney in Rochester, New York, devoted much time, thought, and money in the pursuit of his particular ciphers in regard to the authorship of the Shakespearean works. All of his 'decipherments' are curiosities in that they are completely unintelligible. In

other words, Feely had no cipher system. Perhaps he hews to the line in following the “system” regardless of what comes out. It will be noted that in **Item 108A** he calls his system a “maze.” See TSCE, **Item 1691**.

Item 108

Feely, Joseph Martin, The Shakespearean Cypher, In the First Folio MDCXXIII demonstrated and surveyed, Privately printed, 1931.

The sayings of Shakespeare deciphered using “the key.” See **Item 107**.

Item 108A

Feely, Joseph Martin, Shakespeare’s Maze, further deciphered, Rochester, NY: G.P. Burns Press, Inc., 1938.

Continuing the series of worksheets on the Shakespearean Cypher. Brief grammar of the Cypher. The Cypher in the First Folio, The Cypher in Shakespeare’s Poems.

Item 108B

Feely, Joseph Martin, The Cypher in the Sonnets, The Dedication Key, Rochester, NY: J.M. Feely, 1940, 68 pp. See **Item 107**.

Item 108C

Feely, Joseph Martin, A Cypher Idyll anent the Little Wersterne Flower, Deciphered from A Midsummer Night’s Dream, Rochester, NY: privately printed, 1942, 82 pp.

See **Item 107**.

Item 108D

Feely, Joseph Martin, Roger Bacon’s Cypher: The Right Key Found, Rochester, New York: privately printed, 1943, 50 pp.

Mr. Feely also devoted some time to an attempt to solve the writing in the so-called Voynich Manuscript. He used the principles of simple monalphabetic substitution, which in his decipherments “produces steams of consonants with a few vowels interspersed.” Mr. Feely then proceeds to expand these groups which are for him “abbreviations.” WFF noted that it is an inevitable conclusion that the application of a method of this sort will produce “any reading that the investigator wishes to bring out.” See The Bible Code which produces similar results using a computer.

Item 108 E

Feely, Joseph Martin, William Shakespeare in the Skware Pole, privately printed, 44 pp.

Subtitled: Shown by bits of biography based on anagrams in his name, with comment on the other cryptic carrier, Hortentio, and his Gamut; aided by two caches of his cipher disclosed by request to test internal means of identifying the sender; so that his fraternal cult, the SKYWARE, HAIL MI PLA(y)EES.”

Item 109

Powell, J.A. and William F. Friedman, The Key for Deciphering the Greatest Work of Sir Francis Bacon, Baron of Verulam, Viscount of St. Alban. Geneva, IL: Riverbank Laboratories, 1916, 100 pp. with numerous cuts.

In the campaign conducted by George Fabyan to induce the universities and colleges to accept Elizabeth Wells Gallup's "decipherments" by means of the biliteral cipher as proof that Francis Bacon wrote Shakespeare, Fabyan employed Dr. J.A. Powell, then head of the University of Chicago Press, to come to Riverbank to assist him in the campaign. In these efforts, Fabyan and Powell persuaded WFF to use his photographic and scientific talents to assist them in this fruitless work. Further instruction for students of the biliteral cipher. See comment under **Item 109B**. The numerous cuts were prepared by Col. Fabyan's order, by WFF to facilitate working on examples of the biliteral cipher. Several show WFF's signature in the lower right corner. The biliteral cipher of Sir Francis Bacon as described in his De Augmentis Scientiarum is present in certain works published in the Elizabethan period. Ciphers of all kinds were in general use in the 15th, 16th and 17th centuries by cultured people.

Item 109A

Pott, Mrs. Henry (Constance Mary Fearson), Hints for Deciphering the Greatest Work of Sir Francis Bacon, Geneva, IL: Riverbank Laboratories, 1916, 17 pp.

Mrs. Constance Pott, a British woman with a long history of interest in Sir Francis Bacon, became an ardent supporter of Elizabeth Wells Gallup and her struggle to have the biliteral cipher accepted as authentic. Mrs. Pott gave not only mental support but considerable financial support to Mrs. Gallup. Since Mrs. Gallup in her own work does not teach her own system of deciphering, Mrs. Pott takes up the task.

Item 109B

Powell, J.A. (Capt. NA), The Greatest Work of Sir Francis Bacon, Baron of Verulam, Viscount of St. Alban, Geneva, IL: Riverbank Laboratories, 1916, 13 pp., 3 plates.

The former editor of the University of Chicago Press was associated with Col. Fabyan in the latter's efforts to have Elizabeth Wells Gallup's biliteral cipher accepted as authentic. Dr. Powell

wrote this manual in the interests of that campaign. He was assisted in this by WFF who prepared numerous drawings not because he thought Mrs. Gallup's work valid but merely to accede to Col. Fabyan's requests. This was the first example of Fabyan's duplicity in promising recognition to an author, then after providing the author with a few copies with his name on it and all other copies issued with no author's name. On this practice and the problems it caused with WFF, see Ronald W. Clark, The Man Who Broke Purple, chapter 1-5. There are two copies of this monograph, one with Powell's name on the cover, one without.

Item 109 C

Crain, Dorothy, Du Chiffre Bilatère, Méthode pour enseigner et acquérir une connaissance pratique du chiffre bilatère à l'usage des écoles primaires, Geneva, IL: Riverbank Laboratories, 1918, 69 pp. with numerous illustrations.

French version of **Item 109D**.

Item 109D

Crain, Dorothy, Ciphers for the Little Folks, A Method of Teaching the Greatest Work of Sir Francis Bacon, Baron of Verulam, Viscount of St. Alban, Geneva, IL: Riverbank Laboratories, 1916, 73 pp.

An instructional booklet to teach children how the Biliteral Cipher of Sir Francis Bacon is used. An appendix on the origin, history, and designing of the alphabet by Helen Louise Ricketts. Dorothy Crain was a kindergarten teacher whom George Fabyan interested in the biliteral cipher. In plate 8, there is a beautiful example by WFF of the insertion of a message by biliteral cipher. An interesting experience of WFF's many years later when he had forgotten the message he inserted is described in detail on p. 265 of TSCE. See **Item 1691**.

Item 109 E

Fabyan, George, (compiler), The First Twelve Lessons in the Fundamental Principles of the Baconian Ciphers, Geneva, IL: Riverbank Laboratories, 1916, 13 pp.

Although this item bears on its cover the statement "compiled by George Fabyan" and although the copyright is in his name, the document was really prepared by Dr. J.A. Powell with some photographic and drawing assistance by WFF. It deals with the biliteral cipher of Sir Francis Bacon. This was the first of the brochures prepared at Riverbank Laboratories at the command of George Fabyan to carry out his campaign of forcing the academic world to accept the Baconian authorship of Shakespeare by means of the biliteral cipher of Sir Francis Bacon. Contains a plate, photographed from the original 1605 edition of Bacon's first statement of that cipher in The Advancement of Learning. Also contains a translation of significant pages of the Spedding edition of Bacon in 1857.

Item 109 F

Powell, J.A. (Capt. N.A.), Hints to the Deciphering of the Greatest Work of Sir Francis Bacon, Baron of Verulam, Viscount of St. Alban, Geneva, IL: Riverbank Laboratories 1916, 15 pp.

Another instruction booklet on the biliteral cipher. No author's name appeared on the cover.

Item 109 G

Howell, John, Catalogue of Elizabethan Literature including the works of Shakespeare and His Contemporaries, San Francisco, n.d., 56 pp.

Item 110

Rickert, Edith, New Methods for the Study of Literature, Chicago, IL: University of Chicago Press, 1927, 275 pp.

A statistical method used in cryptanalysis written by an Associate Professor of English at the University of Chicago in her attempt to apply such methods in literary studies. Dr. John M. Manley was the head of the English Department. Dr. Rickert worked in G-2 with Dr. Manley during World War I where her work led to the ideas which grew into this book, as her preface states. The method applies to identifying works of unknown or uncertain authorship.

Item 111

Gallup, Mrs. Elizabeth Wells, The Tragedy of Anne Boleyn (synopsis) deciphered from the Novum Organum, of Sir Francis Bacon by Means of the Biliteral Cipher described in his Advancement of Learning by Elizabeth Wells Gallup, Geneva, IL: Riverbank Laboratories, 1916, 147 pp. and a 4 pp. Appendix.

The impetus for Mrs. Gallup's work on the biliteral cipher came from her attention being directed to italic types in Elizabethan works, which was a bi-product of her work with Dr. Orville Owen on the "word cipher," published at the time of her association with George Fabyan of the Riverbank Laboratories, and several years after breaking off her association with Dr. Owen. Mrs. Gallup's work on the "word cipher" attracted almost no adherents - - whereas her work on the biliteral cipher attracted hordes of vociferous followers.

Item 112

Gallup, Mrs. Elizabeth Wells, The Biliteral Cipher of Sir Francis Bacon, Discovered in his Works and Deciphered by Mrs. Elizabeth Wells Gallup, Detroit, MI: Howard Publishing Company; London: Gay and Bird, 1899, 246 pp., with an Appendix of 4 pp.

This first edition of Mrs. Gallup's book, published simultaneously in London and in the United States, launched a controversy as to whether the cipher was existent or non-existent which continued for some time. Beyond quoting Francis Bacon's explanation of his invention, the Biliteral Cypher, Mrs. Gallup gave no details of her own process of decipherment. She listed neither the starting point for a given cipher story, nor said anything as to what italic letters were excluded, or what Roman letters were included, therefore making it utterly impossible for any professional cryptographer to check her work without going to the most exhaustive effort. A tremendous hue and cry was raised all over the literary world. Mrs. Gallup was derided and vociferously attacked in some quarters, while greatly commended and admired in others. She attracted to her cause many persons of wealth who enabled her to carry on her crusade for the recognition of the biliteral cipher. This first edition is very rare. See WFF's TSCE, Ch. 12, 16, 18. (**Item 1691**).

Item 112A

Gallup, Mrs. Elizabeth Wells, The Bi-Literal Cypher of Sir Francis Bacon discovered in his works and deciphered by Elizabeth Wells Gallup, Detroit, MI: Howard Publishing Co., 1900, 368 pp. with an Appendix of 4 pp.

The second edition of Mrs. Gallup's book contained exactly the same deciphered material as the first, however, this edition had in the introductory material, arguments and personal notes, as well as notes on the Shakespeare plays and a concordant index of deciphered works. The most important addition, however, was the inclusion of Mrs. Gallup's biliteral alphabet for Sir Francis Bacon's Novum Organum and some pages reproduced in facsimile of that work. The most significant of all the additions was her cipher assignments for those pages, which she entitled: "Example of method of extracting the cipher." Here was, at least, a brief example of Mrs. Gallup's own cipher worksheets, and it provided material for some analytical study of her methods of decipherment.

Item 112B

Gallup, Mrs. Elizabeth Wells, The Biliteral Cypher of Sir Francis Bacon discovered in his works by Mrs. Elizabeth Wells Gallup, The Essayes 1625 deciphered by Mrs. Elizabeth Wells Gallup and Mrs. D.J. Kindersley, London: Gay & Bird; Detroit: Howard Publishing Company, 1908, 8 pp.

By 1908 Mrs. Gallup had worked in England with some other devotees of the belief in the Baconian authorship of Shakespeare. Her publisher brought out the decipherment of Bacon's Essayes under the joint authorship of Mrs. Gallup and Mrs. Kindersley in London. This is the only case of Mrs. Gallup having a collaborator. See Kindersley, pp. 196-200, 244 in TSCE, **Item 1691**.

Item 113

Gallup, Mrs. Elizabeth Wells, The Bi-Literal Cypher of Sir Francis Bacon, discovered in his works and deciphered by Mrs. Elizabeth Wells Gallup. Detroit: Howard Publishing Company, London: Gay & Bird, 1901, 368 pp. with an appendix of 4 pp.

The third edition of Mrs. Gallup's book, published one year after the second edition, is identical with the latter except for the omission of the alphabet, worksheets, and pages of the Novum Organum. This gives rise to speculation concerning the reason for this very significant deletion. Signed by WFF, Washington, 1934. Gift of George Fabyan.

Item 113A

Gallup, Mrs. Elizabeth Wells, The Bi-Literal Cypher of Francis Bacon. Replies to Criticisms, n.d., 40 pp., paperback pamphlet. Title page, if any, is missing.

The controversy which raged between the years 1899 and 1902 brought forth Mrs. Gallup's replies to criticisms. Needless to say, the criticisms were very selective criticisms. Rare item.

Item 114

Arensberg, Walter C., The Shakespearean Mystery, Pittsburgh, PA: privately printed, 1928, 330 pp., 222 plates.

The most costly example of Arensberg's obsession with cryptology relating to the Bacon-Shakespeare controversy. Observe the number of pages in fine print and the number of plates. Beautiful reproductions, but ultimately not convincing.

Item 115

Arensberg, Walter Conrad, The Baconian Keys, Pittsburgh, PA., Privately printed, 1928. Revised edition, 115 pp., 71 plates.

An example of Arensberg's obsession in regard to the Bacon-Shakespeare controversy and of his attempted use of far-fetched cryptology to "prove" his thesis. See text on both entries on p. 15 of WFF the B-S Controversy.

Item 116

Blair, William, Cipher, n.d., type reset from article, Ree's Encyclopedia, London: 1802 and 1819-21.

The extract text and plates of Blair's widely-praised work "Cipher." In quarto edition, rebound by Cmdr. Mindte from whom it was a gift to WFF. Discusses Tironian notes on p. 19, and buys the old *skytale* article. For update see Sheldon, EAW.

Item 117

Poe, Edgar Allan, Selections from the Prose Tales of Edgar Allan Poe, New York & London: the Macmillan Co, 1913.

The selection of Poe's prose tales include his world-famous story, The Gold Bug, which is a vehicle for explaining how a cipher message is solved. A high school possession of ESF's, signed Elizebeth Smith.

Item 118

Palatino, Giovanni Battista, Libro di M. Giovambattista Palatino, cittadino Romano, nel qual s'insegna a scrivere ogni sorte lettera antica e moderna, di qualunque natione, con le sue regole & misure & esempi et con un breve, et util discorso de le cifre. Riveduto novamente & corretto dal proprio autore con la giunta di quindici tavole bellissime, Roma: per A. Blado Asolano, 1553, unnumbered pages, 55 lines of which 16 are devoted top cipher.

A sixteenth century scholar discourses on the history of the alphabet and writing with additional reflections on cryptology. The book went through many editions. See Galland. p. 138.

Item 119

Porta, Joan Baptista, De furtivis literarum notis, vulgo de Ziferis, Libri IIII Naples 1563, 228 pp.

Giambattista della Porta was an Italian scholar who worked on cryptography and also on optics. He claimed to be the inventor of the telescope although he does not appear to have constructed one before Galileo. Porta was the first cryptographer to treat cryptography in a scientific manner. A rare and valuable item, worthy of examination as a work of art, as well as for its value in the history of cryptology. See Galland, pp. 146-147.

This copy was really published by John Wolfe in 1591 - a secondary forgery. John Wolfe learned the art of bookmaking and copying in Florence. He was a daring printer who perpetrated a series of forgeries connected with Italian authors, especially Macchiavelli and Aretino. He reprinted Porta's book on secret writing and cyphers.

The folder contains a catalogue entry from Herbert Reichner, Stockbridge, MA. Also three rare-book slips from the Folger Shakespeare Library where WFF examined three books: The original Porta volume, The Wolfe primary forgery from 1591, a secondary forgery from 1591. This very important work was originally published in Naples in 1563 and soon found admirers in Elizabethan England. It is said that Wolfe reissued the Porta reprint at the suggestion of Jacopo Castelvetro, an Italian living in London. He retained the dedication of the Neapolitan edition and

omitted the final colophon. At first glance one could believe it to be the 1563 edition. The only other copies are in the Folger and the University of London libraries.

Item 120

Anonymous, Pantelegraphy, Translating Card, London: The Pantelegraphy Publishing Co. Ltd, n.d.

This is an item dealing with the construction of code groups for commercial purposes. According to WFF, it was a completely impracticable scheme. See **Item 136**.

Item 121

Schneikert, Hans, Die Geheimschriften im Dientse des Geschäfts- und Verkehrsleben, Leipzig: Ludwig Ruberti, 1905, 74 pp. Series: Moderne Kaufmännische Bibliothek.

General cryptography as viewed by a German writer in the early years of this century. Covers Julius Caesar's cipher, Chinese codes, Trithemius and Napoleon. Very important and rare historical item. See Galland, p162. Another edition was published in 1913. See Sheldon, EAW, David Kahn, The Codebreakers, pp. 82ff.

Item 122

Arensberg, Walter, Microfilm of the Skeleton text of the Shakespeare Folio. Missing

Item 123

Anonymous

Seven Examples from Ancient History, Polybius, Aeneas Tacticus. Plutarch, Herodotus, Dio Cassius, Suetonius and Aulus Gellius of ciphers used by leaders.

- 1) Polybius 10.48 (Vol. 2, 42-47 of the Shuckbaugh translation) on fire signaling.
For the most recent description of this system see D. Woolliscroft, Roman Military Signaling, pp. 30-46.
- 2) Aeneas Tacticus 31, On Secret Messages, Oxford 1927 L.W. Hunter translation.
- 3) Plutarch 19 (Vol. 4, pp. 285-87 Perrin translation. On the *scytale*, See West, Kelly, Sheldon, EAW.
- 4) Herodotus 1.123; 7.239 (Powell, 1949 translation, Oxford)
- 5) Cassius Dio 40.9, Vol. 3, Loeb edition, p. 419, Cary translation.
Substitution cipher of Caesar.
- 6) Suetonius, History of the Twelve Caesars (J.H. Freese trans. Routledge, 1923)
On Caesar's cipher.
- 7) Aulus Gellius, Attic Nights 17. 9 (Vol. 2, pp. 233-239, Loeb edition, Rolfe

translation, 1927). On Caesar's cipher. See Sheldon, EAW; David Kahn, The Codebreakers, pp. 82ff.

Item 124

Wheatley, Henry Benjamin, Of Anagrams, A Monograph Treating of their History from the Earliest Ages to the Present Time . . ., Hertford: Stephen Austin, 1862, 186 pp.

Although more than a century has passed since the publication of this item, it is still the most complete exposition of the subject of anagrams. A rare and perhaps unique item. Mentioned in various foreign books on cryptography. See Galland, p. 199. Contains echo verses, chronograms, leonine verses, rhopalic serves, bouts rimes, equivocal verses. Bibliography included.

Item 125

Smith, Francis O.J., The Secret Corresponding Vocabulary Adapted for Use to Morse's Electro-magnetic Telegraph, and also in conducting written correspondence transmitted by mail or otherwise, Portland, Maine: Thurston, Isley & Co., 1845 unnumbered pages.

This is quite a valuable item. WFF believed it the only one in the world. The author was one of Morse's partners in the development of Morse's electromagnetic telegraph and this code is certainly the first to have been prepared specifically for code communication after Morse demonstrated the practicality of his system. This copy was originally the property of the late General J.J. Carty, a vice-president of the Telegraph and Telephone Company and is autographed to WFF in 1923 by its former owner. The item contains an interesting clipping from Scientific American, pasted inside the front cover, dated September 1960, p. 32, "One Hundred Years Ago." "A lawsuit was brought by F.O.J. Smith against Morse to recover 5/16 of the money received by Morse from the governments of Europe for the invention of the telegraph. The partners had worked together in the telegraph business for some twenty years." Mr. Smith received \$300,000 from an earlier settlement.

Item 125.1

Smith, Francis O.J., The Secret Corresponding Vocabulary adapted for use to Morse's Electro-Magnetic Telegraph, and also in conducting written correspondence transmitted by mails, or otherwise, Portland, Maine: Thurston, Isley & Company, 1845 unnumbered pages.

Photographic reproduction of **Item 125** photostat (positive). Photostat negative of front piece and last page.

Item 126

Phillips, Walter Polk, The Phillips Telegraphic Code for the Rapid Transmission by Telegraph of Press Reports, Washington, DC: Gibson Brothers, 1879, 62 pp.

This is not strictly a code at all. It is an abbreviating system which was very widely used in the days when all telegraphic communications were sent by hand-operated Morse key. The special usage it fulfilled is indicated in the title. This little volume has been rebound. The original front and rear covers are preserved inside.

Item 127

Carton, Raoul, "Le Chiffre de Roger Bacon," Revue d'histoire de la Philosophie, (August, 1928), pp. 31-66 and 165-179. See cross reference under Voynich Manuscript. Cf. Galland p. 38.

Item 128

MacDonald, Dwight, "The Lie Detector Era," Part I. "I Know You Done It, the Machine Says So," The Reporter 10, 12 (8 June 1954), pp. 10-18.

The polygraph comes in for a drubbing. NSA and CIA are mentioned in this article and are "said" to use such devices. J. Edgar Hoover didn't like the machine. It does not detect lies, it detects changes in body functions. It was originally used in criminal cases. The author dates the machine to the 19th century, but see Sheldon, EAW "Polygraph" for earlier uses. The author mentions "the CIA's polygraphic screening program in 1948" which spread the gospel to other governmental agencies." This ties in with McCarthy's investigations which tried to expand the political use of the lie detector.

Item 128.1

MacDonald, Dwight, "The Lie Detector Era," Part II. "It's a Lot Easier and It Doesn't Leave Marks," The Reporter 10, 3 (June 22, 1954).

Discusses "The NSA Chamber of Horrors," p. 23 and the polygraphing technique called "hazing" used to intimidate the newcomers and break them to the harness. Proper polygraph technique was ignored. One person described it as "I felt like someone being tried in a Moscow purge." They liked using the EPQT (Embarassing Personal Question Technique). Horror stories about the NSA polygraphing unit at 1436 U Street. The heavily guarded building between a gas station and the undertaker's parlor. Police sergeant (with an aggressive manner but recessive grammar) "I use to take the boys into the backroom and use my club. The lie detector is better. It's a lot easier and it doesn't leave marks."

Item 128.2

[Congressional Record] Remarks of Senator Tydings, 23 May 1949 [Regarding Formation of Armed Forces. [Security Agency].

Interesting historically as throwing some light on the formation of the National Security Agency and its predecessors. Includes photostatic copies of news articles from The Washington Post, 24 June 1949 and the Daily News, 16 July 1949. “Defense Secretary Louis Johnson’s bare-fisted unification efforts” “undercover clawing.” The feeling over the issue “has hit atomic temperatures.”

Item 129

Acme Coding Company, Acme Complete Seven Figure Code, New York, San Francisco, London, n.d.

A code condenser, n.d. but before 1 January 1934, probably autumn of 1933, judging by some correspondence between Mitchell and WFF enclosed with the item. The object of the code condenser is to reduce to a minimum the cost of commercial code messages; some of them do this quite effectively but at the cost of accuracy. William Mitchell, who autographed this copy, was a prominent publisher of large commercial codes. [Correspondence in separate file].

Item 130

Manly, John M., “Roger Bacon and the Voynich Manuscript,” Speculum, 6 (July, 1931), pp. 345-391.

This article presents a scholarly and complete demolition of the alleged decipherment of the Voynich Manuscript by Newbold. Original copy of journal autographed to WFF by John Manly. More notes in grey folder with separate correspondence. **Item 2112**.

Item 131

Meister, Aloys, Die Anfänge der Modernen Diplomatischen Geheimschrift, Beiträge zur Geschichte der Italienischen Kryptographie des XV Jahrhunderts, Paderborn: F. Schöningh: 1902, 65 pp.

The history of cryptography in 15th century Italian diplomatic circles. Extremely important for a study of the history of cryptology. Valuable and rather rare brochure. Rebound for WFF in boards. For translation, see **Item 337**. See also Galland, pp. 122-123.

Item 132

Legrand, Max-Albert, Le Krypt, pour correspondre secrètement en toutes langues. Méthode universelle de cryptographie simple, rapide et sûre, suivie d’un essai de cryptologie à l’usage et à la portée de tous. Paris: École Technique Supérieure de Représentation et Commerce, n.d.

“An impressive title for a small and insignificant item of no importance except perhaps to children.”

Item 133

[Navy Department], Universal Pocket Code, New York: The Press Publishing Co., 1912, 250 pp.

This purports to be a code for newspaper reporters but was actually produced by U.S. Naval Intelligence for the use of its secret agents in World War I. The date shown (1912) is also a complete phony. WFF was quite sure that it was not published until 1917 or 1918. Phraeology and terms used are a give-away that this code was prepared for naval use; for example [code] PALSY (N.C.B.)= NAVY CIPHER BOX. Signed WFF 1923 - with a note "This is not what it seems to be." Book Plate: "If this code should be found by any person a suitable reward will be paid for its delivery to: Charles M. Lincoln, Managing Editor, The World 63 Park Row, New York City.

Item 134

[Navy Department], Universal Pocket Code - Second Edition, Part I: Code (pp. 1-120), Part II: Decode (pp. 1-142), New York: The Press Publishing Company, New York World, 1912, 262 pp.

The second edition of the preceding **Item 133**. It is to be noted that whereas the first edition was a one-part code, the second edition is a two-part code. The date of publication is also "phony;" as noted above in **Item 133**. The general appearance of this code is characteristic of the type of printing produced by the GPO. Moreover, the contents are such as would hardly appear in a commercial code for public use. Finally, GPO tell-tale signature marks can be found at the bottom of page 11 (76152-19-2) and similar signatures are found on each set of eight pages.

Item 135

Dempsey, James Edwin, Dempsey's Telegraphic Cipher Code. Special edition of Dempsey's Telegraphic cipher code for use of the Quartermaster's Department of the U.S. Army, Chicago, IL: James Edwin Dempsey, 1917, 128 pp. License number 1871.

WFF had no information as to how or why this code came into being, for use as indicated in the subtitle, nor does he know to what extent it was used, if at all. Two copies. One copy is stamped with the number 1985 on the title page; correspondence in the volume would indicate it was used for official purposes. A letter of January 1958 is addressed to officers supplied with this code, and is signed by General George W. Goethals of Panama Canal fame. Two copies. Signed by WFF, Washington 1929. Letter in separate folder with correspondence, **Item 2112**.

Item 136

Anonymous, Pantelegraphy. Maximum limit card of a million cipher words.

This is an item dealing with the construction of code groups for commercial purposes. It was a completely impracticable scheme. See **Item 120**.

Item 137

American Red Cross, When Disaster Strikes - Manual of Preparedness and Relief, The American National Red Cross: Washington, D.C. 1929.

Revised edition, 1934, 72 pp. Pages 70 and 71 of this publication give the air-ground message code and instructions therefore to be used by Red Cross representatives in reporting information in case of a disaster. See **Item 137.1**. Both in the same envelope.

Item 137.1

American Red Cross, Disaster - A Red Cross Publication Devoted to Relief and Prevention, Vol. 3, No. 8, December 1949.

Includes a mimeographed two-page pamphlet: "Telegraphic Code for use in reporting Disaster Information." See also p. 4 of the publication "Ground-Air Signal Code." **Item 137**.

Item 138

Hill, Lester S., "Concerning Certain Linear Transformation Apparatus of Cryptography," American Mathematical Monthly, Lancaster, PA, Vol. 38, No. 3, March 1931, pp. 135-154.

Another mathematician becomes intrigued with cryptography. Original copy of the journal, autographed by the author. Important because it lead to the development of a call-sign encipherment system of high merit. Developed and improved by the U.S. Navy. Contains some correspondence. The author was a professor of mathematics at Hunter College. Pre-publication correspondence. [in separate file]

Item 138 A

Published article - offprint of **Item 138**.

Item 139

Anonymous, The Polyalphabetic Substitution Cipher Device and its Three Inventors: Jefferson, Bazaries and Hitt.

Thomas Jefferson was the first of three independent inventors of the basic principle of polyalphabetic substitution cipher, wherein 25 to 30 letters can be enciphered at once and the same time. The first inventor was Jefferson whose device (meticulously described in his papers was in the form of wooden disks, 36 of them): 26 letters, 10 numbers. In 1900 Bazeries, a French cryptographer, invented the same principle - his pictured cylinder shows the plain-text

message: *Je suis indechiffable* (I am undecipherable). In the 1910s the same principle was discovered by Captain Parker Hitt in the form of sliding strips. See also **Items 809, 206.1 and 150.2**. All the military services employed this cipher device, either in the form of a cylinder or in sliding strips. Jefferson's Chart for Jefferson's MSS Vol. 128, pp. 22-37. Library of Congress. Cf. David Kahn, The Codebreakers, pp. 244ff and ch. 11.

Item 140

Schneider, E.L.E. (Commandant), Description d'un système de cryptographie à l'usage de l'armée. Correspondance secrète, Paris: L. Fournier, 1912, 31 pp.

The analysis of the Schneider cryptographic (polyalphabetic) system formed the basis of Part II of WFF's brochure. **Item 167.6** Signed WFF, Washington, DC, 1932.

Item 141

Sacco, Luigi (Colonel of Engineers), "Military Radio Direction Finding," Translated from Bolletino radio telegrafico del reale esercito, Rome, Vol. 12, No. 5-6 (Sept.-Dec, 1933) 23 pp. War Department, Office of the Chief Signal Office, Washington, DC.

Sacco was also much interested in direction finding. Radio direction finding had become a very important party of military science and an important element in the interception of radio communications.

Item 142

Thorndike, Edward L., "Word Knowledge in the Elementary School," Teachers College Record, Teacher's College, Columbia University, New York City, 22, 4 (September, 1921), pp. 334-370.

See comment on **Item 205**. The teaching of English to young children by statistical compilations was an early tool for frequency studies in cryptanalysis.

Item 143

Hill, Lester S., "Cryptography in an Algebraic Alphabet," American Mathematical Monthly, Lancaster, PA 36, 6 (June-July, 1929), pp. 306-312.

A reprint of an article by the author of **Item 138**. Autographed by the author. Considered, but not found to be useful for military purposes.

Item 144

Arensberg, Walter C., Francis Bacon, William Butts, and the Pagets of Beaudesert, Pittsburgh, PA., Privately Published, 1929, 10 pp.

Another example of Arensberg's obsession with cryptology relating to the Bacon-Shakespeare controversy and the secret order in which he firmly believed. See Arensberg's Wikipedia entry.

Item 145

Anonymous, Handguide to Litchfield Cathedral, Litchfield: Printed by Lomax's Successors, 1924, 64 pp.

This ordinary-looking pamphlet guide is an item which pertains to the many others dealing with the work of Walter C. Arensberg because he saw in it "cryptographic proof" of Baconian authorship of the Shakespearean plays. This is just another example of the obsession from which he suffered. As the obsession grew, Arensberg came to believe in the present existence of a secret order, a part of the Rosicrucian Fraternity of the Ark. He also believed that Queen Elizabeth I was the mother of Bacon and that they were buried together in this cathedral in the same casket.

Item 146

Smith, Robert Metcalf and Howard Seavoy Leach, The Shakespeare Folios and the Forgeries of Shakespeare's Handwriting in the Lucy Packer Linderman Memorial Library of Lehigh University with a list of Folios in American Libraries, Bethlehem, PA., Lehigh University, 1929, 47 pp.

The Library of Lehigh University, founded in 1878, possesses among its bibliographical treasures, six original folios of the plays of William Shakespeare. They have one copy of the First Folio of 1623, two copies of the Second Folio of 1632, one copy of the Third Folio of 1664, and two copies of the Fourth Folio of 1685. The Lehigh Collection also includes two interesting forgeries from the pen of William Henry Ireland, a signature and six lines purporting to be Shakespeare's handwriting. A brief exposition of the four Folios and attempted forgery of Shakespeare's handwriting. The notorious "Ireland Forgeries" are discussed by a distinguished Elizabethan scholar of the Lehigh University Faculty.

Item 147

Mauborgne, Joseph Oswald (1st Lieutenant), An Advanced Problem in Cryptography and its Solution, Fort Leavenworth, Kansas: Press of the Army Service Schools, 1914, 19 pp.

The first published solution to the cipher system invented by Sir Charles Wheatstone but attributed erroneously to Lyon Lord Playfair. The Playfair cipher was, for many years, a standard field cipher of the British Army and was also used to very limited extent by the American army in World War I. Mauborgne, at the time of WWF's entry, was a retired Major General and former

Chief Signal Officer of the U.S. Army. He solved this famous cipher system while making a journey on a transport from the Philippines to the U.S. At the time, Mauborgne's work was received as a great advance in cryptanalysis. This, the first edition, is extremely rare and valuable. The same can also be said for the second edition. See **Item 147.1** Cf. David Kahn, The Codebreakers, pp. 198-202.

Item 147.1

Mauborgne, Joseph Oswald (LTC), An Advanced Problem in Cryptography and its Solution, Fort Leavenworth, Kansas: Press of the Army Service Schools, 1914, 2nd edition 19 pp.

Second edition of **Item 147**. Rebound and autographed . Three unbound copies.

Item 148

U.S. Army Signal Corps, The Signal Corps Bulletin.

WFF thought it would be useful to gather together these articles in a single technical manual for basic training and collateral reading by students interested in cryptology. A series that began in 1925 and continued periodically until 1940. The FC contains all 31 issues in which one or more articles on cryptology appear. They are listed by issue on the Item description cards. Folder marked 148 contains extra sheets for Riverbank Publication 22C. Reclassified by NSA and removed from FC. Recovered from NSA by VMI Department of History 5/09.

Item 148.1.

U.S. Army Signal Corps, Friedman, William F. (editor), Articles on Cryptography and Cryptanalysis Reprinted from the Signal Corps Bulletin, GPO, 1942.

Originally marked "Restricted." Declassified 10/28/81 but re-classified and WFF was forbidden to have them re-published.

Nikolaieff, A.M., "Secret Causes of German Successes on the Eastern Front"

Alf, Monge, "Solution to the Playfair Cipher"

WFF, "Edgar Allan Poe, Cryptographer"

WFF, "Jefferson's Cipher Device"

Lewis, F. Acker, "Communications Systems of the American Indians"

WFF, "Jules Verne as Cryptographer"

Item 149

The Signal Corps School, Camp Alfred Vail, New Jersey, Officer's Division. OB-AC-11-1 Department of Applied Communication, Basic Course, "The Solution of Military Codes and Ciphers," 105 pp.

A course of 14 lectures given in the Basic Officers' Course, The Signal Corps School, Camp Alfred Vail, New Jersey. William F. Friedman, Chief of the Code Compilation Section, Office of the Chief Signal Officer of the Army, Washington, DC, 11/30/21.

Item 149.1

The U.S. Army Signal School, Camp Alfred Vail, New Jersey, Pamphlet #4. SP-DG1-4, 2nd impression, December 11, 1922, The Solution of Military Codes and Ciphers, OB-AC-11-1 Basic Course, Department of Applied Communications, 11/30/21. Reprinted 12/11/22.

Item 150

Hitt, Parker (Captain of Infantry, USA), Manual for the Solution of Military Ciphers, Fort Leavenworth, Kansas: Press of the Army Service Schools, First edition, 1916, 101 pp.

When a captain, Col. Parker Hitt, wrote this manual for the Army Service Schools at Fort Leavenworth, Kansas, it was the first general manual ever written in the U.S. Very rare and historically very important. Fourteen lectures.

Copy 2 - Original paperback - belonged to H.O. Yardley, who made a comment on the front cover.

Copy 3 - Original PB, belonged to ESF and contains many additions and comments by her as she used it for training students.

Item 150.1

Hitt, Parker (Lt. Col. Signal Corps, Infantry), Manual for the Solution of Military Ciphers, Fort Leavenworth, Kansas: Army Service Schools Press, 2nd edition, 1918, 100 pp.

Second edition of **Item 150** was issued two years later. Also very rare. This copy, later bound in red buckram, was given to WFF by Captain Lew Wallace, grandson of General Lew Wallace, who was one of the officer students trained by WFF and ESF in 1918. 4 extra paperbound copies.

Item 150.2

Hitt, Parker (Captain of Infantry, U.S. Army), The Star Cipher, As developed by Captain and Mrs. Hitt, 1913-1914.

Captain Hitt also invented, with no previous knowledge of either Jefferson's "Wheel Cipher" or of Bazeries's, same invention in the cylindrical form in 1913. A sliding-strip type of mechanism on exactly the same cryptographic principle, which in 1914 (with Mrs. Hitt) was changed into cylindrical disks. This was tested, developed and perfected into the M-94 by Major

Joseph O. Mauborgne, Chief of Research and Development in the Signal Corps for several years after WW I, with the assistance of the testing skill and inventive genius of WFF. The story of the M-94 from Mauborgne's first heavy brass cylinder to a light-weight aluminum, to a folding flat double panel of sliding strips and how it came to be used eventually by all four armed services, and the parts played by WFF and ESF in these successive developments, is told in the entry under **Item 6**. Cf. David Kahn, The Codebreakers, pp. 244ff and ch. 11. Item taken by NSA.

Synoptic tables for Star Cipher in oversized grey, acid-free box.

Item 151

White, Maurice S., Secret Writing: How to Write and Solve Messages in Cipher and Code, Washington: The Washington Service Bureau, 1938, 24 pp.

The author describes simple ciphers, polyalphabets, mathematical ciphers, multiliteral ciphers, substitution ciphers and double transpositions. The Friedmans considered the book suitable only for children and a "curiosity."

Item 151.1

Ohaver, M.E., Cryptogram Solving, Columbus, Ohio: Stoneman Press, 1933, 33 pp.

An elementary book on the solution of substitution ciphers for beginners. Ohaver was editor of "Solving Cipher Secrets" a department of Cryptograms published in Detective Fiction Weekly. There is an accompanying folder with correspondence from the author dated 5/23/33.

Item 151.2

Rathbun, John H., Codes and Ciphers, Castile, NY, 1931, 18pp.

ESF commented on this item: "another proof that a writer on elementary cryptology can always find a publisher." Original sales price 25 cents.

Item 151.3

White, Maurice S., Cryptograms, A brief discussion of various ciphers and codes, with methods of solving them. Washington: The Washington Information Bureau, 1934.

A four-page multilith pamphlet of very little value historically or otherwise according to the Friedmans. Defines cryptography, Discusses examples from Greek, Latin, and Hebrew. Secret writing, ciphers, substitution ciphers, transposition ciphers, solving unknown ciphers, codes, and a short bibliography.

Item 151.4

Pidgin, Charles Felton, A Private Key to Any Numbered Telegraphic Code, Syllabic-Reversible, Absolutely Secret, Belmont, MA: 1911, 8 pp.

A proposal for a method for enciphering any commercial code in which the code groups are made up of numbers.

Item 151.5

Littlefield, Jack, "Bii nc: Melancholy notes on a cablegram code book," Reprinted from the New Yorker, July 28, 1934, 18 pp.

A delightfully amusing article on the reaction of the average man to the use of a code book. Note by ESF: We are still amused after 32 years. He writes of waiting for codes with exotic messages like:

NARVD- Do not part with the document

OBNYK-Escape at once

ARPUK-The person is an adventurer, have nothing to do with him.

Instead, he gets:

BIINC - What appliance have you for lifting heavy machinery?

UPPXO - For what use was the mixing machine intended.

The code book has words for everything. If you need lard, in bladders, it is CHOOG, Flannel shirts are GOLPO, Cod liver oil is GAHGU, FOOLP for ship's biscuit, A NIBLICK is a GAZER, but a foot warmer is a FREIZ. The cross references are an area for pessimists: ankles, see accidents, chief topic on the stock exchange, see failure.

Item 151.6

Navy Department, U.S. Naval Code of Signals. Comprising:

(1) Army and Navy (Wig-Wag) code

(2) Electric night (Ardois) system

Probably a unique item. Published by the Navy years before the advent of radio.

Item 151.7

Greely, A.W. (Chief Signal Officer), Signal Corps U.S. Army, Army Code Card. The Myer System for U.S. Army and U.S. Navy Signaling, Washington: War Department, Signal Officer 30, October 1896, 4 pp.

Probably the only surviving copy of this 1-4 element signaling system. Signals using flags, torches, hand lanterns or beams of a search light. Flash signals with lanterns, heliographs or search lights. Sound signals with fog whistles, fog horn or bugles.

Item 152

Manly, John Matthews, LIPPOTO, PO. Reprinted for his friends by John M. Manley, 1934.

A tiny booklet which is a reproduction of a “curious little volume” a facsimile of an Italian booklet printed in England in 1591. Professor Manley’s “explanatory” and conclusion in English are delightfully amusing. According to ESF, Professor Manly has an exaggerated sense of his own “greatness” and almost no sense of humor. This pamphlet presents him at a high level of humor, otherwise so rarely seen, as to seem utterly non-existent to ESF. The item bears a holographic message “to W.F. Friedman in friendship and admiration, JMM.” The item has nothing to do with cryptography.

Item 153

German Government, German Army Cryptographic Material, Copy 375.

Item 153.1A

German KRUSA Code of World War I - Encoding Volume of Code No. 145, Satzbuch 145
Teil: Schlüseln.

Item 153.1B

German KRUSA Code of World War I, Decoding Volume of Code No. 145 Entschlüsseln
Nicht in Feindeshand fallen lassen.

Item 153.2

German KRUSA Code of World War I, Encoding Volume of Code No. 140. Note: captured September 12, 1918 in St. Mihiel France, Geheim.C.

Item 153.3

German KRUSA Code of World War I, Encoding Volume of Code No. 152. Photostat negative. Note on front: Marcel Code No. 2, Used Sept. 23-Oct. 1918 by 5th German Army. Captured September 28-29, 1918.

Item 153.4

German KRU Code, Encoding volume of Code No. 5 (photographic copy). Nr. 0234
Geheim! Verzifferungsbuch.

Item 153.5

German KRUSA Code - Encoding volume of Code No. 113. Nr. 067 Verzifferungsbuch 113.

Item 153.6

German 3-letter code of World War I, “Schlüsselheft.”

Item 153.7

German “cover name list,” 225 Infantry Division, Decknamen Verzeichnis, Anlage zum Schlüsselheft, “Nicht in die vorderelinie mitnehmen.

Item 153.7

(1) German “Cover Name List,” Appendix to Schlüsselheft 225th Infantry Division.

Item 153.8

Translation of a German document of WWI. “Signal Service Traffic Regulations Part 10 of Manual of Position Warfare for all arms. British Translation, 22 January 1918. Declassified 7/21/75.

Original is marked “Not to be taken into the Front Line or in Aeroplanes,” SECRET. General Staff (Intelligence, General Headquarters, 13 April 1918), “Measures for ensuring the secrecy of Signal Service Traffic. Measures for Disguising Signal Service Traffic, Instructions for use of the “code book.”

Item 153.9

Record of German Trench Codes solved by G-2, A-6, GHQ-AEF. Record kept by Capt. Berthold. Fritz #3, #11, #14, #19, #23, #25, #28.

Item 153.10

Translation of a German Document of World War I, “The Enemy is Listening,” GHQ AEF, General Staff, Second Section G2, A6. Declassified 7/24/75.

Opening line: “wireless, ground-telegraph and telephone traffic are branches of liaison service most open to enemy interception.” Had they only followed their regulations at Tannenberg.

Item 154

Signal Corps, U.S. Army, Applied Communications, Part I, General Principles - message centers - codes ciphers, Washington, DC., GPO, Prepared at the Signal School, Camp Alfred Vail, New Jersey, 1922, 80 pp.

A textbook prepared for the training of message center and cryptographic clerks in the Signal Corps.

Item 154.1

U.S. Army Signal Corps, Signal Communications for All Arms, Washington, DC: GPO. Prepared under the direction of the Chief Signal Officer, 1923, 73 pp.

A general textbook for signal communications. Training Regulations No. 160-5.

Item 154.2

Instruction for Using the Cipher Device Type M-94, Training Pamphlet No. 2, Washington, DC: GPO, Prepared by the Office of the Chief Signal Officer, February 1922, 11 pp.

Item 154.3

Friedman, William F., Cipher Device Type M-94, instructions for using, Washington, DC: GPO, Prepared in the Office of the Chief Signal Officer, 1922, 11 pp.

Training Pamphlet No. 2. Cipher Device type M-94 was really invented by Thomas Jefferson; independently invented later by French cryptographer Bazeries, and independently again invented by Col. Parker Hitt, Signal Corps, U.S.A., an amateur cryptographer. See Friedman paper on "Edgar Allen Poe, Cryptographer" and addendum thereto. **Item 393**. Cf. David Kahn, The Codebreakers, pp. 244ff.

Item 155

U.S. Army Signal Corps, Establishment of the Army Signal Corps Museum, Fort Monmouth, New Jersey 1962. Miscellaneous Items.

In the 1950s, the Army Signal Corps at Fort Monmouth, NJ established an Army Signal Corps Museum with a Special Cryptography Exhibit. WFF was instrumental in having sent for this exhibit various items of importance. For many years (1921-ca. 1936) WFF held classes at the Signal Corps School twice a year - autumn and spring. This cryptographic school grew from a very small group of students for a period of one week, once a year, to a very large group lasting approximately one month, twice a year. These items are valuable because the Signal Corps and the Signal Training command have ceased to exist since the reorganization of the Armed Forces into the Department of Defense. See the Ms. Collection, numbered series 155 and text of Speeches. Signal Corps Museum, Brochure. Friedman sent two successive models of the M94 Hagelin pocket cryptographer type CD 57. (Cross reference to items in the Collection). Photograph of Exhibit case. Photographic negative of executive order, 28 August 1945, on the release of cryptanalytic information. Public Law 513, 13 May 1950. Sliding Polyalphabet. Picture of Bazeries Cylindrical Cipher originally invented by Thomas Jefferson. Cf. David Kahn, The Codebreakers, pp. 244ff.

Item 156

Pierart, J., Les télégrammes en code et le nouveau statut du langage convenu
Brussels: Forest-Bruxelles, 1933, 15 pp.

A paper by a Belgian on the international regulations pertaining to code language. 3 copies.

Item 157

Gaines, Helen Fouché (Pseud. Piccola), Elementary Cryptanalysis. A Study of Ciphers and their Solution, Boston: American Photographic Publishing Company, 1939, 230 pp.

This book was sponsored by the American Cryptogram Association. Over a period of about 18 years, the late Mrs. Gaines, a member of the above-mentioned association, wherein she used the pseudonym Piccola, contributed more than 30 articles to the official journal of the magazine, The Cryptogram. Mrs. Gaines possessed an analytical mind and consequently produced what is probably to date the best book written in English for the layman or non-professional on this subject. Cf. Galland, p. 72.

Item 157.1

Folder of miscellaneous correspondence between Helen F. Gaines and WFF who looked over the Ms. before publication. General Sacco's Manuale di Crittografia was translated by Mrs. Gaines.

Item 157.2

A paperback edition of **Item 157**, published by Dover in 1956 under the title Cryptanalysis.

Item 158

C.A. Castle (Publisher), Master Puzzler, Four Issues Vol. 1, Nos. 1-4 March, April, May, June, 1933. Mount Morris, IL. Master Puzzler Publications Office, 1933.

These issues contain simple cryptograms in addition to other puzzles.

Item 159

A Method of Reconstructing the Primary Alphabet from a Single One of the Series of Secondary Alphabets, Publication No. 15, Geneva, IL: Riverbank Laboratories, Leather-bound volume, Gift to WFF, February 1948. Spiral binders. 9 copies. Cf. Galland, p. 67

Item 160

Friedman, William F. A Method of Reconstructing the Primary Alphabet from a Single One of the Series of Secondary Alphabets, Geneva, IL: Riverbank Publications, No. 15, 1918, 9 pp.

This is the first paper in cryptologic literature dealing with the subject of restructuring primary alphabets by a study of the spatial relationships existing among the letters of the secondary alphabets. It is therefore of considerable historical importance, pointing out one of the directions in which the cryptanalysis of complex ciphers could be simplified and expedited. This

is the first paper copy on cryptography written by WFF. This publication was the first of the Riverbank series, despite the label No. 15. This arbitrary number was adopted by George Fabyan, who reserved numbers 1-14 for Bacon-Shakespearean publications, projected for the future. They were never used. One photostat copy. Autographed by WFF. Nine copies in spiral bindings, unmarked. Cf. David Kahn, The Codebreakers, pp. 376ff, Galland, p. 67.

Item 160.1

Friedman, William F., A Method of Reconstructing the Primary Alphabet, Geneva, IL: Riverbank Publication No. 15, 1918.

A photolithographic copy of the original, made in 1954. See **Item 160**.

Item 161

Friedman, William F., Methods for the Solution of Running-Key Ciphers, Geneva, IL: Riverbank Laboratories, Publication No. 16m, 1918, 42 pp.

The following is an abstract from the “Letter of Transmittal” dated January 18, 1918 from WFF to Col. George Fabyan. “Concerning the possibility of the decipherment of a message or series of messages enciphered by a running-key.” It was said, until as recently as three months ago, “It can’t be done” or “It is very questionable.” This paper shows how such a message or series of them, enciphered by a “running key,” can be solved. It is the first published explanation in cryptologic literature of the procedure for the solution of such ciphers. On this publication, see David Kahn, The Codebreakers, pp. 375ff. Cf. Galland, p. 67. Black binder copy returned from NSA.

Item 161.1

Friedman, William F., Introduction to Methods for the Solution of Ciphers, Geneva, IL: Riverbank Publication No. 17, 1918, 46 pp. Same as **Item 161**.

A leather-bound copy with gold stamping on cover. “United States Army Service Schools.” See comment on **Item 162.1**. Cf. Galland p. 67.

Item 162

Friedman, William F., Introduction to Methods for the Solution of Ciphers, Geneva, IL: Riverbank Publications No. 17, 1918, 46 pp.

This is what it purports to be, an introduction, but it gives the first published explanation for methods for facilitating the solution of certain types of ciphers by the use of sliding strips, and this is the first published reference to the use of mechanical aids in cryptanalysis. It was, of course, preceded by the Riverbank Publications Nos. 15 and 16, but these were on specialized

subjects. See photos of item in Folder **155**. 200 copies were printed. The FC has copies 21, 27, 48, 152, 162.

Item 162.1

Friedman, William F., Introduction to Methods for the Solution of Ciphers, Geneva, IL: Riverbank Publications No. 17, 1918, 46 pp.

Same as **Item 162** but a leather-bound copy with gold stamping on cover. U.S. Army War College.

Item 163

Friedman, William F., Synoptic Tables for the Solution of Ciphers and A Bibliography of Cipher Literature, Geneva, IL: Riverbank Laboratories Publication No. 18, 16 pp.

These synoptic tables for the solution of ciphers represent the first compilation of its kind in English. This compilation was anticipated by only one other - the latter being in French of a much more complex (and therefore much less practical and useful nature). The bibliography is the most extensive published up until the date of this publication. It is not complete, however, and is also marred by a few errors. This publication was never copyrighted. An extension of **Item 682**. WFF's name handwritten in as author. Copy number 121. Cf. Galland, p. 68. In black binder returned from NSA.

Item 163.1

Friedman, William F., Synoptic Tables for the Solution of Ciphers, Geneva, IL: Riverbank Laboratories Publication No. 18, 1918, 16 pp.

Same as **Item 163**, but a leather-bound copy with gold stamping on the cover. United States Army Schools. Item missing. NSA.

Item 164

Friedman, William F. and Capt. Lenox R. Lohr, Formulae for the Solution of Geometrical Transposition Ciphers, Geneva, IL: Riverbank Laboratories Publications No. 19, 1918, 24 pp.

This was prepared under the joint authorship of Capt. Lenox R. Lohr and WFF. The formulae are of more theoretical than practical interest since they can be applied only to cases in which the transposition matrices are completely felled and one of a limited number of simple route transpositions is followed. This publication was never copyrighted. Lenox R. Lohr was an engineering officer of WWI and a cryptography student of WFF and ESF. Lohr later resigned from the Army to become President of NBC. After a few years he became Director of the Chicago Museum of Science and Industry. Unique, but a now certainly quite useless paper, such

ciphers being long since out of use. However, its historical significance should not be overlooked. Taken by NSA and black binder later returned.

Item 165

Friedman, William F., Several Machine Ciphers and Methods for Their Solution, Geneva, IL: Riverbank Laboratories Publication No. 20, 1918, 58 pp. No. 20-A.

The purpose of this paper was to demonstrate the principles of solution of the Wheatstone cipher, which had been regarded by the British, French, and American cryptographic bureau in WWI as indecipherable. In fact, messages enciphered by the device were considered so indecipherable that immediate use on the Western Front by the Allied Armies was contemplated in the autumn of 1917. But when five short test messages (a ridiculously small number for any system proposed for use where at least 200 messages per day would be encountered) were sent to WFF at Riverbank Laboratories, they were solved within two hours. The story of these test messages and their solution makes an interesting chapter in the "psychology and cryptanalysis" if such a term may be used. Two printings of 200 copies each were made. The second being labeled "Second Impression." Copies of the first impression are designated as Publication No. 20 A. Copies of 2nd impression as Publication No. 20B. The brochure is of historical importance in that it contains the solution of a cipher ("Star Cipher") which sets forth the first explanation in English of the principles for solving the so-called Bazeries Cylindrical Cipher (really invented by Thomas Jefferson), and of solving the Wheatstone Cipher, both the simple and the modified type. Synoptic tables for solving the Star Cipher are included in this publication, but were also printed separately. This publication was never copyrighted. See publication No. 20 C. Cf. David Kahn, The Codebreakers, pp. 244ff.

Item 165.1

Friedman, William F., Several Machine Ciphers and Methods for Their Solution, Geneva, IL: Riverbank Laboratories Publication No. 20, 1918, 58 pp. "Second Impression" (No. 20-B). See **Item 165**. Cf. Galland p. 68. In black binder returned from NSA.

Item 165.2

Friedman, William F., Synoptic Tables for the Star Cipher, Appendix to Several Machine Ciphers and Methods for Their Solution, Geneva, IL: Riverbank Laboratories Publications, No. 20, 1918, 58 pp.

The Synoptic Tables for the solution of one of the ciphers treated in Publication 20A and B ("The Star Cipher") and printed therein as the final pages of that publication were also printed in a separate pamphlet under the title Synoptic Tables for the Solution of the "Star Cipher". This was done for the convenience of students who were interested in solving examples of the Star Cipher - a variation of the Bazeries Cylindrical Cipher - independently invented first by Thomas

Jefferson (c. 1800), later by Bazeries (c. 1890), and still later (c. 1915) by Col. Parker Hitt, U.S. Army. This has been designated as Publication No. 20C. It was never copyrighted. Cf. David Kahn, The Codebreakers, pp. 244ff. Cf. Galland, p. 68. Item taken by NSA, black binder later returned.

Item 166

Friedman, William F. and Elizebeth S. Friedman, Methods for the Reconstruction of Primary Alphabets, Geneva, IL: Riverbank Laboratories Publication No. 21, 1918, 14 pp.

This was prepared under the joint authorship of WFF and ESF. It contains the elucidation and explanation of principles first described in Publication No. 15.

Item 166.1

Friedman, William F. and Elizebeth S. Friedman, Methods for the Reconstruction of Primary Alphabets, Geneva, IL: Riverbank Laboratories Publication No. 21, 1918, 14 pp.

Same as **Item 166** but with a leather-bound cover with gold stamping. “United States Army Service Schools.”

Item 167

Friedman, William F., The Index of Coincidence and Its Applications in Cryptography, Riverbank Publication No. 22A, Paris: Imprimerie – Librairie Militaire Universelle, L. Fournier, 1922, 87 pp.

WFF invents and develops the theory of “index of coincidence” which has come to be extremely important in cryptanalysis. First paper written on the subject. Has imprint of French Librairie Militaire Universelle, 1922. This brochure is of great historical importance in that it appears to be the first to discuss the application of statistical principles and techniques to cryptanalysis; it is, indeed, the first in which the use, in cryptanalysis, of the powerful techniques based upon coincidences in cryptographic texts was given a name and an explanation of their use demonstrated. This was the last brochure written by WFF during his employment at Riverbank Laboratories and was completed shortly before he resigned to accept a position at the War Department in Washington, DC. After his departure, Col. Fabyan sent the Ms. to General Cartier, the Head of the Cryptanalytic Service of the French Army General Staff. General Cartier and his colleagues apparently were so impressed with the techniques and their application, that in accordance with some arrangement made between Cartier and Fabyan and unknown to WFF, Cartier had the Ms. immediately translated into French and printed in Paris under the title L’indice de coïncidence et ses applications en cryptographie. This translation was printed by Imprimerie Librairie Militaire Universelle, L. Fournier late in 1921 (See **Item 167.2**) and the edition therefore bears that date. Cartier then had the original English ms. printed also in Paris by

the same publishing firm, but this printing took place early in 1922. This explains why the French edition bears an imprint date of 1921, earlier than the English publication date of 1922. 3 copies. Cf. David Kahn, The Codebreakers, pp. 384ff. Galland, p. 70. correspondence in file, **Item 2112**.

Item 167.1

Friedman, William F., The Index of Coincidence and its Applications in Cryptography, Geneva, IL: Riverbank Laboratories, Publication No. 22, 1922, 87 pp., (No. 22 B), 87 pp. 3 copies. See **Item 167**.

Item 167.1.1

Friedman, William F., The Index of Coincidence and its Applications in Cryptanalysis, War Department, Office of the Chief Signal Officer, Washington, DC: GPO, 1935, 87 pp.

Register No. 193. Confidential. Hardback edition. Classification changed to Restricted in 1946. This is the edition of **Item 167.1** as printed at the GPO as a technical paper of the Signal Intelligence Section. Historically very important. No copies have ever appeared since this was originally classified confidential but later downgraded to restricted. Classification unknown at present (1956). President Eisenhower abolished the RESTRICTED classification in 1957 or 1958. [Editor's note. DOD Directive 5200.1 dated 8 July 1957 made all material related to cryptologic systems previously classified "Restricted" upgraded to Confidential. See Introduction.

Item 167.2

Friedman, William F., L'Indice de coincidence et ses applications en Cryptographie, Riverbank Publications, No. 22, Paris: L. Fournier, 1921, 4 copies.

The French edition bears the date 1921, whereas the English original, that of 1922. The reason for this date is that WFF had left Riverbank Laboratories and George Fabyan had sent the original English paper to a friend of his on the French General Staff. The paper appeared to be of such importance that the French translated it without delay and had it printed before the English original was printed by the same firm. Cf. Galland, p. 68.

Item 167.3 (Folder marked **167.31**)

Friedman, William F., L'Indice de coincidence et ses applications en Cryptographie, Riverbank Publications, No. 22C, Paris: L. Fournier, 1921, 91 pp.

Ticom souvenir of **Item 167.2**. Captured by the Germans from the French and translated from the French to German [See **Item 167.31**]. See front pages for German instructions and explanations. This was a copy of the original French translation of the WFF paper, which had

come into the hands of the Austrian cryptanalytic bureau. After WWII this copy was obtained from the Austrians by a U.S. Intelligence Agency. Folder missing.

Item 167.31

Die Anzeichen der Zusammentreffen und ihre Anwendung in der Enträtselungskunst, Vienna, 1938.

A German translation by Figl of The Index of Coincidence and Its Application in Cryptography. There is a note on the front cover: "This copy was presented to WFF by Cmdr. Pendergrass of our Technical Division. It is a copy of a typescript which TC received from a contact in another agency who purchased the typescript from Col. Figl. WFF believe it was a translation of this Riverbank paper. 29 December 1954. It would appear that this early work of WF (ca. 1919-1920) had considerable impact upon cryptanalytic techniques. This translation into the German was made by Col. Andreas Figl in Vienna in 1938. There is no way of telling whether the translation was made from the French or the English edition of the original. The copy in the FC is a photostat copy of a typescript which probably was purchased from Col. Figl sometime in 1954 by a U.S. Agency not conversant with the facts behind the writing and publication of this brochure by WFF in 1920. This is therefore a "curious" item. On publications by Figl see Galland, p. 64.

Item 167.32

Friedman, William F.

Correspondence related to his paper "The Index of Coincidence." A file of very interesting letters relating to the establishment of WFF's authorship of this important paper. It also contains the formal certificate from the Library of Congress dated 1 June 1928, when WFF deposited eight of his Riverbank Publications in the Library. The entire story of the authorship of The Index of Coincidence and its attribution to General Cartier would make an interesting tale.

Item 167.4

Friedman, William F., An Application of the Science of Statistics to Cryptography, Appendix to Riverbank Publication No. 22, Paris: Imprimerie-Librairie Militaire Universelle, L. Fournier, 1922, 8 pp.

This paper is believed to be the first in which statistical theory was applied to cryptanalysis. For this reason it is deemed of historical importance in the science. 1 copy in English, 1 copy in French (see **Item 167.5**).

Item 167.4.1

Friedman, William F., An Application of the Science of Statistics to Cryptography, Appendix, Riverbank Publication No. 22, Paris: Imprimerie-Librairie Militaire Universelle, L. Fournier, 1922, 8 pp.

Photostat (negative) copy, printed edition **Item 167.4**.

Item 167.5

Friedman, William F., Application des methodes de la Statistique à la cryptographie, Paris: Imprimerie - Librairie Militaire Universelle, L. Fournier, 1922 8 pp.

French translation of **Item 167.4**. One copy signed by WFF as author. Note by WFF inside front cover. No item.

Item 167.6

Friedman, William F., De cryptement du système du cryptographique du Commandant Schneider, Paris: Imprimerie - Librairie Militaire Universelle L. Fournier, 1921, 31 pp.

The solution of the “undecipherable” Schneider cipher. Very rare. One of the perhaps only a very limited number of copies in existence now. This was published by the French Deuxième Bureau as a separate item, whereas in fact it was originally an integral part of Riverbank Publication No. 22, “The Index of Coincidence.” See **Item 167.1**. One copy of Schneider, Part II of WFF’s paper on the Index of Coincidence. Rare.

Item 167.61

Friedman, William F., Decryptement e du Systeme cryptographique du Commandant Schneider, Paris: Imprimerie-Librairie Militaire Universelle L. Fournier, 1921, 31 pp.

Set of photostat negatives of **Item 167.6**. (no negatives in file, just one copy of photostat (negative) print.

Item 167.32

Friedman, William F., Correspondence relating to his paper The Index of Coincidence. See Ms. Coll. Numbered Series 167.32.

Item 168

Nolan, H.O., The Production and Detection of Messages in Concealed Writing and Images, Geneva, IL: Riverbank Laboratories, Publication No. 50, 1918, 20 pp.

The first detailed brochure on secret writing with invisible inks. Mislabeled 160.1. Also black binder copy returned from NSA.

Item 168.1

Nolan, H.O., The Production and Detection of Messages in Concealed Writing and Images, Geneva, IL: Riverbank Laboratories Publication No. 50, 1918, 20 pp.

Same as **Item 168**, but without the authorship credit on the item itself. This and the preceding item constitute another example of what WFF called “Col. Fabyan’s devious ways” in his relations with the scientific personnel employed by him.

Item 169

Nolan, H.O., Memorization Methods Specifically Illustrated in Respect to Their Applicability to Codes and Topographic Material, Geneva, IL: Riverbank Publication No. 75, 1919, 50 pp.

A perfectly impractical code system depending upon memorization by means of association of ideas. Interesting as a curiosity in cryptologic literature.

Item 170

Barnes, Howard R., (compiler) A.E.F. Field Codes, Field Code No, 1, 2, 3, Chaumont, France: The Adjutant General’s Printing Plant, 1918.

Field Code No. 1 was used by the American Army of Occupation in Germany for a short time. Field Codes Nos. 2 and 3 were never used but were kept in reserve for a number of years. WFF considered this a unique item. Field Codes # 2 and # 3 Declassified December 3, 1954.

Item 171

Barnes, Howard R., (compiler) A.E.F. Field Codes, The Lake Series used by the 2nd Army. The Osage Code, The Champlain Code, The Seneca Code, American Radio Service Code No. 1, Chaumont, France, The Adjutant General’s Printing Plant, 1918.

These are unique WWI items. It is to be noted that the names of the American Lakes were used for the successive codes for the units of the American Second Army. The envelope also contains what is believed to be the very first radio service code of the American Army. The Champlain code was declassified 7/24/75. All the rest were declassified 3 December 1954.

Item 172

Barnes, Howard R., (compiler), A.E.F. Field Codes, The River Series used by the First Army: The Mohawk Code, The Wabash Code, The Sewanee Code, The Colorado Code, The Allegheny Code, The Hudson Code, Chaumont, France: The Adjutant General’s Printing Plant, 1918.

Unique WWI items. It is to be noted that the names of the rivers were used for the successive codes for units of the American First Army. These should be studied in connection with the Report of the Code Compilation Section A.E.F. by Captain Howard R. Baines. **Item 737**. Declassified December 3, 1954. On WWI cryptography, see David Kahn, The Codebreakers, ch. 10, 11.

Item 173

U.S. Army, Partial Roster of the Military Intelligence, American Expeditionary Forces, France. Names of members of G-2, A-6 checked.

A "Who's Who" of the persons who comprised the First American Expeditionary Force for the solution of enemy secret systems. Some of these were persons who were trained by WFF and ESF. Most of the personnel were from New York, but see Lt. J.A. Graham, Lexington, Va.

Item 174

French Government, Code Chiffré, Serie 65, French Army Field Code. 2 copies. Declassified December 3, 1954.

Item 175

Barnes, Harold P. [Compiler], A.E.F. Telegraph Code.

A very small 3-letter code from WWI primarily used for the names of places in France. Unique item. Marked secret. Declassified July 24, 1975.

Item 176

American Expeditionary Forces, A.E.F. Instructions for the Use of Code and Cipher in Armies and Lower Units, The A.G. Printing Dept., GHQ, A.E.F., 1918.

This is a photostat of a historically interesting and important pamphlet of WW I days, dealing with the matter of codes and ciphers and their proper usage. Probably a unique item in the field of cryptology. Acquired when WFF served as a military intelligence officer in WWI at GHQ in France. Marked: THIS TABLE MUST NOT FALL INTO THE HANDS OF THE ENEMY. "Not to be taken into Front Line trenches"

Item 177

No card

No item

Item 177.1

Anonymous, Conventional Signals Used by Germans for Communication between Airplanes and Troops.

Two editions. An example of the type of signals employed by the Germans in communication between their aircraft and ground troops in World War I.

Item 177.1A

Conventional signals 1B. Card numbers do not match contents of the folders.

Item 177.2

Anonymous

Map coordinate code used by the French Cipher Bureau relative to German keys for map coordinates. This was a solution by the French Cipher Bureau of the German system of indicating map coordinates.

Item 177.3

French instructions for the Playfair cipher.

This is a unique item. A single piece of paper explaining the construction and use of the Playfair cipher which was employed during WWI by both British and American armies. Cf. David Kahn, The Codebreakers, pp. 198-202, also Ch. 10, 11.

Item 178

Sinkov, Abraham, "A Property of Cyclic Substitutions of Even Degree," American Mathematical Monthly, Vol. 42, No. 3, March 1935, pp. 145-149.

Reprint of a paper having an indirect bearing on cryptology. 3 copies.

Item 179

Milliken, Donald D., Elementary Cryptography and Cryptanalysis, New York: New York University Book Store, 1942, 117 pp.

The Milliken textbook on cryptology prepared for his students.

Item 180

Shannon, C.E., "Communication Theory of Secrecy Systems," The Bell System Technical Journal, American Telephone and Telegraph Co., New York: Vol. 28, (4 October 1949), pp. 656-715.

Dr. Shannon was with one or two others (Weiner, Weaver, et. al.) among the leaders in the U.S. in the development of what is now called "Information Theory." This article is concerned with the general mathematical structure of secrecy systems. This copy was autographed to WFF. See **Item 180.3**. Cf. H.F. Gaines, Elementary Cryptanalysis, M. Givièrge, Cours de Cryptographie. Vigenère system, Multiple mixed alphabet substitution, the Playfair cipher, fractional ciphers, auto key ciphers.

Item 180.1

Shannon, C.E., "Prediction and Entropy of Printed English," The Bell System Technical Journal, New York: American Telephone and Telegraph Co., Vol. 30,1 (January 1951), pp. 50-64.

An important paper having a bearing upon cryptologic theory. A new method of estimating the entropy and redundancy of a language is described. This method exploits the knowledge of the language statistic possessed by those who speak the language, and depends upon experimental results in prediction of the next letter when the preceding text is known.

Item 180.2

Shannon, C.E., Same as **Item 180**.

Item 180.4

Shannon, C.E., Same as **Item 180.1** (Prediction and Entropy of Printed English, but printed as Monograph 1819).

For related material, see also Ms. Coll. numbered series 180.4. In folder with correspondence on Communication Theory of Secrecy Systems but printed as a Monograph 1727 of the series of technical journals of the Bell System. 3 copies.

Item 180.3

Shannon, A Mathematical Theory of Communication, Bell System Technical Publications. Monograph B-1598, reprinted from Bell Telephone Technical Journal 27, pp. 379-423, 623-656, July-October 1948, 80 pp.

Item 181

Friedman, William F., General Address and Signature Code No. 2 (GAS 2) GPO, Prepared in the Office of the Chief Signal Officer, March 1925, 71 pp.

The first code for abbreviation of addresses in radio traffic with a view to cutting down the lengthy addresses used in military messages. This code was used solely to abbreviate addresses and signatures of official radio dispatches.

Item 182

Calvel, Commandant, Radio Intelligence Intercept Service and Goniometry Service in the French Armies, Fort Monmouth, New Jersey: The Army Signal School, 1934, 91 pp. Official File Copy.

Translation of a French article dealing with the operation and utilization of intercept and direction-finding stations and intercept material. Made ten years later and bound in orange-color paperback, this became an official brochure used in courses of instruction at the Signal Corps School. 2 copies.

Item 182.1

Calvel, Commandant, "Intercept Service and Radio goniometry in the Armies."

Typescript (carbon copy) of the translation of "Ecoutes et radiogoniometrie aux armées," a publication of the French army, August 1924. See preceding **Item 182** which is the multigraphed edition published by the Signal Corps. Center of Studies for Liaison and Communications Intercept Service and Radiogoniometry in the Armies. First Part. Technical Operation. Utilization of Intercepted Information. October 1923, published August 1924. Major Calvel.

Item 183

Viete, Francois and Cardan, Portraits of eminent mathematicians published by Pictorial Mathematics, New York: n.d. Cross reference?

Item 184

Holmes, Wilfred J. (Capt. USN, Retired) Pseud. Alex Hudson), "Intercept at Dawn," The Saturday Evening Post, March 19, 1949, pp. 22-23, 73-98.

WW II Navy Captain employs ciphers in a romantic tale. Captain Holmes established the Joint Intelligence Center, Pacific Ocean Area (JICPOA) in Honolulu during WW II.

Item 185

British Government, British Field Code, World War I.

A typescript copy of one of these codes used in WW I. A souvenir brought back from France at the end of World War I. WFF's work at GHQ, AEF was on codes, no ciphers, but by request of Col. Moorman, he remained at GHQ to write the history of both the code and cipher sections, and returned to the U.S. in April, 1919. Declassified 7/24/75.

Item 186

Signal Corps, U.S. Army Tactics and Techniques, Corps and Army Signal Troops.

Lecture on codes and ciphers, Ft. Leavenworth, Kansas, General Services School, March 8, 1927, 11 pp. Material used in a lecture prepared by WFF for the Army General Staff School in the years between the two wars. TT91.

Item 187

Anonymous, Federal Army Cipher Books, Also the work sheet book of Mr. W.R. Plum, cipher operator for Maj. General Thomas.

This item is believed to be the most valuable item in the entire Friedman Collection because it is believed to be the only set in existence. WFF believes that it contains seven of the eleven cipher books used by the Federal Army in the Civil War. The work-sheet book mentioned above was that used by W.R. Plum, who was the cipher operator assigned to Major General Thomas. It contained many messages which were actually enciphered and deciphered by Plum in his work for General Thomas. This book also contains two messages to General Grant but they were written in the book perhaps by Plum, in 1879. They are, nevertheless, interesting and authentic messages. Several books in the FC explain in detail how this cryptographic system was employed, but further research would perhaps be very useful in developing details which are still obscure. These books came into the possession by WFF by accident. WFF just happened to be walking through as they were about to be burned by personnel of the Old Records Division of the Adjutant General's Office, Munitions Building, because they were considered to be of no use or interest whatsoever. There is a short note attached to each cipher booklet with WFF's theory of the order in which these booklets were used which was NOT in numerical sequence. See separate envelope containing a photostat of message prepared by President Lincoln to be sent in cipher. See **Item 193**. Cf. David Kahn, The Codebreakers, pp. 214-229.

Item 188

No card, no item.

Item 189

Boetzel, A., Methodie einer neuen Geheimschrift, Geheimtelegraphie, Geheimsprache, Geheimtelephonie und Geheimdruck, Leipzig: F.A. Berger, 1900, 85 pp.

German translation of **Item 649**, q.v. p. 47. WFF's copy is one of the second printing in German, signifying that even at the turn of the century the Germans did not let any "technical" item, however, impractical, escape their attention.

Item 190

British Government, Vocabulary of German Military Terms and Abbreviations, General Staff (Intelligence), General Headquarters (B.E.F.) 2nd edition, 1918, 217 pp.

A souvenir of WWI service of WFF. This was a very useful technical aid at the time, when WFF was in the Military Intelligence Service G-2, A-6, GHQ, AEF.

Item 191

Navy Department, Service Radio Code of the U.S. Navy Department, Washington, DC: GPO, 1914, 136 pp.

WFF thought this a unique item. It is believed that this is the first code of its kind in the U.S. Navy and perhaps the world. The first sentence of the instructions reads: "The U.S. Navy Radio Service Code is designed primarily as a radio code for the routine work of the fleet." On account of the limited circulation, however, it may be considered as available for any work not strictly secret or confidential. The document was unclassified. The title page carries the statement "for circulation only among officers of the Navy and Naval Auxiliary Service and radio operators. WFF found it a curious document. Register No. 1109.

Item 192

Friedman, William F., Correspondence and items relating to or from "cranks."

The nut file. Mrs. Crocket from Seven Mile Ford, VA, 11/6/62 "the matter of working out this secret Red code [by] in effect, spiritual intuition, in the form of actual word messages flashed to me, and promptings of my will. WFF concluded she was "ill and should be looked after." She often heard from "spooky friends in the Cosmos." She found coded red messages in the president's major public addresses. She received images of a fish and talked of a secret Fish society. She found proof of the Anglo-Jewish World Conspiracy. She was also worried about pigeons being fed at St. Elizabeth's that should be transferred to the Signal Corps before they starve. In her last letter in 1963 she concluded that WFF was in the center of the vast communist conspiracy. Another letter came from a 17-year old boy named Ernest who wanted to sell WFF an original code with superior powers and would take no less than \$20,000 (in 1937). Another woman wrote to request that the "scientific machine be disconnect from her body."

Item 193

[Civil War]

Correspondence and items relating to cryptographic system used by the North and South during the Civil War.

The file contains a number of miscellaneous items relating to cryptographic systems used by the North and South during the Civil War. In particular, it contains a copy of a brochure

entitled: "Codes and Cipher during the Civil War" prepared for the Chief Signal Officer 20 April 1945. Written in the spring of 1945 by Lt. Thomas Fawcett when he was a member of the Historical Unit under WFF in the Army Security Agency. This **Item 193** contains a mine of information in about ten separate items. All informative. Marked restricted, declassified 14 March 1977. File contains an offprint of George Raynor Thompson, "Civil War Signals" Military Affairs 18,4, (Winter, 1954), pp. 188-201. Part two 8,5 (May-June, 1954), pp. 30-33. Cf. David Kahn, The Codebreakers, pp. 214-229.

Item 194

Taylor, Dr. Charles F., "The Signal and Secret Service of the Confederate States" The North Carolina Booklet, Raleigh, NC, 1901, 24 pp.

One of the few documents in this collection pertaining to the Confederate side of the Civil War. Two copies, photostat positive. See **Items 193**.

Item 194.1

Bahnon, Henry T., "The Last Days of the War," The North Carolina Booklet, Hamlet, NC: Capital Printing Co., 1903, pp. 1-23. 2 copies, photostat positive.

Item 195

No card, no item

Item 196

No card, no item

Item 197

Givièrge, Marcel (Colonel), Cours de Cryptographie, Paris: Berger-Levrault, 1925, 304 pp.

This textbook on cryptology was written by Col. M. Givièrge, the man who succeeded General Cartier as the chief of the Cipher Bureau of the French General Staff. The first edition was published in 1925; a reprinting also in 1925 is marked at the lower right-hand corner of the front cover "2^e edition." A copy of this reprinting forms **Item 197** of the FC. There was, however, another reprinting in 1932 and this one is marked "deuxième edition" immediately below the title. The author's name is now General M. Givièrge. The copy in the FC in **Item 197.1**. The two are identical except that the last word on page v of the avant-propos in **Item 197** is the first word on page V in **Item 197.1**, a most curious phenomenon, purpose not understood. There is also in the FC a copy of the troisième edition, published in 1936. This copy is **Item 197.2**. It was given to WFF as a souvenir of one of the expeditions of TICOM obtained in October 1945. It had been in the library of the Oberkommando der Kriegsmarine, SKL. The title

page and the rear thereof bear markings showing that the book was in the SKL library. On Givièrge, see David Kahn, The Codebreakers, ch. 11 and Galland pp. 77-78.

Item 197.3

Givièrge, Marcel (General), Premières notions de cryptographie, (Extrait du Cours de Cryptographie) ouvrage honore d'une souscription du Ministère de la Marine, Paris: Berger-Levrault, 1935, 32 pp.

The first chapter of the Givièrge course in cryptography, published as a separate brochure and with a special title. On back of the title page is a "note des editeurs" in which there is information of interest, but most particularly is the statement that "Le Maitre enconteste du chiffrement" directed the cipher service of the Ministry during the war with great success. The second paragraph of the "note" states that a new edition of Les Cours de Cryptographie was in preparation in 1932 just before the premature death of the author. On Childs see David Kahn, The Codebreakers, ch. 11, Galland p. 40.

Item 198

Myer, Albert J. (Bvt. Brig. Gen.), Manual of Signals.

For the use of Signal Officers in the field, and for military and naval students, military schools, etc. Washington, DC: GPO 1879, 559 pp. This book contains naval codes, field signals, semaphore. See the Dancing Man Code on p. 314, and the alphabet of five elements on p. 116.

Item 199

Valério, Paul Louis Eugene (Capitaine), De la cryptographie; essai sur les méthodes de déchiffrement, 1e partie Paris 1896, Paris: Librairie Militaire de L. Baudouin 1893-1896, two parts, part 1, pp. 228, part 2, pp. 107.

Historically a very important book on cryptanalysis. Many excellent frequency distributions constitute an important feature of this work. See in this connection, **Item 199.2** containing chapters III and IV. This copy was bound for WFF by Commander Mindte, USN. Both parts or volumes were bound together in the same covers. See Galland for further information.

Item 199.1

Translation into English of **Item 199**. Typescript. No translator listed. 2 files.

Item 199.2

Anonymous, Journal des Sciences Militaires, Revue Militaire Française 69^e annee, Neuvième série, tome quarante-neuvième Paris: Imprimerie et librairie militaires, L. Boudoin 1893, 544 pp. Pages 37-49 inclusive contains Chapter III and pages 244-260 inclusive contains Chapter

IV of Valerio's Essai sur les méthodes de déchiffrement. Gift of the late Commander R.W. Mindte, USN.

On a card dated September 17, 1954 says: "Looks like this is a series, the balance of which may be in LC files. I searched diligently for other copies of the Journal but could find none of the same period."

Item 200

Fleissner v. Wostrowitz, Eduard B., Handbuch der Kryptographie, Anleitung zum Chiffriren und Dechiffriren von Geheimschriften, Wien: L.W. Seidel & Sohn, 1881.

See **Item 859**. See also comments by Galland p. 65 on this important work of historical interest and much statistical information referred to by other writers. A gift to WFF from W.J. Vogel, 1927, a WW I colleague.

Item 201

Thompson, Basil, My Experiences in Scotland Yard, New York: Doubleday, Page & Co., 1923, 359 pp.

The author was the head of Scotland Yard during World War I. The book contains data with regard to the Hindu Conspiracy in which cipher messages solved by WFF and ESF when at Riverbank were involved. The author ignores the cipher messages completely although it was he who sent an agent from Scotland Yard to Washington to seek help in the solution. This British agent was brought to Riverbank by a Department of Justice agent. WFF was a witness in a Chicago trial and a San Francisco trial of the conspirators. Hundreds of Germans and Hindus were convicted for conspiracy to incite an uprising against Great Britain. See pp. 113-114. Also **Items 419 and 463**. ESF thought this would make a great T.V. drama. Cf. David Kahn, The Codebreakers, pp. 371-374.

Item 202

Pershing, General John J., Final Report of General John J. Pershing, Commander-in-Chief, American Expeditionary Forces, Washington, DC: GPO, 1920, 96 pp. 16 plates.

Contains a brief mention of matters allied to cryptography such as radio-intercept stations, intelligence, etc., but no direct reference to codes and ciphers either as used or solved. The code and cipher section of GHQ AEF was nevertheless a very effective weapon in World War I. WFF was selected to stay in France until April 1919 in order to write the history of that section.

Item 203

Squier, George O., Annual Report of the Chief Signal Officer to the Secretary of War, Washington, DC: GPO, 1919, 547 pp.

Very important historically because it contains references to the printing telegraph cipher and the cryptographic work of the Signal Corps during World War I. A volume of 541 pages but no index. Many plates. Item taken by NSA?

Item 204

d'Agapeyeff, Alexander, Codes and Ciphers, New York and London: Oxford University Press, 1939, 160 pp.

An elementary treatise printed in Great Britain. Chapter I "The Beginnings of Cryptography" pp. 7-23 discusses the Vedas, the Greeks, Exodus, Plutarch, the *skytale*, the Romans and Tironian notes.

Item 204.1

d'Agapeyeff, Alexander, Codes and Ciphers, New York, London, and Toronto, Ontario: Oxford University Press, 1939, 160 pp.

Internal contents are identical with the preceding item and were printed from the same plates. The date is also the same but it seems clear that this reprinting was done in the early 1950s. Cover and dust jackets are quite different. This reprint was made in New York. DJ contains the statement: "Cryptography holds a fascination for readers old and young."

Ch 2: From the middle ages onward

Ch 3: Signals, signs and secret languages

Ch 4 Commercial codes

Ch 5: Military codes and ciphers

Ch 6: Types of codes and ciphers

Ch 7: Methods of deciphering.

Short bibliography.

Item 205

Edward L. Thorndike, The Teacher's Word Book, New York: Teachers' College, Columbia University, 1921, 134 pp.

One of the early statistical compilations of English word frequencies for teaching English. An early tool found useful in cryptanalysis.

Item 206

Bazeries, Commandant Etienne, Les chiffres secrets dévoilés, Etudes historique, sur les chiffres, appyée de documents inédits tires des differents dépôts d'archives, Paris: Librairie Charpentier et Fasquelle, 1901, 282 pp.

Bazeries, famous in the annals of cryptology, describes the general history and methods of solution for system invented by early cryptographers and expatriates on his own cipher device known in the terminology as the Bazeries cylindrical cipher device. A photograph thereof with a plaintext message set upon the successive disks reading "Je suis indechiffable." That it was not undecipherable was proven by Viars (See **Item 412**) and that Bazeries was not, NOT, the earliest inventor or originator of this form of cipher device is verified by several other items in the Friedman Collection, including a photostatic copy of Thomas Jefferson's own description of what he called his wheel cipher (**Item 809**). See also other items relating to the invention and development of Signal Corps Cipher Device M-94. See also Galland p. 192 and Jullian Boyd's definitive edition of The Papers of Thomas Jefferson. Upon Boyd's request, WFF prepared a small monograph on Jefferson's Wheel Cipher which was to appear in Vol. XI, but so pleased was Dr. Boyd to have his attention called to this phase of Jefferson's genius, that he mentioned it in footnote 3, page VIII Introduction, Vol. I of the Papers of Thomas Jefferson. Jefferson anticipated Bazeries, of course, by nearly a century. 2 copies, 1 hardbound. Cf. David Kahn, The Codebreakers, pp. 244ff.

Items 206.1, 206.2

Bazeries, Commandant Etienne, "Title?" English translation of **Item 206** by Walter Emery.

Typescript translation of the Bazeries volume on secret ciphers, plus correspondence between the translator and WFF. Related correspondence in separate file. Good on French cryptanalysts. Folder also contains: War Department. Telegraph Code. General A.E. Greely, Washington, 1899, GPO.

Item 207

Hallner, A Scientific Dial Primer, containing universal code elements of universal language, new base for mathematics, etc., San Francisco: Sunset Publishing House, 1912, 157 pp.

A curiosity of cryptologic literature. The author devised 3-letter and 4-letter code words for all conditions of human life from weather to love and designated plain-text meanings which extended in length from three words to a half page. Some of the letters are more amusing, as are most of the photographic illustrations (family photos), none of which have anything to do with the contents of the book. More notes in grey folder with separate correspondence. **Item 2112**.

Item 208

U.S. Government, Foreign Languages for the Use of Printers and Translators, Supplement to The Style Manual of the United States Government Printing Office, Washington, DC: GPO, 1935, 230 pp., revised second edition.

Important in cryptanalytic work upon messages in foreign languages. Many plates devoted to characters of unused languages. See the clipping inside re the author.

Item 208.1

U.S. Government, The Style Manual of the United States Government Printing Office, Washington, DC: GPO, 1933, 302 pp., Revised edition of March 1933.

The section of foreign languages, pp. 109-132 inclusive are interesting and useful for persons interested in the alphabets of such languages since those included cover obscure and rare languages and alphabets. Armenian, Arabic, Bohemian, Georgic, Cree, Dakota, Eskimo, Esperanto, Ethiopic/Amharic, Gaelic, Glagolitsa, Classical and Modern Greek, Hawaiian, Hupa, Japanese, Ladino, Lithuanian, Runes, Samoan, Serbo-Croatian, Tagalog, Telugu, Tibetan, Urdu, Welsh, Wendish, Yiddish and Zuni.

Item 208.2

U.S. Government, The Style Manual of the United States Government Printing Office, Washington, DC: GPO, 1933, 302 pp.

Revised edition, 1939, 346 pp. See Government, U.S. under "G" p. 41 of this bibliography. The earlier edition did not show the author's name, but the Board which determined the terms. Revised edition is much enlarged.

Item 209

Irvin, Stewart, "The International Telegraph Conference of Brussels and the Problem of Mode Language," The American Journal of International Law 23, (2 April, 1929) pp. 292-306.

An article of general interest in connection with the international regulations dealing with code language. Contains several references to a brochure by WFF entitled "Report on the History of the Use of Code and Code Language," which was prepared after the Washington Conference in 1925 as part of the preparation by the U.S. Government for the Brussels Conference of 1928. WFF was Secretary to the U.S. Delegation to Brussels and also Technical Adviser. Stewart's paper is important because of its presentation of legal aspects of code language regulations. Item replaced by RMS, VMI History Dept.

Item 210

Langie, Andre et E.A. Soudart, Traite de cryptographie: études sur les écritures secrètes, Paris: Librairie Felix Alcan, 1925, 366 pp. See **Item 210.1** for translation.

A valuable work on cryptology prepared by two members of the Cipher Section of the French General Staff. This volume was bound in brown buckram by Cmdr. Mindte after it was given to WFF by the Signal Corps. It shows several notes and corrections. Chapter 1 Herodotus, Aeneas the Tactician, Jules l'Africain, and the *scytale* with pictures. Chapter 2 Renaissance to Henry IV, 18th-19th century, Bazeries cipher wheel on p. 218 with photo, and Jules Verne cipher.

Item 210.1

Langie, Andre et E.A. Soudart, Treatise on Cryptography, U.S. Navy Department translation of preceding **Item 210**, by Lt. J.J. Pierpont, USN assisted by H.H. Handley, Chief Yeoman, USN 1934, Washington: GPO, 1940, 118 pp.

WFF's note: not as good a translation as it could have been Pierrepont - spelled wrong on card. Good bibliography. Originally restricted. Register No. 890. Copy 982 also in FC. Declassified by NSA 10/28/80.

Item 210.2

Langie, Andre and E.A. Soudart, Tratado de criptogafia, Mexico: D.F. Secretaria de la Defense National, 1943, 191 pp. Multilith edition.

Spanish translation published in Mexico of the original French work. Gift of Major Thompson, Signal Corps.

Item 211

Hulme, Frederick Edward, Cryptography of The History, Principles, and Practices of Cypher-writing, London, New York and Melbourne: Ward, Locke & Co., Ltd., 1898, 192 pp.

An interesting example of an elementary treatment of cryptography before 1900. Covers Egyptian hieroglyphics, biblical cryptograms (Sheshach), Julius Caesar's code, the wax tablets of Demaratus, Herodotus and the shaved slave's head, Charlemagne and Trithemius. See Sheldon, EAW.

Item 212

Friedman, William F., Historic Code Message; Signal by Lord Nelson, Battle of Trafalgar.

Part I: A navy cryptanalyst challenges WFF with a cryptographic message. Part II: Two and a half pages from the United States Coast Guard Circular, June 1927, giving interesting

information re Britain's navy, one incident of which is related to Part I. Lord Chesterfield cipher. Sent by Claus Bogel. He was a member of Yardley's Black Chamber and later with the Navy Department. On Claus Bogel's activities, see David Kahn, The Reader of Gentlemen's Mail. Herbert O. Yardley and the Birth of American Code Breaking, New Haven: Yale University Press, 2004, pp. 38, 55, 75, 83.

Item 213

Friedman, William F., Elements of Cryptanalysis, Washington, DC: GPO, 1923, 157 pp.

This is a textbook used at the Signal School in WFF's course. His course was designed to demonstrate how certain codes could be so easily solved or deciphered. Relatively understandable to a novice cryptanalyst. Folder contains a review of the book, in a handwritten letter signed by Hitt. The first manual ever issued by the War Department on cryptanalysis and therefore of great historical importance. Now quite rare and not procurable at GPO, it is interesting to record the fact that this was written in his spare moments by WFF, when employed in the Office of the Chief Signal Officer, Washington, DC. WFF had no idea that the document was to be published. Paper bound copy of training Pamphlet No. 3 preface stated this pamphlet was the basis of a course in Military Codes and Ciphers given at the Signal School in New Jersey. Thirty five years after the date of publication of Elements of Cryptanalysis (Item 213), WFF endeavored to ascertain from the Signal Officer the then classification of this document. They could find no record whatsoever of it ever having been written by WFF or printed by the GPO. This small book was important because for the first time in the English language the science of cryptanalysis was organized in a coherent and accurate manner. It was also important because WFF coined the term "cryptanalysis" which later became the standard term for methods and processes involved in the solution of cryptograms. Up until the time this document was published, the general term cryptography was used indiscriminately for both "the making" and "the breaking" of codes and ciphers. One bound and two paperback copies. Five more copies on top of the file cabinet.

Item 213.1

Friedman, William F., Elements of Cryptanalysis, Washington, GPO, 1923, 157 pp.

Photostat negative copy of **Item 213** with a special history. This is a photostatic copy of either an original or another photostatic copy which was stolen by the French, and which the Germans captured. Recovered when the Germans were captured and given to WFF as a TICOM souvenir. See note dated 27 September 1945, by WFF on first page TICOM "nugget" brought back from Germany in 1945. TICOM document no. 2516.

Item 214

Poe, Edgar Allan, Poems and Essays of Edgar Allan Poe, London and New York: The Chesterfield Society, 1856, 499 pp.

Contains an essay “Cryptography” on pp. 431-451. Poe’s essay on cryptography appears in this work. Poe also produced some acrostics (see p. 329) for which see The Shakespearean Ciphers Examined, pp. 97-98 (**Item 1691**). Edgar Allen Poe’s explanation of the solution of the cipher in his story The Gold Bug has never been equaled for its magnificence of concept and explanation. Originally a beautiful book, one of 750 copies of a limited edition of Poe’s life and works. Beautiful cuts and stunning engraving of Poe on the front piece. Poe discusses the *skytale*, Sheshack, On Greek authors, see Sheldon, EAW.

Item 215

Yardley, Herbert Osborne, Yardleygrams, Indianapolis: The Bobbs-Merrill Co., 1932, 190 pp.

This item contains fifty problems and their solutions. The problems illustrate various simple system of cryptography for young people. Inside the front cover on the title page and fly leaf is stamped “Property of the Japanese Embassy, Washington, DC.” WFF bought it in 1960 from his book dealer Sidney Kramer who had purchased it from a second-hand bookshop. This was among the books seized at the Japanese Embassy by U.S. Government Agents. See David Kahn, The Reader of Gentlemen’s Mail, pp. 139-41, 158.

Item 215.1

Yardley, Herbert Osborne, Yardleygrams, Indianapolis: The Bobbs-Merrill Co. 1932, 190 pp., 1st edition. No dust jacket.

Item 216

Yardley, Herbert Osborne, The Blonde Countess, New York: Longman’s Green & Co., 1934, 314 pp.

Another romantic tale involving ciphers. The first to be authored by H.O. Yardley. It was later turned into a movie. Although Yardley is listed as the sole author, it was actually ghost-written by Carl Henry Grabo. Grabo claimed to have written 99% of it. Grabo’s style vs. Yardley’s is discussed in: David Kahn, The Reader of Gentlemen’s Mail; Herbert O. Yardley and the Birth of American Code Breaking, New Haven: Yale University Press, 2004, pp. 152-154, 156, 173-76, 182, 224, 232. Picture of Yardley on the back of the dust jacket.

Item 216.1

Yardley, Herbert Osborne, Red Sun of Nippon, New York: Longman’s Green & Co., 247 pp. Another romantic tale in which cipher’s play a part.

Japanese intrigue in 1934. See David Kahn, The Reader of Gentlemen's Mail, pp. 153-54.

Item 216.2

Yardley, Herbert Osborne and Carl Grabo, Crows Are Black Everywhere, New York: G.P. Putnam & Sons, 1945, 247 pp.

A romantic tale in which ciphers play a part. The title is taken from a Chinese saying. The locals in China and the story grew out of Yardley's one-year service in the cryptanalytic organization of the Chiang Kai Shek government. The book is affectionately dedicated to Edna Ramasaier who became the second Mrs. Yardley. WFF thought Carl Grabo, the co-author, was an engineer in the employ of the American Telephone and Telegraph Company. He is listed on the dust jacket as a Professor of English at the University of Chicago. Carl Henry Grabo was an Associate Professor of English at the University of Chicago and was seven years older than Yardley. He had been an instructor at the university since 1907. He and Yardley worked together on various projects. David Kahn believes most of the writing is Grabo's. See David Kahn, The Reader of Gentlemen's Mail; Herbert O. Yardley and the Birth of American Code Breaking, New Haven: Yale University Press, 2004, pp. 227-228. 2 copies; one with dust jacket. One was a gift of Cmdr. Mindte.

Items 217 and 217.1

Wimsatt, W.K. Jr., "What Poe Knew About Cryptography," Publications of the Modern Language Association of America 58, (3 September 1943), pp. 754-779.

This article, written several years after the article by WFF on Edgar Allan Poe as cryptographer, represents an important extension of the information on this subject discovered by scholarly labors and Professor Wimsatt, a member of the faculty of Yale University. The Item contains correspondence between the author and WFF. *WFF's article first appeared in 1936 in American Literature, and was later reprinted in the Signal Corps Bulletin #98, December 1937, in two parts, Part 2 giving many more technical details than the original article in PMLA. **Item 217.1** Is an offprint of this article. More notes in grey folder with separate correspondence. **Item 2112.**

Items 218

Leverage, Henry, The White Cipher, New York: Grosset and Dunlap, 1919, 272 pp.

Another romantic tale utilizing ciphers.

Item 219

Hume, Fergus, The Crimson Cryptograms, New York: F.M. Buckles & Co., n.d., 255 pp.

A novel based on a cryptogram. Signed WFF, 1929.

Item 220

Major-General Sir George Aston, K.C.B. Secret Service, New York: Cosmopolitan Book Corp, 1930, 348 pp.

Chapter 14 describes the Zimmermann Telegram of World War I. The Appendix of seven pages bearing the title “Conveying Secret Information” after giving three or four examples of elementary systems, relates a few anecdotes on the dramatic side in connection with solved or captured secret systems of communication. Sir George was formerly of the Naval Intelligence Department and Secretary to the War Cabinet. The Zimmermann Telegram episode follows in its outline all other reports re this famous telegram and contains “the usual errors.”

Ch. 1- The story of Army intelligence 1855-1914

Ch. 2- Personal memories of the Naval Intelligence Dept 1886-1890

Ch. 4- Well-kept secrets of the war

Ch. 7- Worst-kept secrets of the war

Ch.12- Some women spies

Check chapter 12 for women in espionage article.

Item 221

Yardley, Herbert Osborne, Ideal Correspondence Code for Commercial, Journalistic and General Correspondence, New York: Ideal Code Company, pp. 149-155.

Code printed up and decode printed down. Discusses system of construction.

Item 222

Zim, Herbert S., Codes and Secret Writing, New York: William Morrow & Co., 1948. With DJ.

An elementary treatment of the subject directed toward amateurs who enjoy making, using, and solving ciphers. Code wheels, multiplication tables, breaking secret codes, special codes and secret languages, secret writing and invisible ink.

Item 223

Forrer, Emil O., Die Hethitische Bilderschrift, Oriental Institute of Chicago, University of Chicago Press, 1932, 62 pp.

A paper on Hittite writing which had not been deciphered to the satisfaction of all scholars at that point. This refers to Hittite ‘hieroglyphics.’ For the history of its decipherment, see Joachim

Latacz, Troy and Homer, Oxford, 2001, pp. 61-62 and David Kahn, The Codebreakers, pp. 923ff.

Item 224

Gelb, Ignace, Hittite Hieroglyphics, Oriental Institute of Chicago, Studies in Ancient Oriental Civilization, Chicago: University of Chicago Press, Part I, 1931 88 pp., Part II, 1935, 37 pp., and Part III, 1942, 77 pp.

There are many who disagree with Dr. Gelb's interpretations of these hieroglyphics. Cf. Joachim Latacz, Troy and Homer, Oxford, 2001, pp. 61-62.

Item 225

Neumann, John von, The NORC and Problems in High Speed Computing.

Address by Dr. John Neumann on the occasion of the first public showing of the IBM Naval Ordnance Research Calculator, 2 December 1954. WFF and the late Dr. von Neumann were friends and for a short period before his untimely death from cancer were colleagues on the Advisory Board of the NSA. He was one of the pioneers and innovators in the design of high speed digital computers.

Item 226

Wormeer, Richard S., Sale Catalogue of books on cryptography and signaling, n.d., but after 1945, 5 pp.

An interesting indication of the value of books on cryptography in 1945: Trithemius 1621, \$20.00, Porta 1602, ed. \$57.50, Federici 1685, \$45.00, Wilkins 1708, \$22.50, and La Croix, \$12.50

Item 227

L'Union Télégraphique Internationale (1865-1915), Berne: Bureau Internationale de l'Union Telegraphique, 1915, 112 pp.

This history of the International Telegraphic Union was prepared by the permanent bureau of the Union in Berne. Although the Union was actually formed in Europe in 1849, this history covers the years 1865-1915. The Paris Conference of 1925 was the first to formulate detailed regulations performing to the construction and length of groups in code language. Friedman considered it an important item.

Item 228

Friedman, Maj. William F., The History of the Use of Code and Code Languages, the International Telegraph Regulations pertaining thereto, and the Bearing of this History on the Cortina Report, Washington, DC: GPO, 1928, 80 pp.

International Radio Telegraph Conference of Washington, 1927. Delegation of the USA Committee on Tariffs, Word Count and Accounting, proposed adoption of the Cortina majority proposal. In 1925, the ITU met in Paris, and in 1926 in Cortina d'Ampezzo. It drew up recommendations. There were two resolutions: a majority and a minority report. The majority report suggested a 5-letter maximum for code words. The only history of the use of codes and code language in the world. Shows how modern code language developed from its early beginnings. Prepared by WFF as one of the official documents following the Washington International Radio-Telegraph Conference held in 1927. WFF was a technical advisor to this conference which was participated in by 80 or more nations. Correspondence in one copy from important figures in the communications world in the U.S. Related correspondence in copy 1. 2 copies. For related material see Ms. Collection, numbered series 228.

Item 229

Wilkins, John, Bishop of Chester, The Mathematical and Philosophical Works of the Right Reverend John Wilkins, London: Printed for J. Nicholson, 1708, 580 pp.

One section of this important early 18th century book is entitled: "Mercury or the Secret and Swift Messenger." This has been published as a separate item and deals with cryptography. In its day, "Mercury" was perhaps the best thing of its kind in English. For more detailed information on this work, see Galland pp. 200-201. This collection of his works was published in 1708. He also cites Aeneas Tacticus, Polybius, Julius Africanus, Vegetius, Frontinus, Cicero, Albam and Atbash. See Sheldon, EAW on these same topics, and David Kahn, The Codebreakers, pp. 79ff.

Item 230

Durning-Lawrence, Sir Edwin, The Shakespeare Myth, London: Gay and Hancock Ltd., 1912, 32 pp.

An early pamphlet by the author of the work described in **Item 770**. The pamphlet contains a facsimile reproduction in modern script of the first page of the Northumberland manuscript. Many references to other items in this collection.

Item 231

Chase, Pliny Earle, "Mathematical Holographic Cyphers," Mathematical Monthly, London: Oct.-Sept. 1858-1959, pp. 194-196.

How mistaken Professor Chase turned out to be! He gives illustrations which he thinks are sufficient to show that a very simple arithmetical process may effectively conceal the meaning of a plain text.

Item 232

Dudeney, Henry Ernest, The Canterbury Puzzles and Other Curious Problems, New York: E.P. Dutton & Co., 1908, 195 pp.

One of the very well-known books on puzzles, a cryptogram is a specialized form of puzzle. This item contains matters of information for young and old. Several puzzles are described, the answers to which have never been found.

Item 233

Buranelle, Prosper, F.G. Hartswick, & Margaret Petherbridge, The Cryptogram Book, New York: Simon and Shuster, 1928, 138 pp.

The Preface of 13 pages on how to solve cryptograms contains interesting general information about cryptography. The authors were connected with the New York World. This is among the very early books which popularized the printing of cryptograms in newspapers.

Item 234

Cooper, Kenneth S., Cipher Stories Puzzle Book, New York: Lewis Copeland Co., 1928, 127 pp. 2 copies, one with dust jacket.

Simple stories involving elementary cryptographic problems based upon a crossword puzzle-type construction. Dust jacket claims it is “a new and unique amusement book . . .” and lists “celebrities spoofed in this puzzle book” beginning with “. . . H. L. Mencken . . . Lindbergh . . . Henry Ford . . . George M. Cohan . . . Will Rogers . . . Gene Tunney, . . . and Irving Berlin.” Fifty names in all including Calvin Coolidge.

Item 235

Smith, Laurence Dwight, Cryptography, The Science of Secret Writing with Problems and Answers, New York: W.W. Norton, 1943, 164 pp. DJ.

An elementary treatise on cryptology more properly addressed to children. See interesting hand-written note inside by a British colleague of WFF. Several appendices. A - Some notes on the enciphering of Japanese. B-The Baconian Biliteral Cipher. The late Mr. Smith was a professor at the University of Maryland at the time of his death. He was in the U.S. Navy during WWII. His statement that “Bazeries stole the idea of the cipher cylinder from Thomas Jefferson” is erroneous. WFF knew for certain that Bazeries had never heard of the Jefferson invention. The

author offered to write a book with WFF for 2 1/2% of the profit for every mention of his name in the bibliography. Chapter II has “The History of Secret Writing.” It covers the Greeks, Histaeus, Plutarch on the *scytale* and Caesar’s cipher. (Cf. David Kahn, The Codebreakers, pp.82ff). The Appendix covers the Baconian Biliteral Cipher and Chapter 5 discusses codes vs. ciphers. See Sheldon, EAW on the *scytale*, pp. 72. Cf. David Kahn, The Codebreakers, pp. 244ff on Bazeries.

Item 235.1

Smith, Laurence Dwight, Cryptography: The Science of Secret Writing, New York: Denver Publications, Inc., 1955, 164 pp.

A second edition of the preceding work (**Item 235**) in paperback, 12 years after the first edition. The publisher states it is “unabridged with corrections.” 2 copies.

Item 236

Anonymous, Report of the American Delegation to the International Telegraph Conference of Brussels, September 10-22, 1928, Washington, DC: U.S. Government Printing Office, 1929, 214 pp.

WFF acted as Secretary of the American Delegation to this International Conference.

Item 236.1

Anonymous, Delegation of the United States of America to the International Telegraph Conference of Brussels, Tabulations of Data furnished by American users of the International Communications Facilities in Response to a Questionnaire based on the Cortina majority report. Washington, DC: GPO, 1928, 30 pp.

Item 236.2

Anonymous, Documents of the Committee for the Study of Code Languages, appointed by the International Telegraph Conference of Paris of 1925, Paris:1925, Cortina d’Ampezzo, 1926. List of Documents.

The official list of documents named in **Items 236.3** through **236.7** inclusive. Each of which relates to code language. The documents are self-explanatory. WFF was secretary of the American delegation to the International Telegraph Conference of Brussels, 1928. The translation of these documents was done under his direction between 1927 when he was Technical Advisor to the American Delegation to the International Radio Conference in Washington, D.C. and the Brussels Conference in 1928. (See other items in the 236 series). Translation of the French text.

Item 236.3

Anonymous, Documents of the Committee for the Study of Code Language, appointed by the International Telegraph Conference of Paris of 1925. List of documents.

Translation of the French text of the report. Washington, DC: GPO, 1928, 36 pp. See **Item 236.2**.

Item 236.4

Anonymous, Documents of the Committee for the Study of Code Languages. Appointed by the International Telegraph Conference of Paris of 1925, Part I, preliminary documents submitted to the committee of study during the Paris conference, Washington, DC: GPO, 1928, 15 pp.

See **Item 236.2**.

Item 236.5

Anonymous, Documents of the Committee for the Study of Code Language, Appointed by the International Telegraph Conference of Paris of 1925, Part II - Documents sent to the Secretariat of the Committee of Study, Washington, DC: GPO, 1928, 203 pp.

Translation of the French text. See **Item 236.2**

Item 236.6

Anonymous, Documents of the Committee for the Study of Code Language, appointed by the International Telegraph Conference of Paris of 1925. Part III, documents submitted to the Committee of Study during the conference at Cortina d'Ampezzo, Washington, DC: GPO, 1928, 35 pp.

Translation of the French text. See **Item 236.2**

Item 236.7

Anonymous, Documents of the Committee for the Study of Code Language, appointed by the International Telegraph Conference of Paris of 1925, Paris:1925, Cortina d'Ampezzo, 1926. Part IV, minutes of the Plenary sessions and reports of the subcommittee, Washington, DC: GPO, 1929, 166 pp.

Translation of the French Text. See **Item 236.2**.

Item 237

Rowan, Richard Wilmer, The Story of Secret Service, New York: Garden City Publishing Co., 1939, 752 pp.

A popular history concerning secret service and secret agents. Several sketches show methods of concealing information. An important work on the history of secret service operations. WFF calls attention to the strange typographical error. See page 76, “Moor” for “Moon.” Chapter 3: the cunning of antiquity, Chapter 4: Rome. Covers the Romans, Persians, Greeks, Rahab the Harlot, but not critically. CF Sheldon, EAW, Spies in the Bible.

Item 238

Hermann, A., Nouveau système de correspondance secrete, Le livre des clefs, Système cryptographique complet . . Paris: Librairie Scientifique A. Hermann, 1892, 26 pp.

A French writer in the 1890s published this book on cipher methods. See Galland p. 88.

Item 239

Ball, W.W. Rouse (Revised by H.S.M. Coxeter), Mathematical Recreations and Essays, New York: The Macmillan Co., 1939, 11th edition, 418 pp.

Chapter on cryptology, pp. 379-409 by Abraham Sinkov, is an excellent condensation of most important principles. It is autographed “to William F. Friedman, to whom the author is indebted for his training in cryptanalysis,” p. 379.

Item 240

Bates, David Homer, Lincoln in the Telegraph Office, Recollections of the United States Military Telegraph Corps during the Civil War, New York & London: D. Appleton-Century Co., Inc., 1939, 432 pp., illustrated.

A member of the Military Telegraph Corps during the Civil War relates memories and facts concerning Lincoln in his personal life and some items concerning the ciphers and codes in use during the Civil War. See Chapter IV, “Cipher Codes and Messages.” Chapter V “Confederate Cipher Codes.” This is a reprint of the book originally published in 1907. It is of great importance for the cryptologists interested in the means and methods used by both sides in the Civil War. Cf. David Kahn, The Codebreakers, pp. 214-229.

Item 240.1

Bates, David Homer, Lincoln in the Telegraph Office, Recollections of the United States Military Corps. Century Magazine 74, 1 May 1907, pp. 123-140, June 1907, pp. 364-375,

July 1907, pp. 364-375, August 1907, pp. 612-622, and September 1907, pp. 765-776. Two photostats (one negative, one positive) of the series.

Serially published recollections of David Homer Bates on Civil War Ciphers and Lincoln's interest in cipher operators. An extremely interesting series in the saga of military cryptography. See Galland p. 71. The five installments were later published as a book, **Item 240**, under the same title in 1907 by D. Appleton-Century Co. It was reprinted in 1939.

Item 240.2

Bates, David Homer, "A Rebel Cipher Dispatch: one which did not reach Judah P. Benjamin," Harper's Magazine, (June 1898), pp. 105-109.

An interesting article describing a Civil War cipher dispatch, the key for which was discovered by the author through a tombstone inscription. Presented to WFF by his friend Cmdr. Mindte who first bound the Harper's Magazine article in grey boards. Photostat positive.

Item 241

Bazeries, Etienne (Commandant), et Emile Burgaud, Le Masque de Fer, Paris: Firmin-Didot et Cie, 1893, 302 pp.

A volume by the famous French cryptographer on the subject of specific ciphers, namely, on the correspondence of Louis XIV. (See Galland p. 18). The identity of the Man in the Iron Mask is still the subject of much speculation. In his notes on Casanova, WFF using the Limited Editions Club 1940 edition of Machen's translation - 8 Vol. calls attention to Vol. 11, page 234, where Crebillion is quoted as saying the Man in the Iron Mask was "nothing but an idle tale and he had been assured of it by Louis XIV himself." Also note 7, p. 242 says the identity of the man is still doubtful . . . generally held that it was Antonio Mattheoli, Secretary of State to the Duke of Mantua. Crebillion held that Voltaire's fanciful elaboration on the story had made it into something like myth. J.T. Item missing.

Item 242

Bywater, Hector C., Their Secret Purposes, London: Constable & Co., 1932, 311 pp.

Makes disclosures of naval episodes during WWII, specifically about the German warships Goeben and Breslau, and the Battle of Jutland. Also references to intercept services and German secret agents. Chapter 13 gives information concerning German cryptanalytic work performed at a station near Neumuenster. Introduction states purpose of book "is to entertain rather than instructive." The last chapter, which author calls: debunking the Washington Conference [1921], is a sentence which might be termed prophetic [for 1932]. See pp. 293. WFF pointed out that

H.O. Yardley was mentioned with worshipful admiration in Ch. XIII and in appendix. Item missing.

Item 243

No card, no item

Item 244, 244.1, 244.2, 244.3, 244.4, 244.5, 244.6, 244.7, 244.8, 244.9

Anonymous, Before the Mixed Claims Commission, United States and Germany, Washington, DC: GPO, 1930-1941.

Organized under the agreement of August 10, 1922 between the U.S. and Germany. This is a series of U.S. Government publications dealing with German espionage during WWI. It contains many cipher messages which were handed over by Sir Reginald Hall from the files of Room 40 OB. The full story of the detective work that was used in proving German espionage in the case of the Black Tom explosion and the Kingsland disaster is one of great fascination. It has never yet been put into a form suitable for wide public consumption. Related correspondence contained in **Items 244.1, 244.7**. Folder also includes newspaper clippings on the Black Tom incident and examples of coded messages.

Item 244.10

Anonymous, Mixed Claims Commission, United States and Germany, documents, German messages, correspondence with American Counsel, etc.

Opinions and decisions in the sabotage claims handed down June 15, 1939 and October 30, 1939, and Appendix. This has to do with the long drawn-out settlement of the claims and counterclaims between the U.S. and Germany as a result of certain sabotage episodes before or during WWI. There are many cryptographic messages concerning the Black Tom Explosion and the Kingsland Disaster both being proved to have been the result of German sabotage. WFF believed the material would make a marvelous T.V. series.

Item 245

No card, no item

Item 246

No card, no item

Item 247

No card, no item

Item 248

No card, no item

Item 249

U.S. Government, French Geographical Code, Washington, DC: GPO, 1918.

Prepared under the supervision of the Director of Military Intelligence, General Staff and published by the authority of the Secretary of War, 360 pp. Although there were administrative difficulties in connection with the printing of this code, these apparently were overcome. See memoranda inside the book. For related materials see also Ms. Coll. numbered series 249. In the summer of 1918, a cable from Gen. Tasker H. Bliss to the Adjutant General of the Army requested that "a list of code words be gotten out for the geographical names of all that section of France, in which operations were then taking place. The book was 4 1/2 x 7" comprising 360 pp. Designed to cover Belgium, the lower part of Holland and Germany to 25 miles over the Rhine and Northern France. Correspondence only in the file. Item missing NSA?

Item 250

Friedman, William F. and President Franklin D. Roosevelt, re: Father Hoffman.

Three pages consisting of:

- 1) A letter from Father Hoffman to his cousin FDR.
- 2) A letter from FDR to the Chief Signal Officer forwarding letter # 1, with a request that Fr. Hoffman be given whatever he asked for.
- 3) Drew Pearson's story relating that Father Hoffman was refused even a second time by "the code expert" and that FDR was furious.

On the bottom of #1 in WFF's handwriting is the true explanation of this incident. See Ms. Collection, numbered series 250. Hoffman considered himself a code expert. He wanted access to code techniques. The code section said NO. Not even commissioned officers got such information unless it was required by their official duties. WFF noted: Never civilians and never amateurs.

Item 251

No card, no item

Item 252

No card, no item

Item 253

Viaris, Gaëtan Léon (Marquis de), L'Art de chiffrer et déchiffrer les depeches societies, Paris: Gauthier-Villars et fils, 1893, 175 pp.

One of the “modern day” classics dealing with cryptanalysis. It is believed that the book itself arose from the series of articles included in **Item 412**. The most important part of the book is that dealing with the analysis and solution of cryptograms enciphered by the Bazeries cipher cylinder. Viaris was a French Naval Officer, but the contents of his book are disorganized and somewhat incoherent. He offers in an addendum details of a cipher system of his own invention from which little sense can be extracted. On Bazeries, see David Kahn, The Codebreakers, pp. 244ff. Item missing?

Item 253.1

Viaris, Gaëtan Léon (Marquis de), L'Art de chiffrer et déchiffrer les depeches societies.

An English translation of **Item 253** was made by a private citizen as a patriotic service whose name WFF does not recall. The work was considered of sufficient importance to warrant a translation. The editing of the translation was never completed and therefore this item will not be found in an easily readable state in this collection. CF. **Item 412** - is a series of articles by Viaris. Viaris' real importance is based upon his ingenious solution to the Bazeries cylindrical cipher device. Cf. David Kahn, The Codebreakers, pp. 244ff.

Item 254

Nicholson, A. (Rev.), No Cipher in Shakespeare: A Refutation of the Hon. Ignatius Donnelly's "Great Cryptogram," London: T. Fisher Unwin, 1888.

A distinguished English Clergyman completely demolishes the cipher system that Donnelly employed to “prove” that Bacon wrote Shakespeare. See also WFF's The Shakespearean Ciphers Examined, pp. 46-49 (**Item 1690**). Photostat negative. Unbound.

Item 255

Anonymous, Background Report, British Services of Intelligence: How Stalin lost a war and how Poland and the Allies gained a Master Cryptographer, Vol. 1, No. 5, September 28, 1950.

Produced in Association with the International Services of Information, Inc. of Washington, DC: 16 pp. The dramatic story of how LTC Ian Kowaleski, a Polish officer on temporary duty in the Russo-Polish Campaign of 1920, solved vital battle orders, issued by the Russian armies and so brought about the latter's complete and final defeat. One cryptographic lesson is here demonstrated. LTC Kowaleski got his breakthrough from a few uncoded signatures. Note: The British Services of Intelligence is a purely private organization and has no official connection

with the British Government. This item came into the possession of WFF from Admiral Earle S. Stone. 1 original, 1 photostat positive.

Item 256

Langen, B. and M. Nippe, "Unsichtbare Geheimschriften und deren Erkennung," A selection from the book, Handbuch der Diologischen Arbeits-methode, Abt. IV, Angewandte Chemische und Physische Methoden, Teil 12/11, Heft 3, pp. 285-296, Berlin: Urban & Schwartzberg, 1932.

Photostat negative of pp. 285-296. German elementary treatise on invisible writing and sympathetic inks. Includes chemical tables.

Item 257

Kritzinger, F.N.U., Die Erzungenschaften der Astronomie, Photostat positive of pp. 194-195 re Galileo's anagram about Saturn.

A German scholar relates the anagrammatic cipher in which Galileo discovered the rings of Saturn. Also, the anagram in which Huygens hid a discovery. WFF does not believe the instant solution of the Huygens and Galileo anagrams as told by Kritzinger. These anagrams are referred to in WFF, TSCE, **Item 1690**, pp. 17-18, 92, 113. Accompanied by an English translation.

Item 258

Military Intelligence Branch, Cryptographic Course, 1918.

Codes and ciphers. A few problems for the study of codes and ciphers that were used for the training of officers for work at GHQ in World War I.

Item 259.1, 259.2, 259.3

Pardol, Manuel E. (Tte de Fragata), "Principles generales de criptografia," Boletin de Centro Naval, Buenos Aires: Tomo XLV, Number 464, May and June 1927.

Cryptography in Argentina in 1927-29, May-June 1927, No. 464, pp. 1-20, November & December 1927, No. 467, pp. 387-390, and September & October 1927, No. 466, pp. 249-252.

Item 260

Ciano, Count, The Ciano Diaries, extracts from New York: Doubleday & Co., 1939-1943.

These extracts from the diaries of Mussolini's son-in-law and Foreign Minister all refer to cryptographic telegrams and what was learned from them. "The Germans are in possession of

our (Italian) secrecy codes and read out telegrams. This is good to know; in the future they will also read what I want them to read.”

Item 261

Graves, Robert, Extract from I Claudius, New York: Harrison Smith and Robert Haas, 1934, pp. 246-249.

Tiberius kept criminal dossiers on his enemies. The Praetorian Guard was put into one camp for easy access just before the arrest and execution of Sejanus. The orders were in cipher. This is fiction. Graves describes the common cipher used:

Latin E substituted for Greek alpha

Latin F for Greek beta

Latin G for Greek gamma H for delta, etc.

Is this Caesar's substitution cipher? The key to this cipher was provided by the first hundred lines of the first book of the Iliad which has to be read concurrently with the writing of the cipher. Each letter in writing being represented by the number of letters of the alphabet intervening between it and the corresponding letter in Homer. This was Augustus' invention. Claudius deciphered it. Cf. David Kahn, The Codebreakers, pp. 82ff.

Item 262

Damm, Arvid Gerhard, Aktiebolaget Cryptograph, brochure of Stockholm Sweden, Stockholm: A-B Hasse, W. Tilberg, 1922, 21 pp. Two copies.

All of these items under this number are of significant historical importance in that they were produced by the first firm in the world that actively engaged in inventing and developing cipher machines. Moreover, it was the firm in which Boris C.W. Hagelin became first a director and later the owner of the business, the name of which changed several years thereafter to Cryptographe Technik, and then to Crypto A.G. in the 1960s. It was the largest and best-known manufacturer and distributor of crypto-apparatus of considerable sophistication. The FC includes practically all, if not all, of the brochures published by the original Swedish firm and its successors.

Item 262.1

Damm, Arvid Gerhard, Allgemeine beschreibung von electro-cryptogrphen, System Damm.

English typescript translation accompanying original. See **Item 262**.

Item 262.2

Damm, Arvid Gerhard, Aktiebolaget cryptograph.

Brochure on cipher machines made by the Cryptograph Company of Stockholm, Sweden, Stockholm: April 1917, 8 pp. This item is of great historical value because it is believed to have been the first brochure prepared by A.G. Damm who was the founder of the company that later became the Hagelin cryptograph Company of Stockholm.

Item 262.3

Damm, Arvid Gerhard, Electric Apparatus, U.S. Patent No. 1, 663, 624 issued, 27 March 1928.

See **Item 262**. Patent brochure.

Item 262.4

Damm, Arvid Gerhard

A mimeograph pamphlet of 14 pages dealing with one of the early machines constructed by Damm in the series “electro-cryptos,” 1925 model. See **Item 262**. English gift of Boris Hagelin.

Item 262.5

Damm, Arvid Gerhard

A photograph-bearing the stamping “Aktiebolaget Cryptograph” and showing an early model of Damm’s “electro-cryptos.” See **Item 262**. See also Ms. Coll. numbered series 262.5.

Item 262.6

Damm, Arvid Gerhard

English and German language transcripts of Damm’s Electrocryptograph System. Gift to WFF and autographed by Boris C.W. Hagelin, 12 October 1946, at Swedsrik, Sweden.

Item 262.7

Damm, Arvid Gerhard, Messages Secrets, Cryptographie Teknik, n.d. but circa 1930.

French brochure issued after Boris C.W. Hagelin became an engineer-director to the Damm firm. Contains description of “Le Cryptographe Type B-21, later became 211. 2 copies. Cf. Galland p. 52.

[Item 263]

War Department, Office of the Chief Signal Officer, Analysis of the Hagelin Cryptograph Type B-211, Washington, D.C.: GPO, 1939.

Declassified 9/21/05. Recovered from NSA 5/09 by VMI Department of History.

Item 264

Normak, A., (Kolonelleitnant Ks. Dipl), Sifri Käsiraamat, Tallinen, 1935.

This is a cipher textbook for use by Finnish cryptographers.

Item 265

Wouves, P.R., A Syllabical and Steganographical Table, Philadelphia: Printed by Benjamin Franklin Bache, 1797.

Photostat negative. According to WFF, an item of very great historical interest and importance. An explanatory note accompanies the item written by the book dealer in Philadelphia from whom WFF purchased this copy. See Galland, p. 205 for explanatory details. In French and English, 1786-98: "By means of which any sort of writings taken from either the French, English, Dutch, Spanish, Portuguese or Italian languages or any languages which use the same alphabet can be converted into numerical figures. According to the extract from a letter from W.D. Witt, Book Dealer, 5202 N. Carlisle Street, Philadelphia, the Library of Congress does NOT have a copy of this. The New York Public Library has a copy signed by Wouves and the Philadelphia Historical Society has an unsigned copy. De Witt thought Wouves was a pseudonym for Benjamin Franklin. The publisher, Benjamin Franklin Bach was his grandson. We know Franklin made use of ciphers. P.R. = Poor Richard?

Item 266

[International Telegraph Bureau], International Telecommunication Convention of Saint-Petersburg and Service Regulations Annexed (Revision of Paris, 1925), London: His Majesty's Stationary Office, 1926, 156 pp.

Code language was determined by the Telecommunication Convention in Paris in 1925.

Item 267

No card, no item

Item 267.1

U.S. Army, Army Extension Courses, Special Text No. 165, Elementary Military Cryptography, Washington, DC: GPO, 1935.

This edition of a special text intended for the instruction of military and civilian personnel was intended to be restricted to regularly enrolled students of the Army Extension Course. It is obvious that there was an earlier edition since the cover page starts: "corrected to include

changes No. 1, 2-25-41, (1941).” The FC contains a mimeograph edition of this work which was of considerable importance.

Item 267.2

U.S. Army, Army Extension Courses, Special Text No. 165, Elementary Military Cryptography, Washington, DC: GPO, 1943 Edition.

Item 267.3

U.S. Army, Army Extension Courses, special Text No. 165, Elementary Military Cryptography, Washington, DC: GPO, 1943 Edition.

Item 268

Item 268.1 Friedman, William F., Advanced Military Cryptography, Special text #166, Washington, D.C.: GPO, 1935, 113pp.

Item 268.2 Copy 2

Item 268.3 Copy 3

Item 269

Signal Corps, U.S. Army, Communication Security, War Department, Technical Manual, TM 11-469, Washington, DC: GPO, December 1944, 44 pp.

This is an early document put out by the signal intelligence Service to cover the most frequently violated principles of cryptographic and transmission security. Historically very important. Item missing, NSA?

Item 270

Signal Corps, U.S. Army, Signal Corps Intelligence, Signal Corps Field Manual FM-11-35; Washington, DC: GPO, September 2, 1942, 40 pp.

This is an early official document which outlines the purposes and duties of the Signal Intelligence Service. It is doubtful whether such a document would be published in these days. Historically a very important item in the Friedman Collection. Declassified 10/28/81.

Item 271.1

Signal Corps, U.S. Army, The Combat Code, No. 1, Tentative edition, Washington, DC: GPO, January 26, 1942, 132 pp.

Revised edition, Published in September 1943 CC-1. 2 copies. Copy #1. A three-letter, one-part code intended for front-line communications. Was probably used very little if at all, in World War II. Prepared largely under the direction of Major (later Brig. General) Earle F. Cook, Signal Corps, U.S. Army who was serving in the Signal Intelligence Service in Washington, D.C. Release order signed by Major General Olmstead, then Chief Signal Officer of the Army states: this “tentative” edition was prepared for the purpose of determining its suitability for field use.” Copy #2 was released by General Marshall as Chief of Staff “for facilitating the transmission of short . . . tactical messages . . . within the division.” Both were declassified 10/28/81.

Copy 2:

Signal Corps. U.S. Army, Signal Communications, Basic Field Manual FM 24-5, Washington, DC: GPO, 1939, 293 pp.

These documents are in the FC because they have sections devoted to cryptography and a description of the use of cipher device M-94.

Item 271.2

Signal Corps. U.S. Army, Basic Field Manual FM 24-5, Signal Communications, Washington, DC: GPO, 1939, 293 pp.

These documents are in the FC because they have sections devoted to cryptography and a description of the use of cipher device M-94.

Signal Corps, U.S. Army, Combat Code, No. 1 (CC-1), Washington, DC: U.S. Army Signal Corps, September 1943, 125 pp.

A later edition would indicate that the three-letter groups were subject to a high degree of error because in this edition five-letter groups were used with a two-letter differential. On the back of the title page it is stated that “the code is published for facilitating the transmission of short, complete, more or less stereotyped tactical messages within the division.”

Item 272.2

Signal Corps. U.S. Army, Signal Communications, Basic Field Manual FM 24-5, Washington, DC: GPO, 1939, 293 pp.

Later edition of the preceding item. It incorporates many corrections but not corrections dealing with the cryptography sections.

Item 273

Hotson, Leslie, "Literary Serendipity," Journal of English Literary History 9, (2 June, 1942), pp. 79-94.

A famous Shakespearean scholar and literary detective ruminates on the bits and pieces which come to light more or less by accident and from which conclusions may be drawn on the involved question of Elizabethan literature. Autographed by the author to WFF. Dr. Hotson was a WWII colleague.

Item 274

Rochfort, William Henry, A Treatise Upon Arcanography or, a new method of secret writing, London: De la Rue & Co., 1836, 19 pp.

A proposed method for a concealment system. Important historically. It was the boast of Napoleon's "bureau noir" or deciphering bureau that no foreign letter ever passed through France unread. The bureau was composed principally of Austrians celebrated throughout Europe for their quickness in perception especially for ciphering purposes. The bureau was abolished under Louis XVIII. The Austrians went home, and not surprisingly, a similar bureau was set up in Vienna by the late Emperor Francis.

Item 275

No card, no item

Item 276

U.S. Army, Fire-control Code, War Department Restricted Technical Manual TM-6-230, Washington, DC: War Department, 12 May 1942, 36 pp.

Many years ago, a brief code for this purpose was first issued by the Signal Corps. It would be difficult to say how practical such a code turned out to be. This edition had both two-letter groups and three-digit groups as code equivalents. Change No. 1 embodying a panel code for this same purpose is included in this item.

Item 277

Hassard, John Rose Greene, The Cipher Dispatches, New York: The New York Tribune, Extra, No. 44, 1879, pp. 44. Photostat positive.

Cryptograms of the Tilden Hayes campaign. See documents of the House of Representatives, 45th Congress (**Item 277.1**) of much historical interest. Clipping from the Washington Post dated November 29, 1960 entitled: "Hayes-Tilden Election Reviewed" inside **Item 277**. Thesis advanced by Drew Pearson is that Tilden probably won. Important disclosure in Elements of

Cryptanalysis by WFF concerning these cipher dispatches. See pp. 31-33, **Item 213**. Written during the Kennedy election 11/29/60. Len Hall and top GOP strategists were pursuing ballot recounts in certain states.

Item 277.1

U.S. Congress, Extracts from Cipher Telegraphic Dispatches: Tilden Hayes Campaign, U.S. House, Miscellaneous documents, Vol. 5, 45th Congress, 3rd session 1878-1879. Photostat negative.

Historic case of use of cryptography in a heated political presidential campaign. The cipher messages were deciphered by Prof. Edward S. Holden of the U.S. Naval Observatory. Two worksheets of WFF are included inside.

Item 277.2

Hassard, John Rose Green, "Cryptography in Politics," North American Review, Boston: Vol. 128, No. 268, (March 1879), pp. 315-325.

An essay by the man who analyzed the cipher telegrams in the Tilden-Hayes campaign. This item contains the original pages from the magazine, also a photostat positive. It contains this observation: "As old as cryptography is, it may be doubted whether it has made great advances in modern times. . . already there has been so great an improvement in the morals of governments that the custom of killing foreign-office messengers for the sake of their dispatch-bags is practically obsolete in diplomacy." No comment.

Item 278.1

Anonymous, Braille alphabet, New York: The Jewish Braille Review, n.d.

The Braille alphabet partakes somewhat of the nature of Morse telegraph code. It also uses some of the principles of frequency of letters.

Item 278.2

Anonymous, The International Hebrew Braille Alphabet, New York: The Jewish Braille Review, n.d.

See **Item 278.1**.

Item 279

Kytka, Theodore, Invisible Photography and Writing, Sympathetic Ink, etc., San Francisco: Confidential circular printed by the Post Office Inspector in charge in San Francisco: 1918, 4 pp.

A trifle on the subject of secret inks etc. For use by the Post Office Inspectors of 1918. Confidential. Declassified 7/24/75. Letter enclosed from the War Department.

Item 280

No card, no item

Item 281

No card, no item

Item 282

No card, no item

Item 283

Nagle, P.E.D., International Communications and the International Telegraph Convention, St. Petersburg, 1875, Lisbon, 1908, Washington, DC: GPO, 1923, 68 pp.

Historical document dealing with the first international conference telecommunications and regulations adopted in 1875 and modified in Lisbon in 1908. Contains the full text of the convention including many items of historical interest, the least of which is that the document was produced in the Department of Commerce, Bureau of Foreign and Domestic Commerce. The Director of the Bureau in 1923 was the (in 1966), the much publicized figure Julius Klein. Contains map of principal ocean cable routes, July 1923 showing ownership districts served.

Item 284.1

Pratt, Fletcher, Secret and Urgent, The Story of Codes and Ciphers, Indianapolis and New York: Bobbs-Merrill Co., 1939, 282 pp.

Pratt attempts and succeeds in writing a popular story about cryptology. The book contains numerous errors and misstatements but is readable and interesting to the layman. On the fly leaf is a short tribute to Fletcher Pratt which appeared in the Saturday Review of July 7, 1956, by a befuddled Hanson Baldwin. Also, there is a comment on the Harvard Baccalaureate Hymn of 1926 which Pratt referred to as "a famous and scandalous acrostic whose hidden properties were not discovered by the authorities until it had been sung in their chapel and published in the Boston Press." WFF comments "Pratt's praise of D.D. Millikin in his prefatory note is revealing in its naiveté." Millikin was a student of WFF and ESF in 1918. Folder contains a clipping, a review, notes and correspondence by and about the author and the book and the inside back cover. Chapter 1 - Sermons in Stone; the Hittites, Egyptian Hieroglyphics, Rosetta Stone. Chapter 2 -The Element of Doubt; Wilfrid Voynich, the Voynich Ms. and Newbold's Theory.

Chapter 3- Jargon, the *skytale*, Suetonius, Cicero, Julius Caesar's cipher. Cf. Sheldon, EAW on these entries. Also David Kahn, The Codebreakers, pp. 82ff.

Item 284.2

Pratt, Fletcher, Secret and Urgent, The Story of Codes and Ciphers, Garden City, NY: Blue Ribbon Books, 1942, 282 pp.

Second edition. The text is identical to the preceding **Item 284.1**. WFF bought a copy at a "discard sale" at the Cosmos Club.

Item 284.3

Pratt, Fletcher, Histoire de la cryptographie. Les écritures secrètes depuis l'antiquité jusqu'à nos jours, Traduction du Capitaine E. Arnaud, Paris: Payot, 1940.

A French translation of Pratt's Secret and Urgent (**Item 184.1**). Translation by E. Arnaud. Later a LTC who was chief of the section of the Secretariat of the French Armed Forces in 1954.

Item 285

Yardley, Herbert Osborne and John M. Manly, Codes and Ciphers - Notes on Problems, Washington, DC: Army War College, October 1917, 20 pp.

This was a set of problems and notes for the instruction of new personnel coming to the Section 8 of the Military Intelligence Division during World War I. See items in FC Manly and Yardley. Cf. David Kahn, The Codebreakers, ch. 12, and David Kahn, The Reader of Gentlemen's Mail.

Item 286

Yardley, Herbert Osborne and John M. Manly, Problems in Codes and Decoding, Washington, DC: Military Intelligence Branch, General Staff, Cipher Section, 1918, 17 pp.

Mimeograph. These problems were used for instructional purposes in World War I.

Item 287

Post, Melville Davisson, "German War Ciphers," Everybody's Magazine, June 1918, pp. 28-34.

More about German secret agents and their concealment system at the time of World War I. Some interesting geometrical codes. "The French War Office, by an extraordinary accident which cannot be made public, had obtained the key to the German radiograph cipher code."

Item 288

Anonymous, Universal Code for Secret Written and Telegraphic Correspondence.

(Translation from the Spanish). Source not indicated. Eleven typescript pages. An anonymous Spanish writer offers as the perfect system, his code of 100 pages with words numbered 00-999; he proposes an additive encipherment of the number groups. No comment by WFF as to its efficiency.

Item 289

Nicolai, W. (Oberst), Geheime Mächte, extract from Leipzig, 1923, pp. 142-147.

A German colonel writes of espionage in World War I and after. See Galland p. 134.

Item 290

Elizebeth S. and William F. Friedman, Riverbank Problems in Cryptanalysis,

In early 1918, WFF and ESF gave a course of instruction to a large group of army officers detailed to Riverbank for training before being sent overseas.

Item 291

Syndics of the Cambridge University Press, A Brief History of the Cambridge University Press, 1955, pp. 25, 3 plates.

A brief history of one of the most venerable printing and publishing houses of England.

No connection to cryptography.

Item 292

Mitchell, Gladys, Faintly Speaking, Penguin Books in association with Michael Joseph, 1956, 203pp. Item marking missing.

Item 293

Kullbach, Solomon, Frank B. Rowlett and Abraham Sinkov, Central Solution for the ADF GVX Cipher System, Technical Paper of the Signal Intelligence Section.

Mimeographed edition of 14 pages with some exercises at the end. A tentative edition of the preceding item. Rare and valuable. Declassified 7/24/75.

Item 294

International Telephone and Telegraph Corp., Conférence Radio Télégraphique Internationale de Washington, 1927, Washington, DC: ITT Press of Norman T.A. Munder & Co., Baltimore, 1927, 87 pp.

A beautiful brochure dealing with the very important radio conference of 1927 held in Washington, D.C. Contains many photographs of delegates to the conference. This led to his (WFF's) appointment to assemble and direct a staff, for the greater part of the following year, in preparation of plans and documents for the International Telegraph Conference in Brussels in 1928. The staff, among them ESF, accompanied the official U.S. Delegation to Brussels. See photographs.

Item 295

Davys, John M.A., Rector of Castle Abbey in Northhamptonshire.

An essay on the Art of Decyphering in which is inserted a discourse of Dr. Walters. (Now first published from his original Ms. in the Public Library at Oxford). London: Printed for L. Gilliver & I. Clarke, 1797, 59 pp. Photostat (positive).

This is a work of great historical importance in cryptanalysis since it described some of the work done by the famous Dr. John Wallis. See **Item 700**. See also Galland, p. 53, Cf. David Kahn, The Codebreakers, pp. 166-170.

Item 296

Jammet, Jean, Civil Engineer, "System de Communications électriques secrètes," L'Onde Électrique, Paris, August, 1926, pp. 365-377.

English translation included (A New System of Secret Electric Communications). Photostat (positive). A paper on printing telegraph cipher systems. Useful and valuable as a historical document dealing with the subject.

Item 297

Ceram, C.W. [Pseud. Maree, C.W.], The Secret of the Hittites: The Discovery of an Ancient Empire, Translated from the German by Richard and Clara Winston, New York: Alfred A. Knopf, 1956, 281 ff.

Author of Gods, Graves and Scholars. The Hittites are given only seven lines in the Bible and dismissed as a minor Syrian tribe. Only in 1880 did an archaeologist claim that there had once been a mighty Hittite empire stretching from the Black Sea to Damascus. In 1910 we began to get a glimpse of their history. Since 1946 we have been able to read their hieroglyphic inscriptions. Bedrich Hrozny (Czech born in Poland in 1879) discovered that Hittite was an indo-

European language. This book contains an interesting section (Chapter 2-4) on the decipherment of Hittite hieroglyphic writing. For a recent description of the decipherment of the hieroglyphic form of Hittite writing, see Joachim Latacz, Troy and Homer, Oxford, 2001, pp. 61-62.

Item 298

Robertson, Harold P., "The Universe," Scientific American 195, (3 September, 1956), pp. 73-81.

Clipping re the author is same magazine. The author's first name is erroneously given as Harold. An autographed copy of the leading article in this issue of Scientific American.
Cosmology.

Item 299

No card, no item

Item 300

No card, no item

Item 301

Pott, Mrs. Henry, Francis Bacon and His Secret Society. An attempt to collect and unite the lost links of a long, strong, chain; Chicago: Francis J. Schulte & Co., 1891, 421 pp.

The tireless Baconian, Constance Pott the Elder, attempts to create the founder of the Rosicrucian Society in the person of Francis Bacon. The volume contains about 25 pages of reproductions of symbols which are found in Elizabethan books and which Mrs. Pott claims to have been those of the Rosicrucian Society. The work of a fanatic (WFF) but it received considerable attention because of Mrs. Pott's prominence, wealth and general intelligence. Probably the source of Walter Conrad Arensberg's delusion concerning the secret society which obsessed his mind.

Item 302

No card, no item

Item 303

No card, no item

Item 304

Dellay, Vincent J. , United States Senate. Report of the Commission on Government Security Pursuant to Public Law 304, 84th Congress as amended. 85th Congress, 1st session,

Document No. 64, Washington, DC: GPO, 1957, 807 pp., 2 copies. One hardbound; one softbound.

The commission on government security was established by Congress in 1955 to fill an urgent need for an objective, non-political and independent study of the innumerable laws, executive orders, regulation, programs, practices and procedures intended for the protection of the national security. Its stated purpose was to establish fair, uniform, effective, and realistic measures to safeguard both the national security and the rights of individuals. Document classification, industrial security, port security, passport security, civil air transport, criminal statutes.

Item 305

Collon, A., "Etude sur la cryptographie, son emploi à la guerre et dans de diplomatie," Bruxelles, Revue de l'Armée Belge; September-October 1899 to January-February 1906, with original pagination retained. Only chapter 2 of this book is in the collection. See Galland, p. 44.

The complete volume is in the War College Library but this chapter is not in it. Item was given to WFF and was cut out. Given to WFF by Charles Mendelsohn who did not reveal where he had found the cutting. Perhaps this section of a series was suppressed before the series of articles appeared in book form.

Item 306

Reimer, R.B., The Crypto-Set.

The item is in the George C. Marshall Museum.

Item 307

U.S. Navy, Elementary Course in Cryptanalysis; Washington, DC: Office of the Chief of Naval Operations, Navy Department OP-20-GYT, circa 1935. See **Items 36** and **1027**, typescript copy.

Item 308

U.S. Navy, Secondary Course in Cryptanalysis; Washington, DC: Office of the Chief of Naval Operations, Navy Department OP-20-GYT, circa 1935.

Mimeograph on the subject, for the instruction of U.S. Navy cryptanalytic personnel.

Item 309

French, Norman R., C.W. Carter Jr., and Walter Koenig Jr., The Words and Sounds of Telephone Conversations; Bell Telephone System Technical Publications, Monograph B-491, June 30, pp. 1-15.

This was first published in the Bell System Technical Journal (See **Item 632**) and is the first study of its kind ever made. Study in the relative frequency of English speech sounds. The most common sound is “I”.

Item 309.1

AT&T, The Popular First Person Singular; Baltimore: The Kalends of the Williams and Wilkins Co. See American Telephone and Telegraph Co.

A tabulation of interest shows the 25 most frequently used words in telephone conversations vs. those in printed English.

Item 310

Friedman, William F., Principal Cryptanalyst, Military Cryptanalysis, Part I, Monoalphabetic Substitution Systems, Washington, DC: Prepared under the direction of the Chief Signal Officer, 1936, pp. 162.

Mimeograph edition. The first edition of this important work in mimeograph form. Declassified 10/28/21. Typescript copy. Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm.

Item 310.1

Friedman, William F., Military Cryptanalysis, Part I, Monoalphabetic Substitution Systems; Washington, DC: GPO, 1938, 142 pp.

First printed edition. Two copies, paperbound. One marked “Desk Copy for Corrections.” Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm

Item 310.2

Friedman, William F. and Lambros D. Callimahos, Military Cryptanalysis, Part I, Revised and enlarged by Lambros D. Callimahos; Washington, DC: National Security Agency, 1952. 2 copies of third edition. No 4th edition.

Reclassified by NSA, but now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm

Item 310.21

Callimahos, Lambros D. and William F. Friedman, Military Cryptanalysis, Part I, Revised and Enlarged by Lambros D. Callimahos, 4th edition, Washington, DC: NSA, April 1956.

Declassified, 22 March 1984. See Friedman, William F. **Item 310.21** .

Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm

Item 311

Friedman, William F., Military Cryptanalysis, Part I, Lessons and Solutions; Washington, DC: Office of the Chief Signal Officer, 1936.

Subcourse of Army Extension Courses. Based on Text, **Item 310**. Mimeograph edition.

Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm.

Item 312

Friedman, William F., Military Cryptanalysis, Part II.

Reclassified by NSA and taken. Now available on NSA website:

http://www.nsa.gov/public/military_cryptanalysis.cfm

Item 312.1

Friedman, William F. and Lambros D. Callimahos, National Security Agency, Military Cryptanalysis, Part II, Simpler Varieties of Polyalphabetic Substitution Systems; Washington, DC: GPO, 1938, 120 pp.

See author card, 1st edition. The first printed edition of **Item 312**.

Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm

Item 312.2

Same as **Item 312.1**, declassified 22 March 1984. Periodic Polyalphabetic Substitution Systems.

Item 313

Friedman, William F., Military Cryptanalysis, Part II, Lessons and Solutions; Washington, DC: Office of the Chief Signal Officer, 1937.

Subcourse of Army Extension Courses. Based on Text, Item 312. Mimeographed. Item originally taken by NSA and classified, but now available on NSA website:

http://www.nsa.gov/public/military_cryptanalysis.cfm.

Item 314

Friedman, William F., Military Cryptanalysis, Part III, Periodic Substitution Systems; Washington, DC: Office of the Chief Signal Officer, 1938, 153 pp.

First edition, mimeograph form of Part III of this work. Item reclassified by NSA. Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm.

Item 314.1

Friedman, William F., Military Cryptanalysis, Part III, Periodic Substitution Systems; Washington, DC: Office of the Chief Signal Officer, 1938, 153 pp.

One hardback, one soft-back copy part III, 4.
Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm

Item 315

Friedman, William F., Military Cryptanalysis, Part III, Periodic Substitution Systems; Washington, DC: Office of the Chief Signal Officer, 1938, 153 pp.

Reclassified and taken by NSA. Now available on NSA website:
http://www.nsa.gov/public/military_cryptanalysis.cfm.

Item 316

Friedman, William F., Principal Cryptanalyst, Signal Intelligence War Department, Office of the Chief Signal Officer, Washington, DC: Military Cryptanalysis, Part IV, Transposition and Fractionating Systems. Typescript. Restricted.

Item 316.1

Friedman, William F., Military Cryptanalysis, Part IV, Transposition and Fractionating Systems, 1st Printed Edition Declassified 8/15/75.

Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm

Item 317

Theobald, Robert A. [Rear Admiral, USN Ret], "The Final Secret of Pearl Harbor," U.S. News and World Report 36,14 (April 2, 1954), pp. 48-93. Two Forewords: 1) Adm. Husband E. Kimmel and 2) Adm. William F. Halsey, USN.

This is a condensation of a book by the author in which he takes the position that the attack on Pearl Harbor was "engineered" by President Roosevelt. Pages 21-23 of the same issue of the

U.S. News and World Report is called “The Big Secret of Pearl Harbor” and is an anonymous editorial on the Theobold book. Theobold’s book was published April 28, 1954, subtitled “The Washington Contribution to the Japanese Attack.” Cf. At Dawn We Slept.

Item 317.1

Anonymous, “The Big Secret of Pearl Harbor,” U.S. News and World Report 36, 16 (April 16, 1954), pp. 21-23.

An article in the form of an editorial on Admiral Theobold’s book: The Final Secret of Pearl Harbor. Many clippings including one relating to the scream of Mrs. Stafford (unseen but vocal eavesdropper when her husband was interviewed).

Item 318

Standley, William H. [Admiral, USN Ret.], “More About Pearl Harbor,” U.S. News and World Report 36, 16 April 16, 1954, pp. 40-42.

The author was Chief of Naval Operations from 1933-1937. U.S. Ambassador to Russia, October 1942 to 1943 and a member of the Roberts Commission to investigate the attack on Pearl Harbor. In this article, he claims that the commission’s verdict, which blamed solely the Army and Navy commanders at Pearl Harbor, would have been different if it had received all of the facts.

Item 319

Beatty, Frank E. [Vice-Admiral, USN retired], “Another Version of What Started War with Japan,” U.S. News and World Report, 36,22, May 28, 1954, pp. 48-50.

The author was aide to the then Secretary of the Navy, Frank Knox, when the Japanese attacked Pearl Harbor. The author challenges the theory that President Roosevelt brought about the attack by astute maneuvers, as is claimed by the revisionists like Robert Theobald in his book The Final Secret of Pearl Harbor.

Item 320

Kittredge, Capt. Tracy B., Ret., “The Muddle Before Pearl Harbor,” U.S. News and World Report 37, 23 December 3, 1954, pp. 52-63, 110-139.

This is an interesting article written by a careful and detached historian who was horrified when the title of his article was changed by the publisher. This article is not intended for the general reader of U.S. News. It is much too scholarly and careful in its analysis of what happened. “U.S. Defense Policy and Strategy, 1941”

Item 321

Kimmel, "Admiral Kimmel's Own Story," U.S. News and World Report, 37, 24 (December 10, 1954), pp. 66-77, 133-159.

Condensation of his book by the same title, published in Chicago by Henry Regnery Co., January, 1955.

Item 322

Puleston, W.D. (Captain, USN, retired), "Revealed - Blunders of World War II; Must the U.S. Again Take the First Blow?" U.S. News and World Report , 38 (February 4, 1955), pp. 106-139.

According to WFF, this is a "Monday morning quarterback" talking about the blunders of World War II. The author was, for a time during WWII, Director of Naval Intelligence. Captain Puleston has veered to an exactly opposite view from that spoken in his book (**Item 1439**) published in 1941 when he applauded the Pacific Fleet having been placed at Pearl Harbor. In 1955 he criticizes other men for blunders. He goes into great detail criticizing Marshall's "Unity of Command" doctrine.

Item 323

Miles, Sherman: Pearl Harbor in Retrospect," Atlantic Monthly 182, 1 (July, 1948), pp. 65-72, 2 copies.

A very important article on the Pearl Harbor attack in view of the fact that the author was at the time of the attack the Director of Military Intelligence in the U.S. Army. The article contains many interesting statements, some of which may have been intended to lift the burden of responsibility from the persons in the Intelligence Department of the Army. See p. 69 for General Miles' estimate of "Magic" and its value and his astonishment that its solution really was kept secret as long as it was. Why did Roosevelt try to reach Admiral Stark by telephone (unsuccessfully) and then just go to bed? Why was he in seclusion the following morning? Why was no action taken on Japan by the Secretary of State, War or Navy when they met on that Sunday morning? Were they in denial? On Magic, See David Kahn, The Codebreakers, pp. 1-67.

Item 324

Signal Corps, U.S. Army, Basic Field Manual FM 24-5 Signal Communications 1939, 293 pp., Vol. IV.

An important document in the FC largely because Section 5 is devoted to military cryptography, and Section 6 is devoted to a description and use of a cipher device M-94 both of which were written by WFF. An early edition (1931) is much more complete.

Item 325

Edgerton, William F., Miscellany of papers on Egyptian hieroglyphics

The author was a fellow student of WFF at Cornell University, and during WWII came to work with the Army Security Agency, becoming by the end of the war a Major in the Signal Corps. He is now one of the leading authorities on Egyptian hieroglyphics and a high ranking member of the Oriental Institute of the University of Chicago (1955). WFE, "Egyptian Phoenetic Writing from Its Invention to the Close of the 19th Dynasty" JAOS 60,4 (1940), pp. 473-506; WFE, "The Thutmosid Succession" Oriental Institute of Chicago, Studies in Ancient Oriental Civilization No. 8, 1933, 43 pp. WFE, "Notes on Egyptian Marriage Chiefly in the Ptolemaic Period," Studies in Ancient Oriental Civilization, Vol. 1, Part 1 (1931), 25 pp. Review of Oscar William Reinmuth, The Prefect of Egypt from Augustus to Diocletian in Classical Philology 32,2 (April 1937), pp. 182-183. Review of Francesco Sbordone, Hori Apolloni Hieroglyphica, 1940 in Classical Philology 38, 1 (Jan. 1943). "On the Late Egyptian Negative" American Journal of Semitic Languages and Literature 48, 1 (October 1931) pp. 27-44. "Ideograms in English Writing" Miscellanea Language 17,2 (April-June 1941), pp. 148-150. "On the Chronology of the Early Eighteenth Dynasty (Amenhotep I to Thutmose III)" American Journal of Semitic Languages and Literature 53, 3 (April 1937), pp. 188-19. "Dimensions of Ancient Egyptian Ships" American Journal of Semitic Languages and Literature 46, 3 (April, 1930), pp. 145-149. "Egyptian Seagoing Ships of One Hundred Cubits" American Journal of Semitic Languages and Literature 47,1 (October 1930), pp. 50-51. "Chronology of the Twelfth Dynasty," JNES 1, 3 (July, 1942), pp. 307-314; "A-IK=K Cease" Zeitschrift für Aegyptische Sprache und Altertumskunde 70 (1934), pp. 123-124. "Wooden Tablet from Qaw," Zeitschrift für Aegyptische Sprache und Altertumskunde 64 (1929), pp. 59-62. "A Clause in the Marriage Settlements," Zeitschrift für Aegyptische Sprache un Altertumskunde 64 (1929), pp. 59-62. "Demotic Writing of MPATE," Zeitschrift für Aegyptische Sprache un Altertumskunde, 69 (1933), pp. 123-126. "Obsolesence of the Imperative Mood in Egyptian," Studies Presented to F.L.L. Griffith, pp. 61-68. See R.M. Sheldon, EAW on Egyptian cryptography and David Kahn, The Codebreakers, pp. 71-73.

Item 326

Morse, Samuel F.B.

Check drawn to the order of Sidney E. Morse Sr. dated February 25, 1869 for \$2,000. This relic of the great inventor of a practical electro-magnetic telegraph system was given to WFF by Miss Livingston Morse, a granddaughter of the inventor. Miss Morse stated that this was the next

to the last check written by Morse. This folder contains a brief typescript containing the contents of a letter written by Morse in 1838 stating that “such things as railroads and telegraphs are impossibilities and rank infidelities.” Letter appears in the Christian Science Monitor. “There is nothing in the word of God about them.” “If God had designed that his creatures should travel at the frightful speed of fifteen miles an hour by steam, he would clearly have foretold it through his Holy Prophets.” It is a device of Satan to lead immoral souls down to Hell. Check is missing.

Item 327

Hamel, George, (D. Phil.), The Krypha CIPHERING Machine: a mathematical opinion, Berlin: privately printed June 24, 1929, 14 pp.

Professor of mathematics at the Institute of Technology, Berlin, Charlottesburg analyzes the virtues of a cipher machine of German invention, “proving” at least to his own satisfaction that cipher messages prepared on this machine are indecipherable without the key. One of the examples of the naiveté of mathematicians who have no training or expertise in cryptology.

Item 328

Clark, Blake, “G-Man of the Air Waves,” Readers Digest 45, 272 (December, 1944), pp. 78-80.

Wartime revelations released by the Federal Communications Commission concerning radio-interception of espionage stations. Claims made for invention are erroneous. An unimportant item condensed from the Christian Science Monitor. “Monitors of the Radio Intelligence Division have swept enemy agents off the air in the U.S. and helped friendly Latin American countries to do the same. RID has been part of the FCC since 1910. The same technology was used to discover rum runners, smugglers and other lawbreakers who used complicated codes. An Axis agent in this country attempting radio communication with Germany or Japan would be detected in a matter of seconds, located in a few minutes and arrested within 24 hours. The long-range direction finder was perfected by George Sterling the “G-Man of the Airwaves.”

Item 329

Locard, Edmond, “Bibliographie Cryptologique” Traité de Criminalistique, Lyon: J. Desvigne et ses fils, Vol. 6, 1931-36, pp. 904-931.

A bibliography in two parts. Very important bibliography by the French cryptographer Locard, 21 copies, 1 photostat neg, one photostat positive.

Item 330

Friedman, William F., Correspondence re the Franklin cipher, See The Cryptogram 24 (December 1935), p. 1.

Item 331

No card, no item

Item 332

Givièrge, Marcel (General), Course in Cryptography, Washington, GPO, 1934, 164 pp.

Translation of **Item 197** *Cours de Cryptographie* by John B. Hurt, a member of the U.S. Army Signal Intelligence Service (Signal Intelligence Section, War Plans and Training Division.) Substitution ciphers, polyalphabets, sliding strip devices and disks, the Vignère system, the Wheatstone cipher, Bazeries, and the enigma.

Item 333

No card, no item

Item 334

Van Olfen, J.P. van, Jr., Secret Code, Amsterdam: J.P. van Olfen, Jr., 1935.

A curiosity of secret communication methods for business and banking purposes. The items seem to be merely a brochure describing the code. Sent to the War Department which sent all such items to be thrown away to WFF. It is advertised as “The World’s Only Patented Code” with a saving of 30-80% in cable costs over a five-letter code. Letter mutilation virtually eliminated.

Item 335

No card, no item

Item 336

Wagner, F., “Studien zu einer Lehre von der heimschrift (Chiffren Kunde),” Archivalische Zeitschrift 1886-88, Band XI (1956), Old Series, pp. 156-159.

An important series of articles on the history of cryptology. It was deemed worthy of translation and the translation constitutes **Item 336.1**. Translation on bond paper was done by a clerk-secretary in WFF’s office. The conclusion is a carbon on thin paper done by G-2 at the request of WFF. This is only the first part of a three-part scholarly monograph on the history of cryptology. 2 copies, one photostat positive, one bound photostat negative.

Item 336.1

Wagner, F., “Studies in the Science of Secret Writing,” Archivalische Zeitschrift, Band 11 (1886), Old Series, pp. 156-159.

English translation of **Item 336**. This history was undoubtedly much used. See also Meister who a few years later wrote his history of the origins and early development of cryptology.

Item 337

Meister, Aloys, The Beginnings of Modern Diplomatic Cryptography - Contributions to the History of Italian Cryptography in the 15th Century.

Typescript, carbon copy, 86 pp. of translation made by the Army Translation section of Die Anfänge der modernen diplomatische Geheimschrift, Paderborn: Druck und Verlag von Ferdinand Schöningh, 1902 (**Item 131**). For comment see preceding entry. Also there is here a translation of the Sicco Simonetta trace (**Item 932**) beginning on p. 83 of this translation, differing only in words and terms, but meaning identical, with Dr. Mendelsohn's translation of **Item 932**. On p. 51 of this item is the statement of Meister's belief that Sicco Simonetta was the very first man to write of "deciphering without a knowledge of the key". See Galland, **Item 617**. 2 copies.

Item 338

Vossius, Gerardus Johannes, De arte grammatica, extract from Amsterdam, 1630.

This is a photostat copy of a section dealing with cryptography. See Galland. The Vossius work was originally published in Latin and covers hieroglyphs, papyri, occult sciences, etc. Caesar cipher, Suetonius, Dio Cassius, Aulus Gellius, Plutarch, Cicero. Cf. David Kahn, The Codebreakers, pp. 82ff.

Item 339

No card, no item

Item 340

No card, no item

Item 341

No card, no item

Item 342

Office of the Chief Signal Officer, Radio Service Code, typescript of draft. Cover letter of transmission signed by Parker Hitt.

Folder with various memoranda from GHQ, 1918 re codes. Memo from Robert C. Davis on code interception. Course of instruction for interpreters employed as telephone listeners in the Fifth Army. LTC Parker Hitt comments on Front Line Code "Potomac." Frank Moorman Sept.

26, 1918 on code training. Distribution of Staff Code AEF and Distribution Tables. Declassified 7/24/75. Robert Loghry - radio service code distribution.

Item 342.1

Photostat negative copy of **Item 342**. Plus Report on French Listening Stations, June 18, 1918. Marked "Secret."

Folder also contains Report on a Course of Instruction for Interpreters Employed as Telephone Listeners in the V Army. Declassified from "Absolutely Secret." 7/24/75 NSA.

Item 342.1 (duplicate numbering)

Anonymous, Chinese Telegraph Code

This is the official code used for the transmission of messages in the Chinese language. By official, in this sense, is merely meant that the Old Chinese government adopted this as a dictionary of the 10,000 most frequently used characters with a number assigned to each character so that it would be possible to transmit messages by Morse telegraph. The date of publication of this item is not known but it was given to WFF as a gift in 1931 by Lt. F.M. Meals of the U.S. Coast Guard. The First edition of this code is also not known but it must go back a good many years before 1900. There are 100 characters per page; the number groups appear in Chinese numerals.

Item 342.2

Anonymous, Chinese Telegraph Code

This is, except for the pages of explanatory material and instructions, the same code as **Item 342.1**. However, in the former 4-digit groups are printed in Chinese characters, but in this edition the number groups are in Arabic numerals, and there is, in addition, a 3-letter group which may be used to represent each Chinese character. This book was a gift in 1940 from Captain Harrod G. Miller, Signal Corps. When ESF was working on the Gordon Lim case in Vancouver, BC, she learned that this particular code was known there as Chu's code. 2 copies.

Item 342.3

Chinese Telegraph Code

This is the archival code book (identical with **Item 342.1**) which was used in the case against Gordon Lim by the Canadian government when ESF, acting as a consultant for the Canadian government, solved the messages which convicted Gordon Lim and his co-conspirators of narcotics smuggling. This group of smugglers had employed the code by super-imposing

numbers, selected according to different cipher systems upon the numeral code groups. See the note attached to page one of this item. Another notable narcotics smuggling case wherein the conspirators employed a different code that involved one Lew Kim Yuan of Seattle in 1937.

Item 343

No card, no item

Item 344

Delage, Emile, La chiffrographie ou l'art de s'ecrire en secret absolu avec des chiffres, Paris: Boyveau & Chevillet, 1900, 64 pp.

A small and elementary treatise stressing processes of encipherment and codes. The reverse of the title page in this first edition, in French, states that "under preparation" are translations in ten (named) languages. In spite of the author's grand illusion, none of these have ever appeared. This item is one of only 25 copies, according to the author.

Item 345

No card, no item

Items 346 and 346.1

Hendrick, Burton Jesse, "The Zimmermann Telegram to Mexico and How it was Intercepted," World's Work, November 1925, pp. 23-26.

Original copy of entire issue and a photostat (Negative) copy of article with notes by WFF in a separate envelope (**346.1**). This article was first to tell the story about the famous Zimmermann telegram. The article was extracted from Vol. III of Hendrick's Life and Letters of Walter H. Page (**Item 546**) which was published a few months later. See **Item 1009** for the cryptographic background of the Zimmermann telegram. **Item 346** is a very important one. See its enclosure. For related material see Galland, p. 87

Items 347, 347.1, 347.2, 347.3, 347.4, 347.5, 347.6

Anonymous, Traveler's Codes; New York: The Equitable Trust Co., n.d.

Six tiny pocket-sized editions. The Equitable Trust Company prepared this five-letter code for the use of its clientele to provide convenience, economy and privacy in communicating by cable, telegraph or radio with relatives, friends or the Equitable Trust Office.

Item 348

No card, no item

Item 349

No card, no item

Item 350

Gallup, Elizabeth Wells

A miscellany of photographs dealing with the bilateral cipher of Francis Bacon. Correspondence with Fabyan, Friedman, etc. Letter to Yves Gylden from Riverbank Labs saying they didn't believe Bacon wrote Shakespeare. For her publications, see Galland, p. 74.

Item 351

Bossert, H. Th., "Found at Last: a bilingual key to the previously undecipherable Hittite hieroglyphic inscriptions," The Illustrated London News, Saturday May 14, 1949, pp. 664-668.

The real solution to the Hittite hieroglyphic writing had yet to be found when this item was added to the FC. For an updated discussion of the decipherment of hieroglyphic Hittite, see Joachim Latacz, Troy and Homer, Oxford, 2001, pp. 61-62.

Item 352

Trithemius, Johannis, Libri Polygraphiae Sex, Contains a final section: Libellus de Intelligentiis, Argentinae: Lazari Zetzneri, 1600, pp. 612.

One of the later editions of the great work of Trithemius. The book is in excellent condition. See Galland, pp. 181-185.

Item 353

de Castro Serrão, José Pedrosa Coutinho (Major), "Generalidades sobre Criptografia," Revista Militar 17, 8-9 (August-September, 1965), pp. 462-484.

Brief introduction in Portuguese of the history of cryptography. Mentions Julius Caesar's cipher, on which see Sheldon, EAW and David Kahn, The Codebreakers, pp. 82ff.

Item 354

Safford, L.F. Captain USN, Statement Regarding Winds Message by Captain L.F. Stafford, U.S. Navy before the Pearl Harbor Attack, S. Con. Res. 27, dated 25 January 1946.

One of the most controversial phases in the investigation of the Pearl Harbor Attack, a so-called "Winds Execute Message." Thousands of words of testimony were taken on this controversial point and in the end there was left only one person who remained convinced that

such a message had actually been transmitted. This was Captain L.E. Safford, USN. This item contains his statement regarding the “Winds” message. On the back of p. 17 of this document will be found a handwritten note by WFF made immediately after a talk with Captain Safford, 14 August 1946. This note is of very considerable interest and importance. The note is autographed to “Billy Friedman with deepest appreciation for the way in which he supported my testimony in an earlier investigation. L.F. Safford, August 14, 1946.” According to WFF’s note: Captain Safford’s reference to “an earlier investigation” is to the Clark Investigation an “inside the armed forces” report. According to ESF, WFF never supported Capt. Safford in any of the latter’s statements concerning this autographed message.

Item 355

United States Government, Prelude to Infamy, Official Report on the Final Phase of U.S.-Japanese relations - October 17 to December 7, 1941, Copyright, 1943 by the U.S. News Publishing Corp. 48 pp.

This item of very great historical interest contains a summary of conversations between the Japanese ambassador and representatives of the Department of State in 1941. This document was released by the Department of State on 19 May 1942. Its importance is that it contains the memorandum made by the Department of State officials immediately after informal talks with the various Japanese representatives involved.

Item 356

Current, Richard N., “How Stimson Meant to ‘Maneuver’ the Japanese,” The Mississippi Valley Historical Review 40,1 (June, 1953), pp. 67-74. Reprint. 1 copy, 1 photostat negative.

In Secretary Stimson’s diary, which was an exhibit of the Report to the Joint Congressional Committee to investigate the attack on Pearl Harbor, there appeared an expression which has been studied most intently by historians, especially those belonging to the “revisionist” school. Professor Current undertakes to explain what Secretary Stimson meant by his expression “to maneuver” the Japanese into firing the first shot. Current does not belong to the revisionist school. This reprint is autographed to WFF by the author.

Item 357

German Government, Aufklärungs und Kampffliegertafel Land und See Ausgabe, November 1941.

This is an example of the kind of air-ground and air-sea code used in the latter part of 1941 by the German forces. It is an original, presented to WFF by Mr. Joshua Cooper of the Air Section of the British Government Code and Cipher School (GC &CS). Probably an absolute unique item in the U.S.

Item 358

Anonymous, "Ximenes, Crossword No. 251 - "Playfair," London Observer 27 September 1953.

A competition puzzle. An interesting example in which the Playfair cipher, the official British Army cipher system, in use for many years, is here used as the basis for a weekly newspaper puzzle in a London newspaper.

Item 359

Anonymous, Specimen of Venetian Cypher in the Latter Half of the 17th Century, Day & Son Ltd., London.

This is a paragraph in a cipher dispatch dated London, 3 January 1654, together with its translation. A very interesting item of historical importance.

Item 360

Webster, F.A.M., The Black Shadow, review of, New York: Moffat, Yard & Co., 342 pp. n.d., but circa 1930.

This "thriller" set in Africa has a paragraph devoted to explaining "a code system" which is the most bizarre ever encountered by WFF. It is unfortunate the FC does not contain the book itself because of this date (1967) the theme is very timely - - "Prejudice of race and color" material of great pertinence all over the world. The code is based on slug-like animals that reproduce by splitting. The plot is based on a black revolutionary named Rastus who is going to unite the dark people and raise a revolution whereby Africa would rule the world.

Item 361

No card, no item

Item 362

No card, no item

Item 363

Fuchs, Wilhelm, "On Mathematical Analysis of Style," Biometrika 39, parts 1 & 2 May 1952, pp. 122-129.

The use of statistical data in attempting to establish authorship of disputed works. This is a "science" which was developed by mathematicians in attempting to determine authorship by more exact means than by "style."

Item 364

U.S. Army Signal Corps, Preliminary inventory of the records of the Office of the Chief Signal Officer, Record Group III. Compiled by Mabel E. Deutrich, Washington, DC: The National Archives, National Records and Archive Services, GSA, 1952, 42 pp.

This inventory covers correspondence, reports, orders, personnel records of the Army Signal Corps from 1860-1940 and pictorial records from 1860-1949. Some of these records are extremely important in any study of the Civil War, especially where it pertains to the Signal Service of the Federal Army. The first six-pages of this small document contains a record of the operations which is miniscule, but a masterpiece of conciseness. Contains a list of the Chief Signal Officers from February 1917 - May 1951. It is interesting that WFF knew personally all the ten listed, beginning with Gen. George O. Squier, appointed in 1917.

Item 365

Peterson, Theodore C., Early Islamic Bookbindings and their Coptic Relations. Reprinted from Vol. I of Ars Orientalis, 1954, pp. 41-64.

This item, autographed to WFF, by the author, has nothing to do with cryptography, but because it was written by Father Peterson and because it deals with a subject of some interest to WFF (bookbinding) it finds a place in the FC. Father Peterson's investigations into the Voynich manuscript are described below. **Items 1613, 1614, and 1615.**

Item 365.1

Peterson, Theodore C., "Johs Sinraum de Herbipoli in Two of His Manuscripts," Speculum 20, 1 (January 1945), pp. 75-78.

This item is in the FC because Father Peterson wrote it. See **Item 365**.

Item 366 [author ?]

"Friedman, Elizabeth Smith, Cryptographer." The American Magazine, (March, 1934), p. 47.

This is a very brief article about the achievements of the cryptanalytic unit of the Treasury Department. This picture - cum - staccato word flash about ESF is the usual network of a phrase or word taken from here and there in news articles and woven into a web of untruths, or half truths. ESF knew nothing of this, not even aware of the photograph until the magazine appeared.

Item 367

United States Army, Destruction of the German Armies in Western Europe - June 6th, 1944 - May 9, 1945.

This is a document of considerable historical interest and importance. It contains good maps. Originally the property of Col. George A. Bicher, Signal Corps, who served with great distinction in the European theater from 1941 through 1945. WFF acquired this item from Col. Bicher's widow in 1956. The report is not intended to represent a complete study of the campaign, but it does represent the last report prepared by the Intelligence Branch G-2 Section, 12th Army Group.

Item 368

United States Navy, Office of the Chief of Naval Operations, Problems in Cryptanalysis of the Period about 1941, Washington, DC.

Assignment #1 - Generation of Cipher Sequences. Elementary Cryptanalysis.

Item 369

Friedman, William F., Military Cryptanalysis, Parts I, II, and IV.

The above was prepared under the direction of the Chief Signal Officer in 1936. Now available on NSA website: http://www.nsa.gov/public/military_cryptanalysis.cfm

Item 370

No card, no item

Item 371

Solff, K. (Major), "The Radio Intercept War," Militär-Wochenblatt 40 (April 25, 1929), pp. 1622-1624.

Translation: typescript of six pages. An article about World War I radio intelligence published in a German military magazine. Translation was made by the U.S. Military Intelligence Division in January of 1936. The first copy of the translation was probably made by a white Russian colonel who, after escaping from the Bolsheviks, took refuge in the U.S. The corrections were made by WFF. The article terminates with a statement which in general is as true today as when written: "The radio-intercept war, which is essentially based solely on the technical defects of the instruments used on human error, could not have acquired the importance that it evidently did attain in the operations on land, at sea and in the air."

Item 372

Johnson, Thomas M., "Spy and Counter-Spy," The Coast Artillery Journal, (January-February 1936), pp. 28-32.

Johnson ruminates further on espionage and secret agents communications. A curious quotation appeared at the end of this article - a "filler." "Nations should never be surprised by their own unpreparedness. It is pardonable to be defeated, but never to be taken by surprise." Frederick the Great. The A.E.F., like every army in American history, had spies and counterspies, "occasionally women" who did their indispensable work with much drudgery and some adventure but no publicity. MID (Military Intelligence Division) "although spying is not supposed to fit the American temperament . . ." Sir Basil Thompson and von Hindenberg agreed they picked it up readily.

Item 373

Flahaut, B.E.M.V. (Capitaine-Commandant), "Secret Language," Belgium Bulletin, (June 1935), 12 pp.

A popular treatise on the solution of certain rather simple cryptographic systems used by the military. A short description of the different ways of "camouflaging" messages exchanged on the battlefield. Transposition ciphers, substitution ciphers, Augustus's system, Francis Bacon. He cites Langie, Givièrge and Lange et Soudart.

Item 374

Randewig, Lt., "The German Radio Reconnaissance in the Battle of Tannenberg," Translated from Wissen und Wehr, Drittes Heft, 1932, pp. 128-141.

Carbon copy of a typescript of 21 pp. More about the German intercept service in World War I. Describes the work of the Reichsarchiv and radio reconnaissance.

Item 375

Cartier, François (General), "The Intercept Service During the War," Radio Électricité, Tome IV, No. 16 November 1, 1923, pp. 453-498.

Photostat negative of original and a typescript in English translation of 24 pages. Translation made by E.H. Military Intelligence Division, 1923. General Francois Cartier was the former Chief of the Central Wireless Bureau of the French Army and of the Bureau of Ciphers. Discusses the use of wireless on the Russian and Serbian fronts, German military radiograms, and German dirigibles.

Item 376

Muñoz, Jose Luis (Commandante de Aviación (Servicio de Vuelo), La criptografía En Anecdotas; Madrid, 1955, Ediciones Ejercito, 372 pp.

A recent, very clear and comprehensible discourse on cryptography, with numerous historical episodes given in illustration. The history of cryptography. Ancient Central and South America - the Maya, Inca and Aztecs. Cuneiform Hittite, the Rosetta Stone, the Spartan *scytale* with illustration on page 47, Aeneas Tacticus, Julius Caesar, Aulus Gellius, the ancient Near East and the Bible, Christian symbols and masons. See Sheldon, EAW, and David Kahn, The Codebreakers, pp. 82ff.

Item 377

Peterson, John, How to Write Codes and Send Secret Messages, New York, London, Richmond Hill, Ontario: Scholastic Book Services, 1966, 64 pp. Pictures by Bernice Myers.

An attractive, brief book for children. Includes recipes for invisible inks. Page 26 has the Spartan *skytale*, on which see Sheldon, EAW pp. 72 ff.

Item 378

Kohn, Bernice, Secret Codes and Ciphers; NJ: Prentice Hall, Inc. 1968, 63 pp. Illustrated by Frank Aloise.

An imaginative and selective capsule of information for the intelligent adolescent. Written by a master of the art of simplifying science for the young. Julius Caesar cipher, Augustus's cipher, Herodotus: tattooing slave's head, Cardano, Vignère tableau, Della Porta, Kasiski, Black Chamber, mentions WFF and ESF and Purple. On the ancient material, see Sheldon, EAW, also David Kahn, The Codebreakers, pp. 82ff. 207ff.

Item 379

Hunt, Arthur S., "A Greek Cryptogram," Reprint from: Proceedings of the British Academy, Vol. 15, London: 1929, pp. 1-10.

A fellow of the British Academy makes public a Greek cryptogram deciphered from fragments of a papyrus manuscript. The decipherment gives formulas used by "beauticians" of those days. The author refers to the fact that "cryptography in Egypt is no novelty." Maspero cites instances from hieroglyphic, hieratic and demotic sources. Cf. Drioton, **Items 865, 866, 867**. Two copies - one original, one photostat positive. What appeared to be ancient hieroglyphic writing turned out to be a monalphabetic substitution cipher. Cf. Sheldon, EAW, Galland, p. 94.

Item 380

American Cryptogram Association, The Cryptogram. The Aristocrat of Puzzles, No. 1, February 1932 through 36, No. 1, January-February 1970. Biloxi, Miss, Rochester, NY, Burton, Ohio, Canton, Ohio, Woodbury, NJ, Greenfield, MA, Collingswood, NJ, and Bethesda, MD. 148 copies and nine duplicates.

The official periodical of the American Cryptogram Association, an organization of amateur cryptographers devoted to the subject as a hobby. The FC contains 140 (and 9 duplicate) issues (1932-1970) and includes a copy of the first issue which bears the inscription "To Piccola from her friend Cherry Blossom," Piccolo was the pseudonym used by Mrs. Helen F. Gaines, author of Elementary Cryptanalysis. Cherry Blossom is the pseudonym of Dr. C.B. Warner, founder and first president of the association. This particular copy may be unique and valuable.

Item 381

Viaris, Gaëtan Henri Léon (Marquis de), ABC Répertoire cryptographique chiffrent et déchiffrent, Paris: Imprimerie Nationale, 1898.

The following is the opening paragraph of a book by Dr. Charles J. Mendelsohn entitled Analysis of M. Viaris' "Dictionnaire ABC," 1930. M. de Viaris, author of several contributions to the science of cryptography, published in 1897 a French code called ABC, provided with an apparatus for enciphering the code groups. The construction is such as to make the volume a cross between a code of the usual kind and a machine for disguising the messages encoded with it. The machinery can be reduced to simple terms, and the process of encipherment can be applied without the mechanical aid provided. The method is a variety of the additive device modified by a change of key after each occurrence of certain specified code groups. The author says that if the keys are sage-guarded and changed as directed "le secret sera de premier ordre." Probably a unique item in the U.S. and of considerable importance in the FC. (Original price marked 95 cents!). See **Item 381.1**, an analysis of this item by Dr. Charles Mendelsohn. See also Galland, pp. 192-193.

Item 381.1

Mendelsohn, Charles Jastrow, An Analysis of M. de Viaris "Dictionnaire ABC," Typescript, carbon copy.

Dr. Charles J. Mendelsohn, who worked on German codes in the G-2 "Black Chamber" in Washington during World War I, was for a time afterwards in the Black Chamber when it moved to New York City and was headed by H.O. Yardley. After he returned to teaching in New York City, being a bachelor with independent income, he started his collection of works on cryptography. This collection, now in the University of Pennsylvania Library, is probably the most extensive in the world on cryptographic items published before 1880. It was planned that an authoritative and scholarly history on cryptography should be written with Prof. Mendelsohn doing Vol. I, which would cover material from ancient times to 1880. WFF was to write Vol. II, which would cover material following 1880 up to as far as would be approved by the U.S. Cryptologic authorities. The preparation of a manuscript under this joint plan was not even commenced because of Professor Mendelsohn's sudden death in 1941. As Professor

Mendelsohn's literary executor, WFF received all of the notes which had been prepared by Professor Mendelsohn up to that time. A microfilm copy of this analysis of de Viaris' cryptographic system is in the Mendelsohn Collection at the University of Pennsylvania.

Item 382

Milliken, Donald D., Cipher Writing, "Reprinted by special permission from the Encyclopedia Americana, 1937" 4 pp.

Milliken for some years conducted a course on cryptology for evening classes at NYU. He was asked to write this article for the Encyclopedia Americana of which this item is a reprint. Milliken, a student of WFF and ESF in World War I, retained a life-long interest in the subject, although not a professional, an important error appears in the third paragraph. There is frequent use of ciphers in the words of Shakespeare. They point to Sir Francis Bacon as author; are worthy of serious consideration. Cf. WFF the Shakespeare Ciphers Reconsidered, **Item 1691**. 2 copies. Autographed to Major WFF from the author, February 7, 1937. Mentions the *scytale*, *atbash*, the Julius Caesar cipher, Augustus' cipher, (on which see Sheldon, EAW). Also discusses the Bazeries cipher wheel, and the Civil War codes on which see David Kahn, The Codebreakers, pp. 82ff, 192ff.

Item 383.1

Santos, Jose P., The Katipunan Alphabets. Carbon copy of a typescript of three pages, provenance unknown.

These alphabets apply to certain Philippine dialects. See **Item 383.2** under Kataus, The Katipunan Constitution. The Tagalog tribe in the Philippines used a cipher in the Aguinaldo insurrection. Cf. **Item 73**.

Item 383.2

The Katipunan Constitution, Foreword by Teodoro M. Kalaw, 2 pages.

Carbon copy of a typescript of two pages, provenance unknown. The constitution of the Katipunan tribe in the Philippines Aguinaldo insurrection is found to have been written in a secret cipher in the Tagalog language. In the same cover as **Item 383.1** which, with this item, are of considerable importance in light of today (1967). Cf. **Item 383.1**.

Item 384

T-lahaut, B.E.M.V. (Capitaine-commandant), Méthodes de Chiffrement," Bulletin Belge de Sciences Militaires, March, 1936, pp. 273-288.

Photostat negative of an article that deals with transpositional processes including rotating grilles, simple substitution, Vignère systems, and one and two-part codes and certain cipher machines.

Item 385

No card, no item

Item 386

No card, no item

Item 387

Central Code Bureau, Central 7-Figure Code Condenser; New York: The Central Code Bureau, 1933.

Another example of a code condenser for economical cable transmissions. Copy sent with compliments of Mr. T.C. Wilwerth, the Head of the Central Code Bureau.

Item 388

No card, no item

Item 389

Hill, H.W., The Quickway Key for Crosswords; London and New York: Frederick Warne & Co. Ltd, 1935, 256 pp.

New revised edition. A “crib” for the extremely popular pastime of crossword puzzles. The first edition was published in 1925.

Item 390

Koch, Edward, Cryptography, or Cipher Writing. A Study of Cryptography. An Analysis of Different Cryptography. Some cryptographic mysteries explained. Belleville, IL: Buechler Publishing Co., 1936, 84 pp. 2 copies.

A small volume on elementary cryptography. The author’s citation on Benjamin Franklin’s “unsolved cipher” is incorrect since that case was solved many years ago. Galland calls it: “An elementary work.” WFF was very skeptical of the story (pp. 49-51) told about the German cipher messages and the sinking of the Lusitania. There is no mention whatsoever of these “facts” as told by Koch in the 3-volume Walker Hines Page biography (**Item 546**). WFF believes that Koch was a gullible victim of John R. Rathon, editor of the Providence, Rhode Island Journal. From the Preface: “Ancient history chronicles cryptography, and from the beginning of recorded time

it played an important part. The art of cipher writing is as old as letters.” “Cryptography always becomes more prominent when war clouds darken the horizon.” “Official correspondence between governments and their diplomatic and consular representatives were always important and transmitted in some secret cipher.” He mentions the Greeks, the *skytale*, Herodotus, the Romans, Caesar’s cipher, Suetonius, the Middle Ages. See Sheldon, EAW, David Kahn, The Codebreakers, pp. 82ff.

Item 391

Hitt, Parker (Col. U.S. Army, retired), The ABC of Secret Writing, New York: Puch Products Co., 1935, 33 pp. With dust jacket.

Col. Hitt produced a small, elementary book for young people. He is the author of The Manual for the Solution of Military Ciphers. On Hitt’s role in WWI see David Kahn, The Codebreakers, ch. 11.

Item 392

Steffens and Mertens, La Scytal

Brochure issued at Brussels, Belgium by the firm, n.d. (circa 1935). Two mimeograph sheets and two photographs. Probably a unique item dealing with a cipher machine which was never produced but which was presented in glowing details. Apparently it was a complete failure. See Sheldon, EAW pp. 72 ff.

Item 393

Friedman, William F., “Edgar Allen Poe, Cryptographer,” American Literature 8,3 (November, 1936), pp. 266-280.

An article which describes the American interest in cryptography as being derived from Poe’s writings. Two copies of the journal. Cf. **Items 117, 148.1, 214 and 217**.

Items 393.1

Friedman, William F., “Edgar Allen Poe, Cryptographer,” Reprint of **Item 393**. 18 offprints of **Item 393**.

Item 393.2

Friedman, William F., “Edgar Allen Poe, Cryptographer,” The Army Security Agency Review, May-June 1950, pp. 12-17.

Reprint of **Item 393.1** with additional and important editorial notes. Note footnote #10. “It is interesting to note that Poe employed in his earliest statement of his famous dictum...: I am

indebted to Professor Wimsatt for quoting it as it appeared in one of Alexander's articles Weekly Messenger. We assert roundly and in general terms, that human ingenuity cannot concoct a proper cipher which we cannot resolve." In a letter to Thomas, after Poe had solved the Frailey cipher, he said: "Nothing intelligible can be written which, with time, I cannot decipher." The footnote contains much pertinent commentary.

Item 393.3

Wimsatt, W.K. Jr., "What Poe Knew About Cryptography," Publications of the Modern Language Assn. of America; New York 58, 3; (September, 1943), pp. 754-779.

Reprint of preceding item? Poe really did decipher lots of cryptograms. Aaron Burr's correspondence cipher, pp. 767, note 65. Poe laughed at Burr's "shallow artifice." Reference to the *scytale* on p. 768. Refers to de la Guilletiere "Lacedaemon Ancient and Modern" maintains that the Spartans invented cryptography. See Graham's 19, 33 July 1841. Cf. Sheldon, EAW.

Item 393.4

Brigham, Clarence S., "Edgar Allan Poe's Contributions to Alexander's Weekly Messenger," Proceedings of the American Antiquaries Society, April 1942, Worcester, MA, 1943, 83 pp.

This reprint concerns Edgar Allan Poe's contributions, in article and correspondence form, on miscellaneous science, humor, puzzles and cryptography. The reprint also contains within its covers come correspondence between WFF and the Director of the American Antiquarian Society, and some worksheets on the cryptographic items. Inasmuch as there is only one complete file of Alexander's Weekly Messenger in the United States, the author deemed it a public service to reprint the contributions of Poe to that magazine in the above-named fields.

Item 393.5

Anonymous, "Edgar Allan Poe on Cryptography," The Bookman; New York: Dodd & Mead & Co., Vol. 17, (March 1903 - August 1903), pp. 4, 5, 7.

Photostat positive of article. This is believed to be the first appraisal of Edgar Allan Poe as a cryptographer. It is insignificant in comparison with the appraisal that was made many years later by WFF and still later by Professor Wimsatt. See **Items 393 and 393.3**.

Item 393.6

Dredd, Firmin, "Poe and Secret Writing," The Bookman 28, (September 1908 - February 1909), pp. 450-451.

The author believed that Poe was a great cryptographer. The Bookman had published an article on this subject five years before in 1903. See **Item 393.5**.

Item 393.7

Wimsatt, W.K. Jr., "Poe and the Mystery of Mary Rogers," PMLA Quarterly 56, 1 (March 1941), pp. 230-248.

Another article by the author of the preceding item but having no bearing upon cryptography.

Item 393.8

Poe, Edgar Allan, Alexander's Weekly Messenger, articles in.

Photostat copy. "To most Americans the mention of the word cipher brings to mind the name of Edgar Allan Poe." Poe not only used some ciphers in his prose tales but he conducted a cryptographic contest in Alexander's Weekly Messenger. He mentions the *skytale* and hieroglyphs. Photostat positive and negative of The Cryptogram, "Mr. Poe as Cryptographer." Folder contains correspondence from the Boston Public Library, Griswold Mss; Harrison, Life and Letters, Vol. 2, 1902.

Item 394

No card, no item

Item 395

Sacco, Luigi (Tenente Colonnello), Nozioni di Crittografia; Rome: Ministero della Guerra, Stato Maggiore del R. esercito - Ufficio situazione. Ministry of War, General Staff of the Royal Army, 1925, 197 pp. with 12 tables at the end. Subtitled: Lezioni Tenute al le corso informatori.

An extremely important item. The original work from which General Sacco deemed by extension his other treatises on cryptography. General Sacco was for many years intimately connected with the Italian Army's cryptologic activities. Upon his retirement from active service he became an important member of the Italian government's telecommunications commission. At this writing (1966) WFF believes him still to be alive. This copy of the first of his words is autographed in Italian to WFF by the author, then a general. A very important letter within volume from Gen. Sacco states this: Copy sent to WFF was his last copy. The letter, in English, is dated July 9, 1937. 2 loose pages of *errata* were included.

Item 395.1

Sacco, Luigi, Manuale di Crittografia; Rome: Privately printed, 1936, 247 pp. with 12 tables.

This is marked *2^e edizione riveduta e aumentata*. This is the first extension of the original work and despite the difference in the title from the preceding item (**Item 395**), is marked

“Second edition revised and augmented.” Attached is a printed announcement concerning edition of 1925 and the edition of that reprinted in 1930; a second page of errata, short bibliography on pp. VIII. Beautiful frequency tables of six long pages. Two appendices. 1) some cryptographic equations and 2) algebraic cryptography. This is one of the very first books to contain mathematical features and equations. Excellent frequency tables for various languages.

Item 395.2

Sacco, Luigi, Manuale di Crittografia; Roma: Istituto Polygrafia dello Stato, 1947, 374 pp. with 28 tables and charts. 3^e edizione aggiornata et augmentata.

Third edition of preceding work (**Item 395**). 3 copies. Copy one autographed to WFF in English, 25 July 1947, by General Sacco. “To Col. WFF, a master in cipher art.” Wonderfully complete bibliography carefully arranged by date, pp. 311-332. Copy two was first presented to Col. Matthew G. Jones with autograph by Gen. Sacco. Col. Jones then rededicated this copy to WFF. Copy three autographed to WFF by General Sacco.

Item 395.3

Sacco, Luigi, Manual of Cryptography; Washington, DC: GPO, 1941, 193 pp.

Translation of the 2nd edition made under WFF’s direction by a series of efforts. See note on the reverse of title page. War Department, Office of the Chief Signal Officer. Restricted. Register No. 21. The original translation of General Sacco’s manuscript was made by the Translation Section of the Military Intelligence Division, War Department, and General Staff. A second translation was made by Miss Helen Gaines and formed the basis of the present translation by Mr. Howell C. Brown. In black binder returned from NSA.

Item 395.4

Sacco, Luigi (General), Manual de Cryptographie; Paris: Payot, 1951, 376 pp.

French translation of the Sacco third edition. Translation of chapter 24 forms **Item 395.6**. Preface by LTC R. Léger. Purchased for WFF by G. Chiles.

Item 395.5

Sacco, Luigi, Correspondence, re his book and letters exchanged requesting copies of each other’s publications.

Item 395.6

Sacco, Luigi, Translation of Chapter 24 of 3rd edition, “Diplomatic and Military Ciphers.” Typescript of 14 pages.

Up to the present writing, this is the best-known concise, historical a statement of the origins and development of cryptology. Made from the French edition of the Sacco volume. Several loose pages included in WFF's handwriting.

Item 395.7

Sacco, Luigi, Manual of Cryptography, Department of the Army, Army Security Agency; Washington, D.C. 3rd enlarged edition, 1947.

Translated into English from the original Italian, 1948, 484 pp. Bibliography of four unnumbered pages. Typescript (carbon copy). This translation was never printed because it was deemed quite unsatisfactory by WFF.

Item 395.8

Sacco. Luigi, "Un primato Italiano, La crytittografia nei secoli XV^e – XVI," Bolletino dell' Istituto Storico di Culture dell'Arma del Genio, No. 26, 1947, 38 pp.

An article of importance in the history of Italian cryptography. Printed from a lecture delivered by General Sacco to the Italian Armed Forces. Note enclosed dated 22 April 1955 states that this item, unobtainable in the U.S., was procured in Europe. In the note it is stated that Gen. Mario Tirelli of the Istituto would welcome comments and suggestions. Appendix on Alberti. Appendix on Simonetta. Cf. David Kahn, The Codebreakers, pp.125-156. For recent work on Alberti see Niccolò Galimberti, "Il De Comonendis cyfris di Leon Battista Alberti tra crittologia e tipografia," in *Sbiaco, la culla della stam,pa. Atti dei Convegna, Abbazia si Santa Scolastica 2006-2007*, pp. 167-239. Alberti's A Treastise on Ciphers has been translated into English by Galimberti Tipografi Editori, 1997.

Item 395.9

Sacco, Luigi, A xeroxed copy of a large bibliography, extracted from Manual de Crittografia; Roma: Istituto Polygrafico dello Stato, G.C. 3rd edizione aggiornata ed aumentata, 1947, pp. 311-331.

Item 396

Cartier, François (Général), "Le mystère Bacon-Shakespeare un document nouveau," Mercure de France, Paris: 1 Sept. 1922, No. 581, pp. 289-329, 15 Sept. 1922, No. 582, pp. 604-651, and 1 Feb. 1923, No. 591, pp. 603-635.

Photostat negative of the first three installments of an article of five installments, devoted to expounding the thesis of Baconian authorship of Shakespeare. These were later incorporated into a book. **Item 397**. 3 files. See items by WFF on the Bacon/Shakespeare controversy. Includes an

article “Souvenirs du Général Cartier” from La Revue des Transmissions 85, (July-August 1959), pp. 23-39. Contains a bibliography of his publications.

Item 397

Cartier, François (Général), Un problème de Cryptographie et d’histoire; Paris: Editions du Mercure de France, 1938, 330 pp. 2 copies.

The endorsement by the great French cryptographer of Mrs. Gallup’s decipherments by the bilateral cipher of Bacon was accepted by the Baconians as irrefutable proof of Baconian authorship of the Shakespeare works. The volume contains a preface in which may be noted Cartier’s statement that he never met Mrs. Gallup or Col. Fabyan and never visited Riverbank. Examination of the Cartier book will reveal that the author’s endorsement of Mrs. Gallup was not based on firm ground and exhaustive tests required by the tenets of objective cryptanalytic science. See TSCE by WFF and ESF, **Item 1691**.

Item 397.1

Cartier, François (Général), “Un problème de Cryptographie et d’histoire,” Mercure de France; Paris: 1921, 1 Dec 1921, No. 563, pp. 385-400 and 15 Feb 1922, No. 568, pp. 116-124.

Photostat negative of an article in two installments. Another two-part article in which General Cartier is concerned with the Shakespearean authorship question. 1966 note: second installment is missing.

Item 397.2

No card, Arnaud, LTC. Note sur le Général Cartier.

This is a brief biographical note or sketch of General François Cartier which was prepared at WFF’s request in May 1954 by LTC Arnaud, Chief of the Cipher Section of the Secretariat of the French Armed Forces. An English translation made by Dr. R.W. Pettengill accompanies this item. There is also a carbon copy of certain extracts from General Cartier’s book, Un Problème de Cryptographie et d’histoire. The correspondence with Col. Harrod G. Miller who was the intermediary in providing the note on Gen. Cartier will be found in the correspondence file. Arnaud, “bibliographie.”

Item 397.3

Cartier, François (Général), Translation of Chapter XIII, p. 81 of Un problème de Cryptographie et d’histoire.

Contains also a photostat copy of a letter from Cartier to Gylden. Also WFF's copy of sections from Gylden's letter assessing Cartier's work.

Item 398

No card, no item

Item 399

No card, no item

Item 400

No card, no item

Item 401

Figl, Andreas (Oberst und Regierungsrat), Systeme des chiffrierens, Graz: U. Mosers Buchhandlung (J. Meyerhof) 1926, 243 pp. and 46 leaves in the Appendix.

This book deals only with the cryptographic systems in a very pedantic matter. The author had written the Ms. for a second volume devoted to cryptanalytic processes. The Austrian government did not give its permission to publish this second volume, however, many years thereafter, indeed after WWII was over, Col. Figl endeavored to sell the Ms. of this volume to the U.S. but without success. Col. Figl translated WFF's Index of Coincidence into German (perhaps for the use of the Austrian deciphering bureau) and a copy came in WFF's possession after WWII. See **Item 167.31**. And all other references to Figl.

Item 402

No card, no item

Item 403

No card, no item

Item 404

Hagelin, Boris C.W., Description of the Cryptographer Hagelin Type B-211.

Photostat negative of a typescript of 17 pages describing the B-211.

Item 404.1

Hagelin, Boris C.W., The Hagelin Cryptographer Type B-211.

Instructions for the localization and adjustment of faults. Photostat positive of a typescript of five pages and one drawing.

Item 404.2

Hagelin, Boris C.W., Cryptographes Hagelin

A printed brochure of 7 pages featuring both the B-211 and the C-36. In both French and English.

Item 405

Hagelin, Boris C.W., Cryptographer C-36; memorandum re possible modifications in the execution of the ciphering members, Stockholm: Typescript of two pages n.d. Photostat positive.

Item 405.1

Hagelin, Boris C.W., The Hagelin Cryptographer Type C-38A.

A brochure (multilith) of nine pages and two plates. Two typescripts - Description of the Hagelin C-38A.

Item 405.2

Hagelin, Boris C.W., Description of the Hagelin Cryptographer, Type C-38A.

Multilith brochure of 18 pages and eight pages of drawings.

Item 405.3

Hagelin, Boris C.W., Hagelin Cryptos.

A spare-parts manual for the C-38.

Item 405.4

Bustring, Bertil R., "Ciphers and Ciphering Machines," The Bulletin of the American Society of Swedish Engineers, N.Y., 36, 2 (October, 1941), pp. 6-7.

An article dealing largely with Hagelin machines. One original; one photostat negative. Also in the folder, Adam Morch Lunoe, "Secret Coding Machine Revealed," Swedish Engineer Brought Design to the U.S." The American Swedish Monthly, (August, 1946), pp. 6-7, 26-27. Hagelin spent four years in the U.S. (during WWII). The Hagelin cryptogram was produced in mass volume in the U.S., at the plant of a well-known typewriter concern which was chosen for the work - the Corona portable typewriter plant in Connecticut. They stopped making typewriters and started making Hagelin machines. These were shipped to all theaters of war where American soldiers lives depended on the quick decoding of enemy messages. Corona turned out 300-500 of

these portable machines every working day during the war on a forced production schedule. The U.S. supplied its allies with the machines for the sake of speedy communications. Some found their way into enemy hands. They were also sent to the Norwegian underground. Next clipping: Hammond Times, March, 1944. "Boris W. Hagelin Creates Cipherring Machines to Confound the Enemy." Hagelin was born in S.E. Russia where his father was manager of Nobel Brothers Oil Production Company in Baku. He was schooled as an engineer in Sweden. He settled in the U.S. in 1940. Typescript of article.

Item 406

Anonymous, "French Matters," (Spies) Trial of Joseph Caillaux. Trial of Bolo Pasha. Excerpts from the New York Times Current History, The European War, Vol. 14, January-March 1918. Also a photostat (negative) copy of a letter from Ambassador Sharp to Department of State, 22 March 1919 bearing on these cases.

These two Frenchmen were tried and convicted of espionage. Some of the evidence employed was based upon cryptographic messages. See particularly Ambassador Sharp's letter. Joseph Caillaux was a former premier of France and still a leader of one of the largest and most influential French political parties. He was arrested on January 14th. He was the guiding hand of a movement called Boloism or Defeatism which wished to make peace with Germany on the basis of the common interests of certain financial groups in the two countries. The day following his arrest, the State Department published dispatches which had been sent in code from Count Luxburg, the German Minister at Buenas Aires to the German Foreign Office. The dispatches showed Caillaux welcomed "indirect courtesies" from Count Luxburg. With Caillaux in prison, the trial of Bolo Pacha proceeded and was concluded on February 14, 1918, when he was found guilty of having received large sums of money from German sources and having attempted to corrupt French newspapers for the purpose of creating internal unrest and disaffection. Bolo was sentenced to death as was Filippo Cavallino, one of his associates who was under arrest in Italy. Porchere, another of Bolo's associates, was sentenced to three years imprisonment. Still another prominent personality in French public life, Senator Charles Humbert, proprietor of the Paris newspaper Le Journal, was arrested on February 18, 1918, and charged with treason as a result of his alleged dealings with Bolo Pacha. Le Journal was the principal newspaper over which Bolo was accused of trying to gain control. The folder also contains a photostat negative of letters to the Secretary of State, Paris March 27, 1918, from W.C. Sharp with excerpts from Le Matin and translations which cover the case. The "Good French Woman" cryptogram from La Lanterna, March 11, 1919. Early in 1916, Charles Humbert received a letter signed, "A Good French Woman," informing him that one of her relations was communicating with the enemy. She wanted the business stopped. She sent to M. Humbert a document addressed to the traitor, written in mysterious characters which she had been unable to decipher. A photograph of this document in cipher was found in the offices of the Sureté. The Deuxième Bureau never found the original.

Item 407

Wheatley, Frederick William, "German Code Key," Reveille, Sydney Australia, (June 1, 1934).

A completely subjective and imaginative account of German World War I cryptography. The author was appointed Senior Naval Instructor at the Royal Australian Naval College, Geelong - later transferred to Jervis Bay. Letter from John K. Caldwell, American Consul General, Sydney Australia, October 6, 1934 sending article of Secretary of State. Wheatley claims he found the key to the German Naval code and was thereby able to inform the British Admiralty of the movements of the German Pacific Fleet. If true, this claim would "lead to the revision of all existing versions of the Battle of the Falklands." Real story: a British agent in Berlin secured the forms which the Germans used in sending codes to ships.

Item 408

Cartier, François (General), "Le secret en radiotélégraphie," Radio-electricité, Paris: 6, 97 (10 December 1925), 98 (25 Dec, 1925), 99 (10 Jan 1926), and 7, 103 (10 March, 1926).

Photostat positive copies of an important series of articles dealing with the principle of electrical cipher machines with special emphasis on the Damm machine, the predecessor of the Hagelin machine, and a brief treatment of other machines, none of which had any value. 11-part article by the WWI head of the French Black Chamber.

Item 408.1

Cartier, François (General), "Secrecy in Radiotelegraphy," English translation of **Item 408**. Typescript. Item missing.

Item 409

No card, no item

Item 410

No card, no item

Item 411

No card, no item

Item 412

Viaris, Gaëtan Henri Léon (Marquis de), Cryptographie, Étude publiée dans le journal Genie Civil Paris: Vol. 13, No. 2 (1888), pp. 25; No. 3, pp. 38; No. 4, pp. 55; No. 5, pp. 72; No. 6, pp. 84; No. 7, pp. 104; No. 8, pp. 278.

Photostat positive copies of a series of articles the contents of which are briefly described by Galland who states that “the study also contains a method of deciphering the Bazeries System.” This statement is erroneous. Galland also failed to note that one of the series is devoted to a cipher device invented by Viaris and carefully described by him. Apparently the device was not worthy of recognition. It is rarely mentioned in cryptographic literature. Cf. David Kahn, The Codebreakers, pp. 244ff on Bazeries.

Item 412.1

English translation of **Item 412**. The translation into English never reached a finished form however. Comment on the Viaris description of machines by H. Léauté will be found in **Item 443**.

Item 413

Bendikson, L., “The Restoration of Obliterated Passages and of Secret Writing in Diplomatic Missives,” The -American Review 1, 3 (Winter 1937), 19 pp.

Secret Writing by means of so-called sympathetic ink forms an important field of cryptology. Reprints of the article sent to WFF by the author. This is an important item among many extremely interesting details of paper, chemicals, and other “instruments” of use in the invisible secret messages, he tells of the recovery of ink chemicals from messages 150 years old. Off print. Examples used are letters to and from John Jay and from Benjamin Franklin. 2 empty envelopes. Sent to WFF by Dr. Paul Scheips. Originally taken from Collection by NSA, later returned by a mysterious lady employed on the “Hill”ant to an investigative committee in the House).

Item 414

Anonymous, “World War I Remembered,” The Washington Post, August 2, 1964.
Complete magazine. “Scoops and Spies Sparked Embassies” pp. 8-9.

Item 415

Wilkes, George, Cryptography, Cosmopolitan Magazine, New York: 36 (Feb-March, April, 1904), pp. 375-478, 584-590, and 716-718, Part I - “The Cipher”, Part II “The Use of Photography.”

One of the better of the old types of articles dealing with the subject as published in a well-known, and at that time important, American magazine. This series is probably of historical value. Original magazine.

Item 415.1

Wilkes, George, Cryptography, Cosmopolitan Magazine, New York: 36 (Feb-March, April, 1904), pp. 375-478, 584-590, 716-718. Photostat copy.

In light of historical events after 1904, this issue is also worth reading for the article entitled: "If Europe Should Go to War." Mentions Pliny, the *scytale*, Herodotus slave's tattoo, Julius Caesar's CIPHER, Jewish rabbis. Cf. Sheldon, EAW and David Kahn, The Codebreakers, pp. 82ff.

Item 416

Mamy, Henri, "La cryptographie," Le Génie Civil, Paris: 9, No. 13, pp. 203-206; Vol. 14, pp. 217-219, and Vol. 15, pp. 235-238. Photostat positive.

Methods of transposition. Mentions Julius Caesar's cipher. Vigenère, Gronsfeld.

Item 417

Budge, E. Wallis, The Rosetta Stone, London: Department of Egyptian and Assyrian Antiquities, British Museum, Harrison and Sons, Ltd. 1927, 8 pp. 3 copies.

The most famous decipherment in the world of ancient languages is here set forth succinctly by a celebrated Egyptologist. First published in July 1913. Cf. David Kahn, The Codebreakers, pp. 905ff. who includes the contributions of Thomas Young to the decipherment of hieroglyphics.

Item 417.1, 417.2, 417.3

Budge, E. Wallis, The Rosetta Stone, London: The Trustees of the British Museum, 1951, 8 pp. Reprint of the 1950 revision.

These three copies are dated 1951 (1) and 1957 (2). The 1913 edition was reprinted four times, revised in 1950, reprinted October 1951, 1955, 1957 and probably many times since. The standard text concerning this "great find" in July 1799 and its great value in solving Egyptian hieroglyphics. Update.

Item 418

Anonymous, "De omnibus rebus et quibusdam Aliis," Review of: Cipher of Roger Bacon by William R. Newbold in The Quarterly Review of Biology, December 1928, 595 pp.

This review of the book by Professor Newbold, edited by Professor Kent, sums up in a very brief and neat way the absurdity of Newbold's "solution" to the Voynich manuscript. The outspoken reviewer is anonymous. Later "decipherers" of the so-called Roger Bacon cipher (as the Voynich manuscript was termed for many years) was Feely. See **Item 1080** and Leonell Strong (See **Items 660 - 660.3**) both of whose "decipherments" are as subjective as Newbold's.

“We are ready to place a small wager that the cipher has its origins in the mind of Professor Newbold and not in that of Roger Bacon.”

Item 419

Tunney, Thomas J., Throttled: The Detection of the German and Anarchist Bomb Plotters in the United States, Boston: Small, Maynard & Co, 1919, 277 pp.

Data concerning Dr. Albert and other German secret agents in World War I. Also, data on the Hindu conspiracy. In the latter connection, there is facing page 80 a portion of the cipher text of a very long letter-type message from one of the Hindus who were tried in the U.S. in 1917 for conspiracy against Great Britain. The author gives the plain text of the whole letter and gives the name of the book used as the key, but gives no credit to WFF and EFF for the solution of the cipher system. Tunney was Inspector of the New York Police Department. The book is “told to” Paul Merrick Hollister, author of “The German Secret Service in America.” Inspector Tunney’s squad was formed early in August 1914 to specialize in organized crimes of violence. It did some radically effective work against Black Handers but as time wore on and the war developed, the squad’s energies became directed solely against the nefarious activities of Germans among us. Cf. David Kahn, The Codebreakers, pp. 371-374.

Item 420

Gioppi, Luigi (Conte di Türkheim), La crittografia, diplomatica, militare et commerciale, ossia l’arte di cifrare e decifrare le corrispondenza segreta, Milano: Ulrico Hoepli, 1897, 175 pp.

The best of the modern (i.e. 19th century) Italian books on cryptography until General Sacco began publishing his books on the subject. Purchased for WFF by Major Fiske, U.S. Military attaché in Rome. See Galland. Mentions Egypt, Suetonius, Aulus Gellius, Plutarch, Dio Cassius, Julius Africanus and Aeneas Tacticus. Cf. Sheldon, EAW.

Item 421

Baker, Newton D., Why We Went to War, New York: Harper & Row for Council of Foreign Relations, Inc., 1936, 199 pp.

Has some bearing upon the Zimmermann Telegram although that telegram or even the name Zimmermann is not mentioned in the book. Other German messages bearing directly upon the severance of relations with the German government in 1917 are discussed briefly. Appendix contains the addresses made by President Wilson in connection with the Declaration of War against Germany in April 1917.

Item 422

No card, no item

Item 423

Marchetti, Odoardo (Generale), Il servizio informazioni dell'esercito Italiano nella grande Guerra, Roma: Tipografia regionale 1937 - XV, 262 pp.

World War I intercept and signal intelligence service in the Italian army. A detailed, well-prepared report by the Italian general, with good photographs. Sent to WFF by Luigi Sacco. Needs to be put in acid -free box - *extremely fragile*.

Item 424

Hoy, Hugh Cleland, 40 O.B. or How the War Was Won, London: Hutchinson & Co., Ltd., 1935, 256 pp.

Forward by Sir Basil Thompson, with DJ. Vital secrets of British intelligence in World War I are discussed by one who claims to have been on the inside. It contains an account of the Zimmermann telegram with the usual perpetrated errors concerning the same.

Item 425

Rintelen, Franz von Kleinst (Captain), The Dark Invader, Wartime reminiscences of a German Naval Intelligence Officer; New York: The Macmillan Co., 1933, 288 pp.

Many cryptographic references, pp. 34, 59, 80, 82, 83, 98, 133, 178, 203, 213, 229. See also Rintelen in Mixed Claims Commission, **Items 244**, and **244.1-10**. Notes on codes in **Item 2112**.

Item 426

Bernstorff, Count von, My Three Years in America, New York: Charles Scribner Sons, 1920, 428 pp.

Graf (Count) von Bernstorff was born and christened Bernstorff, Johan Heinrich, Andreas Hermann Albrecht. An important book. This book contains translations into English of many German foreign office messages sent immediately before U.S. entry into WWI. There are several references to the so-called Zimmermann Telegram, which is referred to therein as the Mexico dispatch. Count von Bernstorff was the German ambassador to the U.S. from 1914 until he was asked to leave just prior to the actual declaration by the U.S. of War against Germany in 1917. Many penciled page numbers by WFF within the front cover call attention to references having to do with cable and wireless German agents, conspiracies etc. pp. 380-381 describe his reaction to the Zimmermann telegram.

Item 427

State - U.S. Department of, Publications of the Foreign Relations to the United States 1917, Supplement 1, The World War, Washington, GPO, 1931, 708 pp.

Basic data with regard to the Zimmermann telegram and other items of importance in WWI. Also relating to German communications. Also data concerning Count Luxburg (German Minister to Argentina) and the sinking of American and British ships. Index refers to the Zimmermann Telegram in four places (marked in the margin).

Item 428

Epstein, Sam and Beryl, The First Book of Codes and Ciphers, New York: Franklin Watts, Inc., 1956, 62 pp. Pictures by Laszlo Roth.

A book on codes for young readers. Discusses Caesar's cipher, oghams of the Celts, the Rosetta stone, Atbash and Sheshach, and Cardano. See Sheldon, EAW, David Kahn, The Codebreakers, pp. 79ff. On Cardano see Galland, pp. 34-35.

Item 429

Anonymous, Photo samples of German, French, and British codes and ciphers, World War I.

Item 430

No card, no item

Item 430A

No card, no item

Item 430B

Congressional Record, 74th Congress, 2nd edition, Vol. 80, No. 58, p. 4273 and No. 83, March 20, 1936. "Tea Pot Dome."

The Congressional Record delves into the telegrams and references to the Tea Pot Dome scandal of the 1920s, the big scandal of the Harding Administration. Cf. **Item 1798**, The Origins of the Teapot Dome by J. Leonard Bates, 1963, which does not mention the messages and revelations thereby made. See bibliography under Bates, J.L.

Item 431, 431.1

Schooling, John Holt, "Secret in Cipher," Pall Mall Magazine, Vol. 8, Nos. 33, 34, 35, 36, London: 1896. Photostat positive of the entire series.

A historical item unique in the U.S. Describes ciphers from ancient times to late Elizabethan days. **Item 431.1** Contains the photostat negatives of the above item but they are ruined. The folder also contains a handwritten note from WFF with the solution to a challenge cipher in Schooling's article .

Item 432

Boucard, Robert, "Les secrets des chiffres," Gringoire, Paris, December 15, 18, 1936, January 5, 8, 22, 29, and February 5, 1937 issues.

A member or ex-member of the French cipher bureau of WWI days writes a multi-part article in a weekly newspaper. The series quotes many telegrams of WWI period and gives various types of cryptography. There is included a photograph of a modified Wheatstone cipher device. Original newsprint copies. Certainly a valuable item because, if available at all in public sources, would be extremely difficult to find and very fragile. Discusses Francis Bacon cipher, Dreyfus Affair, WWI. Newsprint. On cryptography in World War I, see David Kahn, The Codebreakers, ch. 10, 11. There are two modified Wheatstone devices in the Marshall Museum.

Item 433

Zanotti, Mario, Manuale di crittografia le scritture segrete, Milano: Ulrico Hoepli, 1928, 154 pp.

A general text on cryptography. Elementary in nature. Contains a bibliography of some dozen or so items. Gift from the book dealer Paul Pearlman, October 1942. Bibliography of 13 items. 2 copies.

Item 434

No card, no item

Item 435

French, Norman R. and Walter Koenig, Jr., "Frequency and Occurrence of Speech Sounds in Spoken English," Journal of the Accoustical Society of America, 1, 1 (October, 1929), pp. 110-120.

Statistically important piece of work done under the auspices of the AT&T Co. Cf. **Item 632**.

Item 436

Gillette, J.M. (Prof.), "Extent of Personal Vocabularies and Cultural Control," Scientific Monthly, (Nov. 1929), pp. 451-457.

Psychological tests demonstrated that the larger a person's vocabulary the greater chance of business or professional success. Studies of size of vocabulary in the Bible, Shakespeare, Milton, etc.

Item 437

Eldridge, R.C., Six Thousand Common English Words, their comparative frequency and what can be done with them, Niagara Falls, N.Y: Privately published, 1911, 64 pp.

Statistical information about the relative frequencies of English words, compiled over many years and from a large variety of sources. There are six lists of words. List #1 contains 2890 words aggregating 13,825 words; 73 words occurring 20 times or more, 78 words occurring 19 or 20 times each, etc. Sources also cited. The last list, #6, cites the 353 most frequently occurring words in an aggregate of 100,000 of which the list was published later in London.

Item 438

Gylden, Yves, Analyse au point de vue decryptement de l'appareil à chiffrer, "Cryptographie Type C-36," Stockholm: Typescript of 22 pages and two diagrams, February 26, 1936.

Very important from a historical point of view in the study of the Hagelin cipher machine. Contains two files. Three mimeographed copies of the study, and one English translation.

Item 438.1, 438.2

Gylden, Yves, Analyse au point de vue decryptement de l'appareil à chiffrer, "Cryptographie Type C-36," Stockholm: Typescript of 22 pages and two diagrams, February 26, 1936.

Very important from a historical point of view in the study of the Hagelin cipher machine. Contains 2 files. 3 copies, 1 mimeographed copy, 1 English copy. Contains 2 files.

Item 438.3

No card

Gylden, Yves, Analysis from the point of view of Cryptanalysis, of Cryptographer Type C-36 provided with 6 Key Wheels, 27 Slide bars, the latter having moveable projections, single or multiple, Stockholm, May 9, 1938.

On Gylden's publications see Galland, pp. 82-83.

Item 438.26

No card. Brochures from B. Hagelin machine. Crypto AG Zug, Switzerland.

- 1) Description of Hagelin Type CX-52
- 2) Auxiliary devices for teleciphering Series T-55 telecryptos
- 3) Appareils auxiliaires pour téléchiffrement T-55
- 4) Type TC-55 Telecrypto
- 5) Pocket cryptographer CD ® 57
- 6) Cryptographer Type C-52.

Hagelin, Boris C.W., Eighteen advance announcements and instructional brochures for Hagelin cryptographic devices and machines. Contained in 2 files.

Item 438.4

Hagelin, Boris C.W., P.M. au sujet des observations formulées par le Lieutenant-Colonel J.E. Koot concernant l'appareil C-36.

Photostat-positive of a typescript and a letter to Yves Gylden from Hagelin. Koot, a Dutch Army Colonel, makes comments upon the Hagelin machine type C-36. Colonel Koot was the Chief of the Cipher Service, General Staff, Dutch Army. Also a Hagelin letter to Gylden commenting on the Koot observations.

Item 438.5 (1)

Hagelin, Boris C.W., Instruction pour l'emploi de la machine à chiffrer, Type C, 19 January 1939, 15 pp. French instructions for using the C-36.

Item 438.5 (2)

Hagelin, Boris C.W., Notice succinct d'emploi de la machine à chiffrer, Type 37, marine, April 1939, 8 pp.

French instructions for using the C-37 machine. In the same folder as above. Gift from Boris Hagelin and autographed by him to WFF in 1946.

Item 438.6

Lunoe, Adam Morch, "Secret Coding Machine Revealed," American Swedish Monthly, August 1946, pp. 6-7, 26-28.

Item 438.7

Hagelin, Boris C.W., Hagelin Cryptographers, Types C-52, CX-52.

Lithograph brochure of 28 pages, 18 figures and 6 photographs. Autographed to WFF by Boris Hagelin, 8 March 1953.

Item 438.8

Hagelin, Boris Caesar Wilhelm, Analyse du point de vue securité cryptographique de la machine CX-52.

A dittoed manuscript of 28 pages, dated 11 March 1953 and presented to WFF by Boris Hagelin, who declined to indicate the name of the author. From other clues WFF inferred that it was written by a member of the cryptanalytic staff of one of the Scandinavian countries which belongs within NATO orbit - - perhaps Norway.

Item 438.9

Hagelin, Boris Caesar Wilhelm,

Avant-propos etc. in re the C-type machines. A series of technical observations concerning machines of the C-type written by a knowledgeable cryptanalyst, name undivulged, by the Hagelin Company.

Item 438.10

Hagelin, Boris C.W., Hagelin cryptographers, types C-52 and CX-52; Zug, Switzerland: 1954, 34 pp. with 15 figures.

Item 438.11

Hagelin, Boris C.W., Technical Description of C-52 and CX-52.

C - 52 Mimeograph copy of 10 pages and four pictures. 2 copies. CX-52 mimeograph copy of 12 pages and 4 pictures. May, 1955. Transcript of (probably) the first draft of the brochure.

Item 438.12 (1)

Hagelin, Boris Caesar Wilhelm, Analyse du point de vue securité cryptographique de la machine CX-52.

This is merely another edition of **Item 438.8**. Author unknown.

Item 438.12 (2)

Hagelin, Boris Caesar Wilhelm,

Analysis of the CX-52 machine from the point of view of cryptographic security. English translation of **Item 438.12 (1)**. See **Item 438.8**. Author and translator unknown.

Item 438.13

Hagelin, Boris C.W., Notice re the iCBf machines, Zug, Switzerland: Crypto A-G, 21953, 2 pp.

Re 1-time pad printer. Never put into practical operation. No item. At NSA?

Item 438.14

Hagelin, Boris Caesar Wilhelm, Comparison between the machines types C-446 & BC-543 and types CX-52 and CX-52B. Zug, Switzerland; Crypto A-G, July 1953, 3 pp. No item. At NSA?

Item 438.15

Hagelin, Boris C.W., Random Tape Auxiliary Device RT-53, Zug, Switzerland. Crypto A.-G. 1953, one page plus one figure.

This brief explanation tells what the machine was intended to do. No item. At NSA.

Item 438.16

Hagelin, Boris Caesar Wilhelm, Random Series Generator CB-53, Zug, Switzerland, Crypto AG 5 pp. Plus 2 figures.

This generator was intended to be used either in conjunction with a printing mechanism or “one-time pads,” or for punching random teleprinter tape for sending purposes (Mechanical one-time pad), further details in brochure itself. No Item.

Item 438.17

Hagelin, Boris.W., Manufacturing Program 1953, Zug, Switzerland: Crypton A.-G., 1953, 10 pp. Plus 6 figures.

Just how much of this manufacturing program was carried through is not known. No item, NSA?

Item 438.18

Hagelin, Boris.W., Memorandum re the Hegelin ciphering machines with reference to the program CP bsr 1/006e/3 dated June-August 1953, Zug, Switzerland: Crypto A.-G. 6 pp. Plus 1 figure.

WFF has no knowledge of how or if this program was pursued.

Item 438.19

Hagelin, Boris C.W., The Pocket Cryptographer Type CD-55 & CDR-55, Zug: Switzerland, Crypto AG, October 1955.

These brochures deals with one of the latest Hagelin cryptographic devices. It uses the basic principles of the C ñ series of cryptographic machines. In the FC will be found a copy of CD-55 which was a gift from Boris Hagelin, Jr. to WFF.

Item 438.20

Hagelin, Boris.W., Keyboard attachment unit type B-52, Zug, Switzerland: Crypto AG, January 1956.

This is a recent (1956?) publication of the Hegelin firm and deals with a keyboard attachment for one of the recent Hagelin machines. [1967] Boris Hagelin, Sr. is a very gifted engineer, self-taught but with brilliant ideas. He got his real start in the manufacturing of cryptographing machines with the adoption, against the advice of WFF, of theC-36 type, to which the signal corps gave the designation M-209.

Item 438.21

Hagelin, Boris.W., Advertising letter re manufacturing program of A.B. Cryptoteknik and Crypto A.G., October 1956, 3 pp.

This and **Item 438.22** are the first two brochures put out by Boris Hagelin Jr. after he came to Washington to take up residence, and serve as the Western Hemisphere representative of Crypto A.G.

Item 438.22

Hagelin, Boris.W.

Memorandum: To rely on a cipher or code system which is not safe can be more dangerous than using no code at all. October 1956, 2 ñ 1/3 page memorandum. See **Item 438.21**

Item 438.23

Hagelin, Boris.W., Cryptographer Type B-21. Card with short history of B-21. October 1956.

The B-21 was Hagelin's first venture in the ciphering machine field. The first prototype was made in 1926 and was a very primitive affair. It was based on the Damm principle of "simplified rotors." Folder has photo negatives of cards. See **Item 438.24**.

Item 438.24

Hagelin, Boris.W., Converter Type M-209, Card with a short history of M-209. This and the following items: **438.23**, p. 3 and **438.25** p. 9 with brief comments.

Were sent to WFF under date of 17 October 1956 by Boris C.W. Hagelin with the following note: While rummaging through my old papers the other day, I found a draft for some texts, which you had asked me for a long time ago. These texts were to be used as labels for some old cryptographers you possess. I now enclose these texts. Please tell me if they are in accordance with your wishes. If not, please let me know, and give me some pointers. U.S. version of the type C-38 machine. It had a burst of glory during WWII but has since then been doomed to oblivion. A resurrection is expected through the medium of the new type of CX-52 machine.

Item 438.25

Hagelin, Boris C.W., Machine type C-35, serial no. 600. (Card with short history of C-35).
See **Item 438.24**, page 3 (2).

This machine is the first of its type manufactured, except for a few handmade models. A number of different models were built in Sweden, France, and the U.S.

Item 438.26

Hagelin, Boris.W.

Eighteen advance announcement and instructional brochures for Hagelin cryptographic machines.

Item 438.4

Gylden,Yves, P.M. au sujet des observations formule par le Lieutenant-Colonel J.E. Koot concernant l'appareil C-36, 24 Fevrier 1937.

Item 438.6

Lunoe, Adam Morch, "Secret Coding Machine Revealed, Swedish Engineer Brought Design to U.S.," The American Swedish Monthly.

Item 439

Hartswich, E. Gregory, "Almost Perfect Cipher System," Esquire (April 1936), pp. 87-88, 140.

The author has in mind the Playfair cipher, one that was abandoned by the British and the Americans during WWI; but in 1936 it still seemed a wonderful method to non-professionals. It is preceded by an editorial note, to which WFF has added a comment: "nuts!" Cf. David Kahn, The Codebreakers, pp.198-202.

Item 440

Gylden, Yves, Bibliography, Extracted from Contributions of the Cryptographic Bureau in the World War, by a well-known Swedish expert, the late Yves Gylden (d. 1966).

Item 441

Friedman, William F., Air-Ground Liaison Code #2, Fire Control Code #2, and Instructions Accompanying; Washington, DC: GPO. War Department July 1, 1930. Confidential.

Prepared under the direction of the Chief Signal Officer. Used to create words and phrases to be transmitted by electrical or visual signaling. Regular communications between all ground stations and aircraft engaged in general liaison and reconnaissance. It could be used for communication between front line ground stations in case of emergency. Fire control code - intended for inter-communication between any agencies using authorized methods for the observation and adjustment of fire whether aerial or terrestrial. Both codes were confidential. This type of communication was widely used before the time of wide spread field radios.

Item 442

Türkel, Siegfried, Morse-und Morseähnliche Zeichen als Grundlage der Überschiffrierung, Eine Kryptographische Studien, Graz: Verlag von U. Mosers Buchandlung (J. Meyerhoff), 1926, 39 pp.

The author of the preceding item goes into the question of super-encipherment by means of Morse and similar characters. WFF deemed it: "Worthless from a cryptologic point of view."

Item 442.1

Mimeographed copy of English translation of **Item 442**. Translated RWP, April, 1952.

Item 443

Leauté, H., Sur les mecanismes cryptographiques de M. de Viaris, Le Genie Civil, Paris: August 1888, pp. 67-80.

Description by a Frenchman of a cipher device invented by another Frenchman well known in cryptologic history. Drawings. 2 copies.

Item 444

Gylden, Yves, "Kryptografin i den polisiära verksamheten tjänst," Tidskrift for Polisvetenskap, August 2, 1936, pp. 3-5.

Cryptography as used in police work. Published in Swedish Journal for Police Technique. A gift to WFF in 1937 and autographed by the great Swedish cryptologist, M. Gylden himself.

Item 445

Sinkov, Abraham, The Existence of Alphabets Having No Interval Repetitions, Technical paper of the Signal Intelligence Section, War Plans and Training Division, OCSigO; Washington: GPO, 1934, 6 pp.

An important paper having direct bearing upon the type of alphabets used in cylindrical cipher devices such as the M-94. 5 copies.

Item 446

Bell asco, Giovanni Battista, Venice, 1553, six leaves, La cifra del Sis Giovan Battista Bellas.

Photostat negative of this very early and quite rare essay on cryptography. The author's name is usually spelled Bellso. In his study of the origins of the so-called Vignère cipher, Dr. Charles J. Mendelsohn (**Item 626**) quotes Vignère: "first I shall present the cipher which I, for my part, credit to a certain Belasio of the suite of Cardinal Capri, since he was the first, so far as I know, who used it . . ." The Bellasco essay is therefore very important.

Item 447

Norman, Philip, "Cleverest Code Machine Looks Like One-Armed Bandit," Washington Post, Sunday, April 13, 1963, pp. B3.

No item.

Item 448

Candela, Rosario, Announcing Cryptography, the Science of Writing and Reading Ciphers, Decrypting: The Art of Solving Ciphers, New York: The Crypto Club, 1934.

A gifted amateur, an architect by profession, gave a course of instruction in cryptography and cryptanalysis at Hunter College, Extension Division, in the 1930s. Mr. Candela also wrote a book on the subject. Folder contains clippings and announcements, programs etc. Cf. Galland p. 34.

Item 449.1

Gylden, Yves, "Le Chiffre de Nihilistes," Revue Internationale de Criminalistique, Lyon, J. Desvigne, 1930, Vol. 2, No. 9, pp. 690-696.

This and the following three items are interesting papers by the able Swedish cryptologist, all gifts to WWF by M. Gylden himself. The Russians gained all of their scientific knowledge, including that concerning ciphers, through espionage. Also includes an article on "Le chiffre particulier de Louis XVI et de Marie-Antoinette lors de la fuite de Varennes, 1931, pp. 3-11,

1932. "Cryptologues italiens aux Xv^e et XVI^e siècles," pp. 3-13 with bibliography, 1932. "Essais cryptographiques. Un cas typique de complication illusoire," *Le Chiffre de Rozier*, pp. 2-13.

Item 449.2

Gylden, Yves, "Le chiffre particulier de Louis XVI et de Marie-Antoinette lors de la fuite de Varennes," *Revue Inernationale de Criminalistique* Lyon, Vol. ?, No. 4, (April 1932), pp. ?

Check date and see previous entry. See **Item 449.1**.

Item 449.3

Gylden, Yves, "Cryptologique Italiens au Xve et XVIe siecles," *Revue Internationale de Criminalistique*, Lyon, 4 (March, 1932), pp. 195-205. See **Item 449.1**.

Two photostat negative copies of a very good article on the history of the early Italian cryptologists by my Swedish friend, Gylden, once a member of the Swedish Black Chamber. WFF note.

Item 449.4

Gylden, Yves, "Essais cryptographiques; un cas typique de complication illusoire: le chiffre de Rozier," *Revue Inernationale de Criminalistique*, Lyon Vol. ? No. 4, April 1932, pp. 2-13.

Original reprint, pp. 1-7; a gift of M. Gylden. See **Item 449.1**

Item 450

Locard, Edmond, *Manuel de technique policière*, Paris: Payot, 1939, 3rd edition, 363pp. PB

A manual for French Police officers covering ciphers, secret inks and the like. A "souvenir" of a trip to Germany in 1945 by WFF. This copy belonged to the Library of SKL Chef MND III - cipher section of the German Navy.

Item 450.1

Locard, Edmond, *Manuel de Technique policière*, Paris: Payot, 1939, 3ème edition, 63pp.

Translation of Chapter VI of preceding item, in handwritten pencil draft manuscript.

Item 451

No card, no item

Item 452

Vela, Manuel Rey, "Cryptography: Writing of Figures, "Mirabeau" System - How to Encipher and Decipher," Translated from Revista de Technica Policial y Penitenciaria, Havana, Cuba: July 1936, 3 pp.

Item 453

Barrell, Charles Wisner, "Elizabethan Mystery Man," The Saturday Review of Literature, May 1, 1937, pp. 11-12, 14-15; May 8, 1937, p. 12-17.

The theory that Edward de Vere, the Earl of Oxford, wrote Shakespeare, is summarized in this article. One of the early pronouncements for the Oxfordian theory. Elmer Edgar Stoll, "The Detective Spirit in Criticism," The Saturday Review, May 8, 1937, pp. 12-17.

Item 453.1

Stoll, Elmer Edgar,

The detective dealing with the question of the authorship of Shakespeare, raised in the magazine the previous week and doubtless planned that way by the editors. See **Item 453**.

Item 454

Gylden, Yves, The Contribution of the Cryptographic Bureaux in the World War, GPO, 1935, 87 pp. Reprinted from the Signal Corps Bulletin.

Translation of **Item 456**, 9 vols., p. 53. Swedish cryptologist Gylden re WWI. A very significant and useful compendium of the work of the Swedish cryptologic organization for a number of years, which included the war years. Pre-war France, Germany, England, Russia, Austria, and Italy. 1914-1918 western front. 2 copies. See **Item 455**.

Item 454.1

Reprint of pp. 1-21 of the above item from Signal Corps Bulletin No. 75, (November-December 1933), GPO, Washington: 1934. Autographed by WFF.

Item 455

Gylden, Yves, The Contribution of the Cryptographic Bureaux in the World War, GPO, 1935, War Department, Washington, D.C.: GPO, 1935. Reprinted from Signal Corps Bulletins Nos. 75-81.

Item 456

Gylden, Yves, Chiffrerbyräernas insatser I världskriget till lands Stockholm: Militärlitteraturföreningens Förlag, No. 160, 1931, 139 pp.

An account of the successes and failures of cryptography in WWI, written by the noted Swedish cryptologist, the late Yves Gylden. Autographed to WFF 4 September 1937. This is probably the only copy in the U.S. Swedish version of previous work. 2 copies. On cryptography in WWI, see also David Kahn, The Codebreakers, ch. 10, 11.

Item 457

Baller, F.W., An Idiom a Lesson. A Short Course in Elementary Chinese, Shanghai: China Inland Mission, 5th impression, 1928, 106 pp.

A simple text on the Chinese written language.

Item 458

Broglie, Albert, "The Secret Correspondence of Louis XV with his Diplomatic Agents from 1752 to 1774," Extract from Vol. II of The King's Secret, London, Paris, and New York: Cassell, Petter and Galpin, 1879.

This small item is interesting for its mention of cipher correspondence between Count de Broglie and Count de Vergennes, because the latter's name is encountered frequently in the ciphers of the American Revolutionary War. A small tale of espionage covering Louis XV's diplomatic agents.

Item 459

Mathers, FNU, The Kabbalah Unveiled, London, 1887 pp. 2, 3, 8-11.

Photostat (negative) of six pages. The Kabbalah has a certain very direct interest for cryptographers interested in the history of the subject. No item?

Item 459.1

Encyclopedia entry on "Kabbalah". In envelope.

Item 460

Ludendorff, Eric von (Field Marshall), My War Memories, extracts from typescript with English translation.

The great German Field Marshall of World War I includes in his war memories incidents of cryptology and particularly those concerned in the Battle of Tannenberg, as well as certain details of the Zimmermann telegram.

Item 461

Reinach, Joseph, Histoire de l'affaire Dreyfus, Le procès de 1894, extract from, pp. 244-253, 592-595.

Photostat (negative). More about the French officer falsely accused as a spy. This involves the “doctored” cipher message. Cf. David Kahn, The Codebreakers, pp. 254ff.

Item 461.1

Reinach, Joseph, Histoire de l’Affaire Dreyfus; Paris: Editions de la Rue Blanche, 1901-1911, 7 volumes, Chapter IV, “The Capitulation of Mercier,” pp. 242-252, of Vol. I.

Translations on the Message of Panizzardi. Relates specifically to the Panizzardi telegram, what had been doctored to add “evidence” against Captain Dreyfus. 3 copies, 1 typescript with corrections, 2 carbon copies, corrected Appendix VI of Vol. I, pp. 592-595. “The message of Nov. 2.” Cf. **Item 461**. Cf. David Kahn, The Codebreakers, pp. 254ff.

Item 462

Clemenceau, Georges, Des Juges, Excerpts from Paris: Publisher? 1901, pp. ?

Photostat negative of pp. 175-176; 357-368. Item dealing with the world-famous Dreyfus “treason” case and the Panizzardi telegram. This telegram was in code and a translation of it, used in the court martial proceeding, had been tampered with by his accusers. The alterations were later disclosed and Dreyfus was cleared.

Item 463

Johnson, Thomas M., “Secrets of the Master Spies,” Popular Mechanics, Chicago: April 1932. Vol. 57, No. 4, pp. 636-640, September 1932, Vol. 58, No. 3, pp. 406-413.

Photostat positive. A cheap and trashy exposition on spy work. A mish-mash about George Fabyan and the Hindu ciphers of 1916. Mentions WFF “now the leading American authority on secret writing” as if the author had been present when WFF had testified in the cases against the Hindus. This involves the trial in San Francisco of the Hindu plotter’s who used a dictionary code. The article explains the system. Not noted on card: Vol. 58 has cipher stories that mentions Histiaeus and the shaved slaves head. See Sheldon, EAW pp. 34, 164, 174, and 215.

Item 464

No card, no item

Item 465

No card, no item

Item 466

Old, Bruce S., "On the Mathematics of Committees, Boards and Panels," The Scientific Monthly, August 1946, pp. 129-134.

Photostat positive of a delightful satire on groups mentioned in the title.

Item 467

Young, Owen D. and James G. Harbond, et. al., The Place of Radio in World Communications, New York: RCA n.d., No page nos.

An item of historical importance in the history of the use of radio in world communications. A beautifully produced brochure.

Item 468

No card, no item

Item 469

Friedman, William F., Six Lectures on Cryptology, April 1963.

In brown banker's box on table. Declassified June 30, 1977.

Item 470

Boursin, Alain, Poste 85. Les secrets de la T.S.F. pendant la guerre, Paris: Editions Albin Michel, 1937, 251 pp.

Secrets (alleged) of radio interception during WWI. An insignificant and probably highly lurid account by a non-expert in the field. Publisher claims this book was "censured for 20 years."

Item 471

Boucard, Robert, Les dessous de l'espionage allemand, des documents, des faits, Paris: Les éditions de France, 1933, 214 pp.

Deals with German espionage during WWI and a few years thereafter. This and other books by the authors were later condensed into two multi-part articles in the weekly newspaper Gringoire. See **Item 699** and **432**, also Galland.

Item 472

Boucard, Robert, Les secrets du G.H.G. (Grand Quartier General) des documents, des faits, Paris: Les éditions de France, 1936, 226 pp.

Allegedly contains many French secret telegrams of WWI given to the author by French cryptographers and cryptanalysts of that period. See Galland p. 27. On cryptography in WWI, see also David Kahn, The Codebreakers, ch. 10, 11.

Item 473

Anonymous, Reichsarchiv "Der Welt krieg 1914-1918, Band II, excerpts from:

Basic material for study about WWI and radio intercepts from the official German archives.

Item 474

Anonymous, "Ciphers and Cipher Keys," Liddell's Living Age, n.d. pp. 491-495.

Translation of Neves Wiener Tageblatt, Wochen-Ausgabe (Vienna, Current Affairs), July 2, 19** ca. 1920-1925. A former Austrian code officer chats of the stealing and buying of codes by enemy governments.

Item 475

Pyle, Joseph Gilpin, The Little Cryptogram: A literal application to the play of Hamlet of the cipher system of Mr. Ignatius Donnelly, Saint Paul: The Pioneer Press Co., 1888. Extract from, pp. 10-25.

A satire on Ignatius Donnelly's The Great Cryptogram in which the latter tries to prove Baconian authorship of Shakespeare. Numerical gibberish. Cf. **Item 104**.

The theory that Edward de Vere, the Earl of Oxford, wrote Shakespeare, is summarized in this article. One of the early pronouncements for the Oxfordian theory. Elmer Edgar Stoll, "The Detective Spirit in Criticism," The Saturday Review, May 8, 1937, pp. 12-17.

Edgar, the Detective dealing with the question of the authorship of Shakespeare, raised in the magazine the previous week and doubtless planned that way by the editors. See **Item 453**.

Item 476

Dupont, General, Le haut commandement allemand en 1914, extract from Paris: Librairie Chapelot, 1922.

A brief comment on the famous Tannenberg battle, and the Russian cipher relating thereto, of WWI. In a single paragraph, this French general tells why the Germans won the Battle of Tannenberg. They knew the Russian code. One-page typescript. "I learned these details

personally from the mouth of his cipher officer himself; the public got the revelation of the fact from the Falkenhayn who slipped it into his memoirs accidentally.”

Item 477.1

U.S. Department of State, “Strategic Use of Communications during the World War,” Extracts from. A Department of State Publication, n.d., but probably late 1927 or early 1928.

This article is an official publication and reveals information concerning WWI cryptology. The British organization, the Battle of Jutland, and the Zimmermann Telegram. This typescript was copied by the American Consul in Edinburgh, almost verbatim from The Scotsman. Three items in one envelope. See WFF’s notes on this item. Cf. **Item 508**.

Item 477.2

Finley, Harold D., British Secret Service

Report of a lecture delivered before the Edinburgh Philosophical Institution on December 13, 1927.

Item 477.3

Anonymous, “Secret Service Secrets; How Jutland Was Foreseen,” Extracts from: Edinburgh Daily Express, 14 December 1927. Carbon copy. Two pages.

Item 478

Wheatstone, Sir Charles, The Scientific Papers of Sir Charles Wheatstone . . . published by the Physical Society of London, London: Taylor and Francis, 1879.

Photostat (negative) of the two papers. This item contains two articles of an extremely important nature in the history of cryptology. In the first one, “Interpretation of An Important Historical Document in Cipher,” pp. 321-341. The famous British physicist and electrical engineer presents his translation of a document in cipher for the edification of members of the Philobiblion Society. Accompanying the translation is a history of the document. The second article, giving “Instructions for the Employment of Wheatstone’s Cryptograph,” is of even greater historical interest and importance. The article is taken from a pamphlet to accompany the instrument invented by Sir Charles and called “The Cryptograph.” The latter represented a significant advance in the development of mechanical cipher devices. Many years later, it formed the basis for a device which was proposed and probably briefly used by the British Army during WWI. See in this connection the brochure by WFF entitled “Several machine ciphers and methods for their solution.” In the WFF Collection, there is one of the original devices made by Sir Charles. - - an item absolutely unique, certainly in the U.S. and perhaps the world. There are in the FC several copies of the British modification of the original Wheatstone device. Sir

Charles gives an example of the use of his cryptograph. [i.e. the cipher message, the plain text of the message and then follows with N.B.] The above dispatch is given nearly at length in order to illustrate the system of cipher; but in practice only the most important parts requiring concealment need be rendered in cipher.” Sir Charles, eminent scientist that he was, could not have been more wrong. The first commandment of good cipher practice is NEVER to mix plain language and cipher or code language in the same message. [i.e. that gives a clue to the solution]. Item is in the Marshall Library

Item 479

No card, no item

Item 480

Anonymous, “Secret Language” (code language), Journal Télégraphique, (April 1931).

Photostat (negative) copy of translation into English of original French text, 15 pp. This document on the subject of code language in telegraphic communications was officially transmitted by the Department of State to the Secretaries of War, Navy, Commerce, Treasury, and to the Chairman of the Federal Radio Commission, under date of October 6, 1931. This deals with the economics (costs) of code and cipher language in the graphic message.

Item 481

Givièrge, Marcel (LTC), “La cryptographie et les machines à cryptographier,” La Science et la Vie, Paris: March 1933, pp. 223-231. “Les machines à cryptographier et leurs applications dans la telegraphie sans fil,” Genie Civil, Paris: September 2, 1922, Vol. 81, pp. 218-220. 2 copies: 1 photostat negative, one photostat positive.

Item 481.1

Photostat positives plus English translations of above articles.

Item 482

Gylden, Yves, “La cryptographie militaire des puissances centrales pendant la guerre de 1914-1918,” Revue Militaire Française, Paris: August 1931, No. 122, pp. 211-231.

Gylden was a celebrated Swedish cryptologist who wrote this article just before he published his Treatise on Decoding in French. He concludes “We now know that the cryptographic service of the German army was not equal to its task during the War of 1914-1918.

Item 482.1

English translation of **Item 481.1**. Translation interspersed with French article. “The Military Cryptography of the Central Powers during the War of 1914-1918.

Item 483

Krasohutzki, H. (Lt., retired), "German Cryptanalysis," Vossische Zeitung, January 1928.

Interesting lessons to be learned from chapters in cryptologic history in World War I, if the author is not a German Yardley. Reading this makes one wonder: did the Germans win the war? (WFF). The author claims that German deciphering was far superior to the British.

Item 484

Signal Corps, U.S. Army, Telephone Code of 82nd Div. A.E.F.

Paraphrased extract from an obsolete telephone code used by one U.S. army division during WWI. This is certainly a unique item in the world of cryptography. It demonstrates very closely how ill-informed the U.S. Army was in the field of cryptology at that time. The cover letter is signed by Col. Harold G. Hayes, Chief Signal Corps, and Army Security Agency.

Item 485

Helmick, Leah Stock, "Codes - Fact and Fallacy," The American Legion Magazine 23, 2 (August 1937), pp. 18-19, 58.

Original copy and one photostat negative of the article. In 1937, the Readers' Digest held a contest for "best feature articles." Mrs. Helmick won honorable mention with her article. "Key Woman of the T-Men," a feature story of Elizabeth S. Friedman's work with codes and ciphers used by smugglers. The Readers' Digest furnished a re-write of the article with a different title, to be published in the American Legion Magazine. The Digest, thus fulfilled its claim that it published only reprints from other magazines. Mrs. Helmick cleared the article with both the Treasury Department and the Public Relations officer of the War Department. In spite of this, after the article appeared, WFF was called upon by the Inspector General of the Army to explain why WFF's name appeared in the story. Harbinger of things to come?

Item 485.1

Helmick, Leah Stock, "Key Woman of the T-Men," Reader's Digest, September 1937, pp. 51-55.

Mrs. Helmick's article as actually written by her. Original copy and photostat negative. Adopted for the American Legion Monthly. About ESF and codes.

Item 485.2

Helmick, Leah Stock

Correspondence re WFF and the "inquiry." Col. Wogan read it for content. The article contained no classified information.

Item 486

Coussillan, Capitaine, "La Recherche du Renseignement par les Transmissions," Revue du Genie Militaire, October 1924, pp. 325-352. Conference held at Cercle Militaire de Nancy, November 29, 1923.

Photostat negative of a lecture given November 29, 1923 to a military circle in Nancy. See footnote to title of article. Purports to be a history of cryptography in WWI by a French officer who participated in such activities.

Item 486.1

English translation of **Item 486**.

Item 487

Drioton, Etienne, "Decipherment of Egyptian hieroglyphics," La Science Moderne, August 1924, pp. 423-432.

Photostat positive of article. Cf. other Drioton articles in Sheldon, EAW pp. 89-98. On Egyptian cryptography see also David Kahn, The Codebreakers, pp. 71-73.

Item 488

Anonymous, "Cryptographie Pendant la Guerre," Extract from: La Revue Maritime, (February 1928), pp. 231-233 with note on p. 362.

An article in a French maritime journal on British cryptography in World War I. Photostat negative.

Item 489

Cartier, François (General), "Généralités sur la Cryptographie," La Science Moderne, Paris, 4 (April 1924), pp. 212-220.

Photostat negative. Discusses the history of cryptography - Demaratus, Harpagus, Aulus Gellius, Histiaeus, scytale with illustration, Julius Caesar, Plutarch, Lysander, John Wilkins, Mercury or the Swift Messenger, Vigenère, Bazeries. See entries in Cf. Sheldon, EAW, David Kahn, The Codebreakers, pp. 82ff, 244ff.

Item 490

Plum, William R., The Military Telegraph During the Civil War in the United States, Chicago: McClung & Co., 1992, Vol. 1, 377 pp.

Photostat negative of Chapter 2: “War Cryptographs” pp. 33-61 and appendix pp. 370-377. An important historical item. Plum was the Chief Telegraph Operator for General Thomas. His work-book (actual-original) may be seen in **Item 187**.

Item 491

Safford, L.F. (Commander), “Wilder Horizens,” United States Naval Institute Proceedings, Vol. 63, No. 11, Whole number 617, November 1937, pp. 1537-1552.

An article of a general nature on electrical communication. Autographed: Note: This article was submitted in a contest, but did not win.” Autographed to Col. Friedman by L.F. Stafford. Discusses signals, carrier pigeons, semaphore, telegraph, telephone.

Item 492

Anonymous, “Secrets Exposed,” Chambers’ Edinburgh Journal, (September 1853).

Item 492.1

Anonymous, “Cryptographs,” Chambers Edinburgh Journal 1853, pp. 134-136.

Photostat positive. This reproduction of an article in the famous Scottish journal, more than a hundred years ago, is from a source unknown, either as to author, the volume number of the journal, or the exact date. See **Item 492**. Mentions the *scytale* and Histiaeus. See Sheldon, EAW.

Item 493

Givièrge, Marcel (Colonel), “Questionis de Chiffre,” Revue Militaire Française, Paris: No. 36, 1 (June 1924), pp. 398-432.

Field cryptograms.

Item 493.1

Givièrge, Marcel (Colonel), “Questionis de Chiffre,” Revue Militaire Française, Paris 37, 1 (July 1924), pp. 59-78.

Item 493.2

Givièrge, Marcel (Colonel), “Questionis de Chiffre,” Revue Militaire Française, Paris.

Translation into English of the two-part article and published in the Signal Corps Bulletin; Also translated into German (Geheimschriftfragen). The latter is a TICOM souvenir of WFF.

Item 494

Voris, Alvin C. (Captain), "A Proposed Amendment to the War Department Telegraph Code for Use in the Field," Papers of the Signal School, Leavenworth, 1912 (?).

Photostat positive of pp. 13-22. Comments on the paper given by Lt. Karl Truesdell, pp. 23-26. Tactical codes.

Item 495

Thompson, James Westfall and S.K. Padover, Secret Diplomacy; A Record of Espionage and Double-dealing 1500-1850, An extract from, London: Jarrolds Ltd, 1937, 286 pp.

This is a photostat copy of only the bibliography given at the end of the book itself. This book contains an appendix consisting of a ten-page article on cryptography.

Item 496

Smith, William (Rev.), "An Introduction to the Art of Deciphering," Extract from: A Natural History of Nevis and the Rest of the English Leeward Charibee Islands in America . . . Cambridge 1745, Letter X, pp. 243-278.

Photostat positive. This is of great historical interest in connection with James Falconer and his book Cryptomensis Patefacta (Item 87). This item in the FC contains comments upon Falconer's treatise and may well be the most detailed review of that important work in the whole of English literature. It is a complete mystery as to why the Rev. Smith included "The Art of Deciphering" in his disquisition on Falconer in his geographical treatise as named above. Highly interesting information on p. 1, being the author's explanation and commentary on the rarity of the Falconer book.

Item 497

Vail, Alfred, "Mode of Secret Correspondence," Extract from: The American Electro-Magnetic Telegraph, 1847 (Publisher?).

Photostat negative of pp. 46-52. Alfred Vail was a partner of Morse's in the development of the telegraph in the U.S. This article is of undoubted historical importance since it was published only seven years after the completion of the line between Washington and Baltimore. The name of the principal Signal Corps Installation in the U.S., now known as Fort Monmouth, New Jersey, was formerly called Camp Alfred Vail.

Item 498

Lavine, F.N.U., "Safeguarding the Message," Extract from: Chapter 35 Circuits of Victory, Garden City, NY: Doubleday, 1921.

Photostat negative of pp. 398-409. Extremely interesting side lights on communications of World War I. A description of the AT&T printing telegraph cipher machine is included. The picture following p. 402 shows the AT&T cipher using a single key tape. Beneath this appears the statement, "Designed by the engineers of the AT&T Co. - the first absolutely undecipherable code in the history of the human race." Cuts to the right show how perforated tape is used in the messages.

Item 499

No card

Gross, Hans, "Ciphers and Other Secret Writings," From Criminal Investigations, trans. by Adam & Adam, Madras India, 1906. Foreign office treatise in deciphering codes. Picture writing, Count Gronfeld' cipher, numerical ciphers, alphabetical ciphers, syllable and word ciphers, Count Vergennes Method, *Scytale*, Cf. Sheldon, EAW.

Item 500

Peterson, Ernest G., Peterson's International Banking Code, New York: Peterson's Cipher Code Corp, 1911, 340 pp.

A commercial code especially adapted for the type of telecommunications used in banking. This code soon came into international use; it is still widely used in many countries. It has been probably the most widely used commercial code in the world, therefore the name of Peterson's Code is known to government and bankers and other businessmen wherever met.

Item 501

No card, no item

Item 502

Lysing, Henry, (pseudonym for John Leonard Nanovic), Secret Writing: An Introduction to Cryptograms, Ciphers, and Codes, New York: David Kemp & Co., 1936, 117 pp.

Another small book for the layman interested in cryptology. Understandable for young readers. Simple codes, Bacon cipher, St. Cyr slide, Vigenères table, Playfair cipher, Porta's table, The Nihilist Transposition, Gold Bug cipher, secret inks.

Item 503

Anonymous, Report to the Chief Signal Officer to the Secretary of War, GPO, Washington, DC, 1919.

This voluminous report covers the multitude of operations of the Signal Corps in 37 chapters. It is a gold mine for historical researchers, for it relates Signal Corps operations at home and abroad during the period of WWI. Chapter 33 deals with the code compilation used in France by the First and Second Armies - - short but quite accurate. A copy of these codes is in the FC (See **Items 841 and 1007**). The table of contents reveals the wide range of WWI aspects covered, including carrier pigeons, women telephone operators, photography, trans-Atlantic electrical communications and many other subjects. Annual Report, fiscal year ending June 30, 1919.

Item 504

Anonymous, Stock and Bond Trading Code, New York: The Code Company, 1928, Wall Street Edition, 577 pp.

A commercial code constructed for the use of stock brokers. This item is included in the FC purely as an example. A gift to WFF by William Mitchell, head of the Mitchell Code Compilation firm. Mr. Mitchell had WFF's name embossed in gold letters on the cover.

Item 505

Lord, Walter, Incredible Victory, New York: Pocket Books, 1968. Softbound, indexed, 306 pp.

Battle of Midway. Cf. **Items 634, 889, 1125, 1507, 1815**.

Item 506

Boucard, Robert, Les femmes et l'espionage. Les dessous de l'expédition de Russie, Paris: Les Editions de France, 1929, 244 pp.

Another spy series by a popular author. See Galland, p. 27.

Item 507

Boucard, Robert, Les dessous des archives secrètes (d'un espionnage à l'autre), Paris: Les editions de France, 1929, 205 pp.

The author has something to say about the Zimmermann telegram of WWI fame. Also, information on espionage and counterespionage operations. See Galland, p.27.

Item 508

Ewing, Alfred (Sir), "German War Orders - British Secret Service - - Sir Alfred Ewing's Experiences," The Edinburgh Scotsman, December 14, 1927.

This item is perhaps one of the rarities of the FC. Very important because it was the first public disclosure of the work done by the British cryptanalytic organization in WWI. Not only is there a quite lengthy article in the issue of the newspaper of that day, based upon the report of an address delivered by Sir Alfred before the members of the Edinburgh Philosophical Institution on December 13, 1927, but there is also a letter signed by Balfour and a fairly lengthy editorial lauding Sir Alfred and his work. (See also **Item 477.2**). The British Government was not pleased with the disclosures by Sir Alfred Ewing. The editorial enclosed expressed the hope that Sir Alfred could be persuaded to write a book. Sir Alfred's son finally brought out the desired "Life" of Sir Alfred. (See **Item 603**.) Cf. David Kahn, The Codebreakers, pp. 266ff.

Item 509

Tucker, Wilson, The Warlock, New York: Doubleday & Co., Inc. 1967, 192 pp.

Item 510

Burgess, Anthony, Tremor of Intent, New York: Ballantine Books, Inc., 1966, 221 pp. Softbound. Article by author contained in the text. Book World, Nov. 26, 1967.

Burgess's novel relates the story of a spy who receives a message he cannot decode. He becomes attracted to a girl who resembles his daughter. The girl's brother decodes the message. Spy for British Intelligence. Go to Yarylyuk on the Black Sea, infiltrate the convention of Soviet scientists. Locate the British defector and kill him.

Item 511

Wise, David and Thomas B. Ross, The Invisible Government, New York: Bantam Books, Inc. 1965, 402 pp.

No comment by WFF.

Item 512

Wise, David and Thomas B. Ross, The Espionage Establishment, New York: Bantam Books, 1967, 277 pp. Softbound, indexed. Discusses KGB, Smersh, MI6, Red China and the Cold War.

No comment by WFF.

Item 513

Gill, A.J., "Privacy Systems of Radio Telephony," Post Office Electrical Engineers Journal, London: October 1933, pp. 224-230.

Photostat positive of article. The growth of radio telephony being a concomitant need for secrecy in transmission. This is one of the very early attempts to achieve such secrecy, now usually referred to as scrambled speech.

Item 514

Hitchens, Captain, Enemy Codes and Their Solution, A brochure prepared by the British Army equivalent of G-2, A-6, GHQ-AEF; Intelligence Ciphers, GHQ, B.E.F. January 1918.

More cryptology of WWI by a British officer at GHQ-BEF. Hitchens was an outstanding leader in this field. Although WFF never met him while at GHQ, the former's reputation was well and widely known. His efforts were devoted entirely to enemy codes (not ciphers). Photostat negative. He writes on method and he lists as qualifications for such work: thorough knowledge of the language employed, lively intelligence, highly developed critical faculty, natural flair for the work, untiring patience, and obstinacy.

Item 515

[Signal Corps, U.S.A.], The Cipher Disk, Signal Corps, U.S. Army.

Item in George C., Marshall Museum.

Item 516

No card, no item

Item 517

Kryha, Alexander von, Kryha Cipher Machine Data.

Folder contains pamphlets and papers on the Kryha cipher machine invented by the Russian Engineer Alexander von Kryha, but developed in Germany. Items are the official commercial booklet used by the agents for this cipher machine. There are newspaper clipping of the first trip of the Graf Zeppelin (1929) which carried a Kryha machine; four different papers by a German mathematician, Georg Hamel on the mathematical impossibility of deciphering messages in this system without possession of the key; photostat copies of three Navy Department brochures concerning the solution of messages in this system; and a typescript of the earliest work ever done on solution in this system, the latter by WFF in 1929. A very valuable item in the FC.

File 1:

The Kryha cipher machine - 5 pamphlets, red covers. Georg Hamel, Die Chiffrier-Maschinen, Berlin: Reinhold Kuhn, 1927. Georg Hamel, "Anwendung der elementaren Zahlentheorie auf die Theorie einer Chiffrier-Maschine, Sitzungsberichte der Berliner Mathematischen Gesellschaft XXVI Jahrgang. Georg Hamel, The Kryha Ciphering Machine. A mathematical opinion D. Schwarte, "Mechanisiertes Chiffrieren," Heeresstechniss Montatschirft für alle technicschen Fragen des Reiches heeres 6, 10 (October, 1928), pp. 401-404.

File 2

William F. Friedman, "Principles of Analysis of the 'Kryha'" c. 1929, typescript, circa 1929, 16 pp. Navy Department, Pamphlet No. 12, "Subsequent Solution of the Kryha Machine," Navy Department, Office of the Chief of Naval Operations, 1931, photostat-negative, 25 pp. Ibid., "Initial Solution of the Kryha Ciphering Machine."

Item 518

Beale, The Beale Papers: containing authentic statements regarding the treasure buried in 1819 and 1821, near Bufords in Bedford County, VA, and which has never been recovered, Lynchburg, VA: Virginia Book and Job Print, 1885.

This file contains the raw material for a story which was first published in 1885 and is of recurring interest. WFF believed it to be a complete hoax, albeit a fascinating one. The story involves three cryptograms, the solution to one of which is set forth in the document. The cryptographic system used in the one message for which the solution is given in the story (and which presumably underlies the other two cryptograms) is of diabolical ingenuity specifically designed to lure the unwary reader to devote much time and labor in perfectly fruitless research in searching for a key book. Even a brief summary of the story behind this item would occupy much more space than we have here.

Oversized file box with Beale correspondence. Carl W. Belson, President, Beale Cipher Society. File #4 contains IBM print out of words. Cf. <http://bealesolved.tripod.com>. Claims to have solved the code.

Item 519

Schreiner, George Abel, "Threads by which Nations Hang," Harper's Magazine, April 1918, pp. 665-674.

Photostat negative of article. A journalist with the Associated Press, who, having operated as a war correspondent in WWI, relates some very interesting incidents in which cryptology is involved.

Item 520

Lloyd George, David, War Memoires 1916-1917, Excerpt from: Photostat negative of pp. 532-535.

The great British premier of WWI has something to say about the famous Zimmermann Telegram. The Prime Minister made some minor errors which detract from the value of his comments. For example: Sir Alfred Ewing, who was the head of British Naval Intelligence is referred by Lloyd George as EWART of the diplomatic service. Cf. David Kahn, The Codebreakers, pp. 266ff.

Item 521

No card, no item

Item 522

Volts, James D., Bibliography of Cryptography, Cincinnati, OH: Privately Printed, 1938.

According to WFF, this is not a good bibliography. The most interesting part of the item is the Foreword. The Compiler was not a cryptographer, even with amateur standing, and just why he undertook to compile it presents somewhat of a mystery. He told WFF he just wanted something to do. The work gives evidence thereof. Gift of the author. A catalogue of books pertaining to the science of codes and ciphers.

Item 523

Hitt, Parker (Captain, Signal Corps), "A Simple Transposition Cipher," Fort Leavenworth, Kansas: Lectures at the Army Signal School circa 1912-1913, pp. 12-13.

Photostat positive. A two-page item on cipher taken from Captain Hitt's lecture at the Army Signal School. Deals with what we now call "railfence" cipher.

Item 524

Muirhead, M. (Captain, Royal Field Artillery) Military Cryptography, A study of transposition cipher systems and substitution frequency tables, Fort Leavenworth, Kansas.

Lectures at the Army Signal School, [n.d. circa 1912-1931], pp. 8-34. Based upon papers published originally in the Journal of the Royal United Service Institution, London, October 1911, Vol. LV, No. 404, pp. 1321-1332. Photostat positive. One of a series of lectures given at the Army Service School by various American and British officers. Comments at the end by Captain Parker Hitt and Lt. Karl Truesdell.

Item 525

Black, Frederick F. (1st Lt), Mechanical Enciphering and Deciphering, Fort Leavenworth, KS: Lectures at the Army Signal School, circa 1912-1913, pp. 23-32.

Photostat positive of what may well be one of the first series of lectures on cryptography ever made in the U.S. Armed Services. A simple, if not amateurish, “invention” of no value.

Item 526

Black, Frederick F. (1st Lt.), A Transposition Cipher, Fort Leavenworth, Kansas: Lectures at the Army Signal School, n.d. circa 1912-1913, 3 pages.

See comment on preceding **Item 525**. Deals with a cipher method proposed by B. Baden-Powell of the British Army. Photostat positive.

Item 527

Boller, Vernon W., (1st Lt.), A Rapid Enciphering and Deciphering Disk, Fort Leavenworth, KS: Lectures at the Army Signal School c. 1912-1913, pp. 11-13.

This three-page article begins by stating that “nothing new is involved in the principle of this disk.” It is only a mechanical device for the use of the Vigenère cipher. Primitive.

Item 528

Viereck, George Sylvester, The Strangest Friendship in History, extracts from, New York: Liveright, 1932.

Only extracts from this book (photostats), pp. 122, 353-359 are contained in this item. These have to do with the cryptographic systems used by President Wilson in his communications with Colonel House. Important for historical purposes. 2 copies. 1 photostat positive, one negative.

Item 529

No card, no item

Item 530

Pitman, Sir Isaac, A History of Shorthand, London: Sir Isaac Pitman & Sons Ltd. 4th ed. n.d. but later than 1874, 258 pp.

An early edition of a classic history of the invention and development of stenography by Mr. Isaac Pitman (later knighted). The William Byrd and Pepys diaries, among other documents, were actually written in shorthand. They were “deciphered,” but not by cipher methods. Discusses Tironian notes, Roman shorthand, the Dark Ages on which see Sheldon, EAW pp. 32, 233, 234, 237, 273, 274, 279-307, 570, and 587.

Items 531 and 531.1

Peckham, Howard H., "British Secret Writing in the Revolution," Michigan Alumnus Quarterly Review, Winter 1938, pp. 127-131.

A Michigan University librarian, who was for a time the head of the Clements Private Library in Ann Arbor, discloses information gained from documents in the Clements Library. This deals with the plot of the British Major Andre and Benedict Arnold re the proposed surrender of West Point. The article unfortunately contains several errors, when speaking of matters outside the American Revolutionary period. **Item 531.1** contains two photographs (enlarged) of two cipher messages which appeared in the article. Very important items in the history of the American Revolution. See also **Item 1752**, Bakeless and **Item 1888**, Pennypacker.

Item 532

Helling, Hans, Das Rätselbuch: Eine Sammlung der besten Rätsel nebst Auflösung für Jung und Alt, Dritte auflage. Berlin: Verlag von Neufled & Henius n.d. but earlier than 1918. Translation: A Collection of the Best Riddles with Solution for Young and Old.

An undated small treatise on conundrums, rebuses and the like. Of some usefulness in German elementary cryptologic problems, pp. 87-117 deal with cryptography.

Item 533

U.S. Marine Corps, Marine Corps Air-ground Code, 1934.

An example of panel [?] and fire control codes. Leather binding with snaps.

Item 534

Rosenbeau,

Letter to General Greene, dated Williamsburg, January 22, 1782. Important in the cryptology of the American Revolution. WFF's work-sheets on the solution, many in his handwriting, and a short report and solution by him. See also **Item 677**.

Item 535

Gregory, James F. (LTC), Telegraphic Code to Insure Secrecy in the Transmission of Telegrams, Washington, DC: GPO, 1886, 250 pp. 2 copies.

This code was taken over almost intact from a publicly available code, known as Slater's Code, including instructions for enciphering the groups. See **Item 536**. In copy 1, the last sentence of the letter of transmission states "the labor of compiling the new vocabulary has been performed by Mr. W. G. Spottswood." This generous tribute also appears in Copy 2. An important item despite Col. Gregory's lack of imagination. Rebound for WFF by Cmdr Mindte.

Copy 2 shows 777 on back of front and reverse of rear cover. 777 was the [additive] used for many years.

Item 536

Slater, Robert, Telegraphic Code to Ensure Secrecy in the Transmission of Telegrams, Printed and Published by W.R. Gray, London: 1979, 2nd edition, 125 pp.

Item 536 was a gift to WFF from Cmdr Mindte and autographed in 1953. Numbered vocabulary for Telegraphic use.

Item 536.1

Slater, Robert, Telegraphic Code to Ensure Secrecy in the Transmission of Telegrams, London: Simkin, Marshall, Hamilton, Kent, Co., Ltd, 5th edition, 1906, 125 pp.

This code enjoyed great popularity for many years. WFF has never been able to find a copy of the first edition published circa 1870. With some very simple modifications, this code formed the basis of one of the codes, allegedly secret, of the U.S. War Department. See **Item 535**

Item 537

Clifton, E., Nouveau Dictionnaire Anglais-Français et Français-Anglais, Paris: Garnier Bros, n.d. 562 pp.

This is the dictionary mentioned by Yardley in The American Black Chamber as having been used for a German message (Berlin to Mexico) intercepted many times in 1918. The page numbers in Yardley's book are 120-139. WFF has checked the method used in these two strange no-address, no-signature messages, which according to Yardley, were intercepted at least 60 times. They were indeed encoded by using the English-French half of this dictionary.

Item 538

Cantea, E. (Major), Notiuni de cryptografie, Din tainele omenesti de Maior E. Cantea; Bucharest: Calea Grivitei, 1921, 71 pp.

Elementary treatise on cryptography in the Romanian language.

Item 538.1

Cantea, E. (Major), Elements of Cryptography. The Secrets of Man, Typescript of 49 pages. Translation of **Item 538**.

Discusses the Greeks, Demaratus, the *scytale*, Julius Caesar, Alfred I. Cf. Sheldon EAW. David Kahn, The Codebreakers, pp. 82ff.

Item 539

Faulman, Karl, Illustrierte Geschichte der Schrift, Populär-wissenschaftliche Darstellung der Entstehung der Schrift der Sprache und der Zahlen sowie der Schriftsysteme Aller Völker der Erde, Wien: Pest, Leipzig: A. Hartlebens Verlag, 1880, 632 ff.

Discusses Nordic runes on p. 34. Egyptian writing. Latin tachygraphy pp. 549. Tironian notes. An important item in the history of the invention and development of writing, including hieroglyphs and stenography. Rare item. Cf. Sheldon, EAW and David Kahn, The Codebreakers, pp.86ff.

Item 540

Faulman, Karl, Historische Grammatik der Stenographie, Übersichtliche Darstellung der Systeme der Stenographie von der Ältesten Zeit bis auf die Gegenwart auf Grundlage von Originalstudien, Vienna: Verlag von Bermann & Altman, 1887, 376 pp.

Prof. Faulman was an authority on shorthand systems and this book contains a great amount of information on this subject, including a history of the art.

Item 541

No card, no item

Item 542

No card, no item

Item 543

No card, no item

Item 544

Verne, Jules, The Cryptogram, Being the Conclusion of the Jangada, or 800 Leagues on the Amazon. New York: George Munro's Sons, 1882, 280pp. Translation by James Cotterell.

This 1889 paperback is a rare item.

Item 545

Verne, Jules, The Cryptogram

This copy has a somewhat different title page and pagination than **Item 544**. The Cryptogram. The Giant Raft. Part II. Translated by W.J. Gordon, New York: Charles Scribner's Sons, 1882, 260 pp. An original edition, bound copy, illustrated.

Item 546

Hendrick, Burton Jesse, The Life and Letters of Walter H. Page, New York: Doubleday, Page & Co., 3 Vols: Vol. 1, 1922, 436 pp., Vol. 2, 1923, 437 pp., and Vol. 3, 1925, 440 pp.

Page was the U.S. Ambassador to Great Britain in World War I. This work contains Page's account of the British solution of the famous Zimmermann Telegram of WWI, the no less famous Room 40 OB, Admiral Hall, and Sir Alfred Ewing of the British cryptanalytic organization. See **Item 1009** for the true story of the Zimmermann Telegram, which had never been told by the British Government; nor can the truth be found in the many published accounts other than **Item 1009**. See Ch. 12 for Zimmermann telegram. Cf. David Kahn, The Codebreakers, pp. 266ff.

Item 546.1

Hendrick, Burton James, "Übersetzung aus der amerikanischen Zeitschrift," World's Work, November, 1925.

The Zimmermann Telegram to Mexico and how it was intercepted. A final installment from the new volume of page letters by Burton J. Hendrick, November 1925. German translation of **Item 346**. This translation was captured from the German Foreign Office, Cryptanalytic unit by one of the U.S.-British TICOM teams. It was presented to WFF as a souvenir.

Item 547

Appier Hazelet, Jean, Methode pour escrire occultement . . . and methode pour escririre de nuiet . . ., Paris, 1620.

This is part of a much larger work dealing with military apparatus in general. A section devoted specifically to cryptanalytic methods is of interest but it goes into detail only with regard to the quite impractical method of Trithemius. See Galland, pp. 6-7 for further details, including the other author's name, given no credit in this volume.

Item 548

Havet, Julien, "L'écriture secrete de Gerbert," CRAI, Paris: 1887, 23 pp. with two plates.

An early discourse on secret writing by a professor of the French Academy. Gerbert was Pope Sylvester II, whose office extended from A.D. 999 to 1003. See Galland, p. 86 for more information on this item.

Item 549

No card, no item

Item 550

Navy Department, Solution of a Progressive Cipher. Problem No. 3, Washington, D.C.: Navy Department, Navy Department Pamphlet No. 5. Communication Division Bulletin No. 92, October 1930.

Another instructional pamphlet on a type of cipher which has never been popular in modern governmental cryptographic operations. A mish mash without meaning. Photostat negative.

Item 551

Fernandez, D. Diego, Historia del Peru, extract from Secunda parte, Libro segundo, Capitulo LII Sevilla, 1571.

Photostat (positive) of pp. 105A-109A made from the LC copy. It appears that the author claimed that the Vigenère system was invented by him 15 years before it was published by Vigenère. See Galland, pp. 63-64 who quotes Dr. Charles Mendelsohn as saying that Fernandez's material came from Porta although the latter is never mentioned. See Carmona, Tratado de Criptografía, Madrid 1894, pp. 170.

Item 552

Haswell, John H., "Secret Writing: the Ciphers of the Ancients and Some of Those in Modern Use," Century Magazine 85, 1 (November, 1912), pp. 83-92.

Photostat (positive) of article. A journalist discourses on cipher methods from the days of Sparta to the Civil War. Discusses Histiaeus, the *scytale*, the Middle Ages, naval signals, torches, flags. Does not quote sources. Cf. Galland pp. 85-86 and Sheldon, EAW.

Item 552.1

No card, no item

Item 552.3

Friedman, William F., The Principles of Indirect Symmetry of Position in Secondary Alphabets and their Application in the Solution of Polyalphabetic Substitution Cipher, Washington, DC: GPO, 1935, 21 pp.

The printed edition of this important paper produced as a final version of the 1926 manuscript. Originally issued as a confidential document but downgraded to Restricted, 1 April 1946. Taken BY NSA. Returned 5/09.

Item 553

Alberti, Leone Battista, A Treatise on Ciphers, 1467-1472.

Aloys Meister (See **Item 92**) transcribed the original Latin manuscript of Alberti into a more modern calligraphy and then made the German translation which appears in his book Die Geheimschrift in Dienste der Papstlichen Kurie von Ihren Anfängen bis zum Ende des XVI 1906. Dr. Charles J. Mendelsohn translated into English the two portions which are included in this item a) "Secret Writing in the Papacy" b) Cryptologic history. Only four copies of the original Alberti manuscript are known to exist (See Galland, p. 3). The date (c. 1470) makes it the oldest treatise on cryptography thus far discovered. Cf. David Kahn, The Codebreakers, pp.125-156. For recent work on Alberti see Niccolò Galimberti, "Il De Comonendis cyfris di Leon Battista Alberti tra crittologia e tipografia," in Sbiaco, la culla della stampa. Atti dei Convegni, Abbazia di Santa Scolastica 2006-2007, pp. 167-239. Alberti's A Treatise on Ciphers has been translated into English by Galimberti Tipografi Editori, 1997.

Item 554

No card, no item

Item 555

Friedman, William F., The Principles of Indirect Symmetry of Position in Secondary Alphabets and Their Application in the Reconstruction of Primary Alphabets. Ms. of a technical paper prepared in the Office of the Chief Signal Officer, War Department, Washington, DC; May 6, 1926.

Carbon copy of typescript of first edition. Indirect symmetry in one of the powerful tools in cryptanalysis. First application and explanation of "indirect symmetry." First edition.

Item 555.1, 555.2, 555.3 Duplicate copies of **Item 555**.

Item 556 and 556.1

Glyden, Yves, "Histoire du decryptement," Revue Internationale de Criminalistique, Lyon, 1930, No. 5, Vol. 2, pp. 363-380.

Photostat (negative and positive of article). A history of cryptanalysis in brief.

Item 556.1

English translation of **Item 556**. Carbon copy. 18 pp., 3 copies.

Item 557

Lemire, Charles, Jules Verne 1828-1905, Paris: Berger-Levrault & Cie, 1908, 195 pp.

A life of the author of one of the best-known romantic tales employing ciphers. A memorial issued after Verne's death.

Item 558

Army Extension Courses, Special Text 165, Elementary Military Cryptography, Special Text 165, 1935 e.d., Army Extension Courses. Prepared under the direction of the Chief Signal Officer for use with the Army Extension Courses, Washington: GPO, 1935.

The first edition of this historically important document. Monoalphabetic substitution systems, mixed alphabet ciphers, polyalphabetic substitution systems, cipher disks and square tables, enciphered code.

Item 558.1

Friedman, William F., Elementary Military Cryptography, Special Text 165, 1743, ed., 81 pp. A later edition of **Item 558**.

Item 558.2

Friedman, William F., Basic Cryptography, Department of the Army, Technical Manual TM 32-220; Washington, DC: GPO, 1950, 186 pp.

Item 558.3

Friedman, William F., Elementary Military Cryptography, Subcourse, Introduction and Lesson, One (with solutions), Washington, DC: GPO, 1943.

This item was used in connection with **Item 558.2**.

Item 559

Friedman, William F., Advanced Military Cryptography, Special Text 166, 1935 ed. Washington, DC: GPO, 1935. Prepared under the direction of the Chief Signal Officer for use with the Army Extension Courses.

Double transpositions, complex substitution systems. Deals purely with cryptographic methods of a military nature.

Item 559.1

Friedman, William F., Advanced Military Cryptography, Special Text 166, Second Edition, Washington, DC: GPO, 1943. Prepared under the direction of the Chief Signal Officer for use with the Army Extension Courses. Later edition of **Item 559**.

Item 559.2

Friedman, William F., Advanced Military Cryptography, Special Text 166, n, DC: GPO, 1935. Prepared under the direction of the Chief Signal Officer for use with the Army Extension Courses.

Item 560

Monroe, James (President), Monroe's Cipher, New York Public Library.

A photostat negative copy of the "state cipher" (actually a code) used in the American Revolutionary period. See Edmund C. Burnett, "Cipher of the Revolutionary Period," AHR 22,2, (Jan 1917) pp. 32—334, (Especially pp. 333-334.) President Monroe used this when he was Minister to England in 1805. Later it was used by others among them James A. Bayard and President Jackson.

Item 561

Jefferson, Thomas, "Letters to William Short, April 6-August 25, 1790," William and Mary Quarterly, Vol. 1.

Photostat positive of pp. 294-301. Further material for the reconstruction of the syllabary used by the American revolutionists. Handwritten chart by WFF.

Item 562

Jefferson, Thomas, "Letters of Thomas Jefferson to William Short," William and Mary Quarterly, April 1933, pp. 98-116.

Photostat (positive) of pp. 98-116. See **Item 561**. Work sheets included, in an attempt to reconstruct the syllabary. Of considerable historic interest. Worksheets of WFF in his handwriting enclosed.

Item 563

Anonymous, An Operator's Cipher, source and date unknown, but probably 1915.

This cipher was to be used in radio work for enciphering for transmission the name of the sending detachment, its location, the date and hour, the tactical number, the address and the signature of the message. The cipher comprises four cipher alphabets which are identified by the letters A, B, C, and D. The operator putting these parts of the message in cipher may use, at will, any one of these four alphabets and indicate to the receiving operator which one has been used by sending the indicating letter as the first letter of the first cipher group.

Item 564

U.S. Navy, Initial Solution of the Kryha Ciphering Machine, Washington, DC: Navy Department, Pamphlet No. 8, 1931, 25 pp.

Photostat negative. Another example of work done originally by WFF being issued by another department with no credit given.

Item 565

U.S. Navy, Problems on the Kryha Ciphering Machine, Pamphlet No. 9, Office of the Chief of Naval Operations 1931, 15 pp. Photostat negative.

Item 566

Navy Department, Subsequent Solution of the Kryha Ciphering Machine, Office of the Chief of Naval Operations, 1931, 24 pp. Another of the Naval Instructional Pamphlet, No. 12. Photostat – Neg.

Item 567

Navy Department, Solution of a Columnar Transposition Cipher, Washington, D.C.: Navy Dept. Pamphlet No. 14, 1931, 13 pp.

Photostat negative. An instructional pamphlet on this common type of cipher. Elementary Instruction Pamphlet.

Item 568

Friedman, William F.

Christmas cards in cipher and cuneiform and a party invitation. All originated by WFF.

Item 569

No card, no item

Item 570

Sherwin, Oscar, Benedict Arnold, extract from 274-279; New York: Century Co., 1931.

A biographer of Benedict Arnold relates again the cryptographic incident concerning Arnold's attempt to deliver the garrison and the buildings of West Point to the British, in return for money. This is believed to be the most detailed exposition of the codes and ciphers employed. Photostat positive.

Item 570.1

Copy of **Item 570**.

Item 571

Brown, O.F., "Secret Radio Telephony Systems: A Review of the Problems Involved and Solutions Suggested," Wireless World, London: June 8, 1927, pp. 713-716 and June 15, 1927, pp. 763-765.

Photostat negative of a two-installment article on ciphony and radio telephony. Obviously, one of the very earliest of the attempts to provide secrecy in these forms of communications other than the use of codes and ciphers as such.

Item 572

Volts, James D., Bibliography of Cryptography? Letter of receipt in separate envelope.

Item 573

Samuelson, Sten G., "Invisible Writing," The Police Journal, Vol. 24, 6 (April, 1938), 7 (May) and 8 (June), pp. ***.

Article in three installments. Translated by J.J. Germain, from an article in Nordisk Kriminal Teknisk, Vol. 7, No. 9. An article of a general nature dealing with secret inks and the like, and methods for recovering the secret message. Original article included. Has a short bibliography.

Item 574

Yardley, Herbert Osborne, "Codes," The Saturday Evening Post 203, 42, (April 18, 1931), pp. 16-17, 141-142.

Pre-publication extracts from the author's (then) forthcoming book, The American Black Chamber. Illustrated.

Item 575

Yardley, Herbert Osborne, "Secret Inks," The Saturday Evening Post, 203, 40, (April 4, 1931), pp. 3-5; 140-145.

Pre-publication extracts from the author's (then) forthcoming The American Black Chamber. See also David Kahn, The Reader of Gentlemen's Mail, pp. 111, 146-148, 156.

Item 576

Yardley, Herbert Osborne, "Ciphers," The Saturday Evening Post 203, 45, May 9, 1931, pp. 35, 144-149.

Pre-publication extracts from the author's (then) forthcoming book, The American Black Chamber. Picture of R.H. van Deman and picture of Yardley. See also David Kahn, The Reader of Gentlemen's Mail, p. 111.

Item 577

Yardley, Herbert Osborne (Major), "H-27, The Blonde Woman from Antwerp," Liberty Magazine, Vol. 2, No. 2, 16, (April 21, 1934), pp. 22-29.

A romantic tale involving ciphers. "We all make mistakes," she said, and fell into Greenleaf's arms, dead.

Item 578

Riddle, John Major (pseud), "The Literary Black Chamber," Vanity Fair, (September 1931), pp. 72-73.

Photostats negative and positive. An extremely amusing satire on Yardley's The American Black Chamber. "WFF thinks that John Riddell is none other than James Thurber, who served as an official State Department cryptographer in WWI and probably came into contact with Yardley during that period." (Hand written note by ESF). See **Item 812**.

Item 579

Yardley, Herbert Osborne, "Are We Giving Away Our State Secrets; A Cipher Expert's View of the Methods Used by the Government in Its Diplomatic Correspondence," Liberty, December 19, 1931, pp. 8-13.

An article in which Yardley alleges important weaknesses in the State Department codes and ciphers. Original copy and photostat negative. WFF rates these as antiquated codes. He asks "Why was the Black Chamber Abolished? Did we stop reading diplomatic traffic?" See also, David Kahn, The Reader of Gentlemen's Mail, p. 139.

Item 580

Yardley, Herbert Osborne, "The Beautiful Secret Agent," Liberty, (December 30, 1933), pp. 30-35.

A romantic tale involving ciphers. Major Yardley makes the most of the reputation he gained from the fiction masquerading as the truth in The Black Chamber and started writing fiction as fiction. See also David Kahn, The Reader of Gentlemen's Mail, p. 150.

Item 581

Verne, Jules, "Études Littéraires: Edgar Poe et ses oeuvres," Musée des Familles 31, (April, 1864), pp. 193-208.

One great writer writes of another. Illustrated.

Item 582

Beaufort, Admiral Sir Francis, Cryptography. A System of Secret Writing, Adapted from Telegrams and postcards; London: Edward Stanford, 12, 13, 14, Long Acre W.C. n.d.

This folder contains two photostatic copies of the so-called "Beaufort Cipher." One copy is assembled in a form which corresponds to the original form in which it was published. There are many references to this system in cryptographic literature. It is, however, only a very minor variation of the Vigenère system. A rather rare item. See Galland, p. 19; Cf. David Kahn, The Codebreakers, pp. 202-204.

Item 583

Brown, Rawdon, "History of Italian Cipher," Calendar of State Papers and Mss. Relating to English affairs existing in the archives and collections of Vienna, Vol. II, London 1867, Appendix II, pp. LXIX-LXXII.

Photostat positive of a brief discussion of Italian State Ciphers from 1471-1654. Historically very important for the professional cryptologist interested in the history of the subject.

Item 584

Lansing, Robert, War Memoirs of Robert Lansing, extracts from Indianapolis: Bobbs-Merrill Co., 1935, Chapter XVI- Armed Neutrality, Chapter XXII Publicity and Secrecy.

Photostat negative. The WWI Secretary of State relates in his memoirs matters such as those pertaining to the conflict between publicity and necessity for secrecy, the Zimmermann Telegram, etc. also the behavior of certain unaligned governments, and the means used by the U.S. to counter such behavior against the interests of the U.S.

Item 585

No card, no item

Item 586

Hoare, Sir Samuel, The Fourth Seal, extract from (p. 57), London: William Heinemann, 1930.

A member of the British Mission in Moscow states that the Russians were reading all codes and ciphers of the British during WWI. Two photostat positives and one negative. The

concluding statement is an astonishing assertion hardly believable in its implication. 2 photostat positives, 1 photostat negative. “One of them implored me as a friend and ally to ask the British Foreign Office to change a cipher that could be read almost as early as the daily paper.”

Item 587

Everitt, Nicholas, British Secret Services During the Great War, London: Published by Hutchinson 1920, pp. 82-96, 236-237.

Photostat negative. Grammatical code used for sea work. Discusses the sinking of the Lusitania. The French Secret Service knew that prior to WWI, the Germans had made many secret surveys of France, particularly off the northern territories and provinces. The French obtained copies and notices that one of these survey maps had been ruled up with diagonal, lateral and parallel lines dividing the country up into squares. Precisely as one would find on a chess board. It was not much of a surprise, therefore, when a chess puzzle was intercepted from the Germans and when compared to the “chessboard” map, it was an exact match. The French War Office was able to plot out all of the reserve forces behind their front lines, posted in the exact positions as on the map: Pawns represented infantry, Kings represented artillery, Queens - field artillery, Knights – cavalry, Bishops - air divisions, and Castle - military headquarters.

Item 588

No card, no item

Item 589

No card, no item

Item 590

Johnson, Edward D., Don Adriana’s Letter, London: George Lapworth & Co. Ltd., 1948, 2nd enlarged edition, 31 pp.

This product of the labors of Mr. Johnson has no more validity as a cryptographic system than have any of his other products. This copy is a gift of Count L.L. de Randwycke of Aerdenhout, Holland. The author also produced “The Bi-Literal Cipher of Sir Francis Bacon” and “Francis Bacon’s Cipher Signatures.”

Item 590.1

Second copy of **Item 590**. A gift from the author.

Item 591

No card, no item

Item 592

Gylden, Yves, “Notes sur l’espionomanie.”

Photostat negative of pp. 669-676. Comment regarding the famous Dreyfus case, as an example of what “spy-mania” will lead to. **Item 449.1** is a reprint of this article. Gift of the author. On Dreyfus, see David Kahn, The Codebreakers, pp. 254ff.

Item 593

Walchius, Joann (Pseud.), Decas fabularium humani generis sortem, etc., Argentorati: Sumptibus Lazari Zetzneri MDCIX 67 leaves, 1609.

This item is not at all well known in cryptologic bibliographies. Pages 189-224 deal with cryptology. According to the recollection of WFF, the author’s real name was discovered after some excellent literary detective work by his friend, the late Dr. Charles J. Mendelsohn. See WFF’s notation inside. The author’s true name was Johann Grasshof. See Galland, p. 196. This copy was photostated from a photostat negative loaned by Dr. Charles J. Mendelsohn who tracked down a reference to A. Walchius in the literature. He discovered a copy at the University Library of Breslau.

Item 594

Mamy, Henri, “La Cryptographie,” Science et Guerre, Paris: Bernard Tignol, Editeur, 1888, Chapter II, pp. 51-99.

The preceding **Item 416** forming chapter II of the book indicated above.

Item 595

Rowan, Richard Wilmer, Spy and Counterspy, New York: Viking Press, 1928.

Photostat negative of Chapter V, pp. 87-110, and some pages of Chapter VI. These excerpts deal with ciphers used in espionage. World War I incidents. The writer was possibly a journalist; he was certainly no one with a knowledge of codes and ciphers. The concealment type necessarily employed by spies and saboteurs may be accurate as related herein, but nothing else is. For example, what is stated about “Fabian” on pp. 98. “Using carrier pigeons was so common a practice that all troops at the front were commanded to shoot any pigeon seen flying toward the enemy. One such pigeon was brought down and was found to have been painted bright colors resembling a parrot. It being some spy’s belief that a parrot in Flander’s field would attract less attention than a pigeon. Balloons were used and German snipers would shoot them down so they fell in the proper area.

Invisible inks.

Using planes to drop spies over the front lines of the enemy.

The Poe cipher

Aristagoras and Histiaeus' tattoo, on which see Sheldon, EAW.

Dictionary ciphers.

Item 596

Foreman, Grant, Sequoyah, Norman, OK: University of Oklahoma Press, 1938, 90 pp.

Sequoyah was a Cherokee Indian who “invented” an alphabet for writing the Cherokee language, for which he was awarded a medal by the General Council of Cherokee Nations. This was a remarkable feat considering that the alphabet for writing the languages of the Old World apparently was invented once and only once. Page three states the following: “Sequoyah is celebrated as an illiterate Indian genius who, solely from the resources of his mind, endowed a whole tribe with learning. The only men in history to conceive and perfect in its entirety an alphabet or syllabary.” See **Items 596.1**, pp. 1-2. **Item 612**, and **863** pp. 175-177. The latter is in a book written by the greatest living authority on the alphabet.

Item 596.1

Anonymous, “Sketch of Sequoyah, Inventor of the Cherokee Alphabet: Indian Leader, 17, 21 (January 1914). Printed at Laurence Institute, Kansas, by student apprentices, 2 pp. See website for Cherokee language.

The inventor of the Cherokee alphabet, Sequoyah, is lauded in the leading article. This gifted Indian's American name was George Guess, sometimes written as Gist. He was a soldier in the War of 1812.

Item 597

Candela, Rosario, The Military Cipher of Commandant Bazeries, an essay in decrypting; New York: Cardanus Press, 1938, 137 pp.

The many footnotes are a tribute to the author's learning. A gift to WFF. Copy A. The author writes what amounts to a diatribe against all professional cryptologists. WFF thought it was a beautiful book, but it was too bad the author needed nearly 150 pages to explain an “achievement” which could have been described in no more than a dozen pages. After page 137 of this work, it is stated that the author had the first 100 copies printed on rag paper and these were presented to the persons he names in several accompanying lists. What WFF calls a “diatribe” is merely the idea that the military and government discourage knowledge about cryptography and spurn outside cooperation. He finds this attitude indefensible and dangerous. Candela believed cryptography was in the domain of culture and, as such, was the heritage of man. Any humble mortal may try his hand at it. The word “Cryptographitis” was coined by Bazeries who describes it as “an all-pervading, incurable malady.” “The moment it grips you, it

rapidly spreads its tentacles to the most recondite corners of your nervous system, and stays there, never to leave you again. In its virulent forms, it gives its victims delusions of grandeur.”

Item 597.1

Christmas card from LTC Arnaud (Labeled **Item 845**), Extract from the Military Cipher of Commandant Bazeris, An Essay in Decrypting by Rosario Candela; New York: 1938, Photostat negative, pp. 68-71. Also “Mortal Cryptographer,” New Yorker: July 24, 1943.

Candela was an architect; he’s Italian. There’s nothing occult about cryptography. Candela wanted it taken away from “the priests.” He also disliked Yardley’s arrogance. He taught the subject at Hunter College (night school).

Item 598

Poe, Edgar Allan, “Secret Writing,” Graham’s Magazine, (July, 1841).

Miscellaneous photographs, negatives, and correspondence dealing with WFF’s articles on Poe. This important essay of Poe’s on cryptology was published in one of the leading magazines of the day. See also enclosures and **Item 417** or **417.1**. WFF thinks that a good deal of Poe’s articles were cribbed from encyclopedias of the day. A biography of Poe would not be definitive unless Poe’s various writings on cryptography were considered. The correspondence in **Item 598** is of considerable interest (1930s). Valuable for anyone studying Poe as a subject for a biography.

Item 599

Dlandol, Le Contr’Espion ou les clefs de toutes les correspondances secretes, Paris: Chez le Veuve Guillot, Imprimerie-Libraire 1793, 96 pp. and 2 plates.

Important item in the history of cryptology. Note the date. See Galland p. 56.

Item 600

Russell, C.E., Espionage and Counter-espionage, extract from, New York, 1925. Photostat negative of Appendix III, “Codes and Ciphers” pp. 224-253.

This appendix cites many “do’s and don’ts” for military codes and ciphers. Major Russell was a knowledgeable officer. This item contains the first public revelation of Device M-94, the cylindrical cipher device. Among the recommendations: Never use coded and uncoded words in the same message, Never send a message code previously sent uncoded or vice versa. Never attach a decoded message to an encoded message. Also discusses Col. George Fabyan, Francis Bacon’s biliteral cipher, Playfair cipher, etc.

Item 601

No card, no item

Item 602

Fabyan, George (Col.), What I Know About the Future of Cotton and Domestic Goods, Chicago: Marshall-Jackson Co., 1900.

Fabyan was a member of the important corporation Bliss, Fabyan & Co. of Boston, Chicago and New York. This book is a “spoof” in that its pages are completely blank. This was Fabyan’s way of telling friends who asked for “tips” on the cotton exchange that he knew nothing about cotton futures. Autographed by Fabyan, the last four pages were used by WFF as the beginning of a diary when he left the U.S. as the 1st Lt. for service in France in 1918.

Item 603

Ewing, Alfred W., The Man of Room 40; the Life of Sir Alfred Ewing, London: Hutchinson & Co. Ltd., 1939, 295 pp.

An extremely interesting and important account of the work done by the British cryptanalytic service in WWI, written by the son of Sir Alfred Ewing. The author tells something about his difficulties in obtaining permission of the British Government to publish the portions dealing with the activities of Room “40 OB.” Although this was more than 20 years after the end of WWI, Ewing Sr. became Sir Alfred. He had been director of Naval Education before that fateful August 4, 1914 when he was immediately charged by the Director of the Intelligence Division, Admiralty War Staff to begin endeavors in the cryptologic field. An extremely detailed index increases the utility of this volume.

A gift of Professor E. R. Vincent, Corpus Christi College, Cambridge, England. On the fly leaf, WFF has placed a list of special interest. The final paragraph on page 208 implies that the British Cryptanalytic Bureau was closed after WWI. This is not true. The story in regard to the Zimmermann Telegram follows the usually published versions which are in reality incorrect. The footnote at the bottom of page 240 implies that in The Scotsman (Edinburgh) for Nov. 7 1925, there was a previous disclosure of the Zimmermann Telegram episode. Actually, it was the issue of 14 November, but following this lead, WFF found that it refers to the long-defunct magazine World’s Work issue of November 1925, in an article by Burton J. Hendrick (**Item 346**). Sir Alfred did not finish out the war in Room 40; in poor health, he retired to Edinburgh and his teaching. See the handwritten note by WFF in folder **603** telling about a luncheon on October 8, 1961 with Brig. Gen. John and Tempe Tiltman at their home in Annapolis. Present were Joshua Cooper of GCHQ, formerly GC & CS and Room 40 OB. Cooper tells a story of the deciphering of German codes because of a codebook found on a dead German sailor which

enabled Paymaster Erwin Rotter to solve the super encipherment and read the traffic. Cf. David Kahn, The Codebreakers, pp. 266ff.

Item 604

Yardley, Herbert Osborne (Major), The American Black Chamber, Indianapolis and London: The Bobbs Merrill Co., 1931, 375 pp. Reprinted in New York, 1933, London: 1934. 2 copies, one with DJ.

This item, a copy of the original edition with the whole of the dust jacket, is replete with notations by various persons who were connected with the operations of the so-called "American Black Chamber" during the years 1918-1929. The FC includes numerous reviews of this major indiscretion in a field which demands high security of its workers. This book stirred up an enormous amount of interest in the U.S. Many of the accounts of cryptanalytic achievements are exaggerated and distorted. The book was written not so much to give a truthful account as to glorify its author. Galland, p. 206 says that "it is romantically exaggerated, somewhat inaccurate but a very interesting book, containing information concerning methods and examples of deciphering, details of historical interest, codes, and statistical data. The FC has another copy of the first edition which was presented to him by the widow of LTC John McGrail, Signal Reserve, who, as captain in Military Intelligence, was the head of the secret ink division of the "Black Chamber" during WWI. Both copies are valuable for the reason that this book cannot be reprinted in the U.S. because an act of Congress known as "An Act for the Protection of Diplomatic Codes," was passed in 1934, when it became known that Yardley was about to publish another book making further revelations of U.S. cryptanalytic activities. See also **Item 604.1**, **604.2**, and **604.3**. The FC contains everything published by Yardley and several unpublished items. Various editions of this book, in English, French, and Japanese. See, for example, WFF's handwritten note at the top of p. 20 which debunks a "solution" story of H.O.Y.'s - a case of an agent procuring a copy of the French dictionary used, so that the American Black Chamber had only clerical workers to read the messages cited by Yardley. Also see notes on pp. 140-141 re the "Waberski Message." Copy No. 2 of **Item 604** was a gift of the widow of Col. John McGrail. The latter played a prominent role as the Chief of the Secret Inks Section during WWI and in the American Black Chamber for a time after; he then taught at Providence College, Rhode Island, but returned to government service in WWII, and died suddenly in May 1945. See the Washington Star clipping attached to the fly leaf. See also the typescript and handwritten note of WFF re a quotation from a review of the book in a London newspaper (author of review unknown). Note the annotations in the copy with the DJ. "Some time in 1942, McGrail told me that he had it on most excellent authority that this book was actually "ghost written" by an AT&T Engineer named Clem Koukul, who received \$1,000 for his work. WFF didn't know Koukul, but felt Yardley had much help from somebody in writing the book. WFF interviewed Yardley with the permission of the G-2 as to why he was publishing his book. He said:

- 1) To support his wife and child.
- 2) To demonstrate the unpatriotism and naiveté of the Secretary of State (Stimson).
- 3) To prepare the ground for his future livelihood.

He had previously had a government sinecure, and a real estate job. They both fell through. WFF wanted to prove Yardley a liar about the inadequacy of the AEF Field Code. He believed Yardley colored up each story to suit himself. To show Yardley compressed three months into 24 hours to give a “rapid solution” to a code. See also, David Kahn, The Reader of Gentlemen’s Mail, 105-136, 203-204.

Item 604.1

Yardley, Herbert Osborne (Commandant), Le Cabinet noir américaine, (The American Black Chamber), Paris: Bibliothèque d’histoire politique militaire et navale n.d. but probably 1935 [at end Bar-le-duc Imprimerie Compte - Jacquet, 1935], 249 pp. Translated by E. Rinon.

The French translation of the preceding **Item 604**. Enclosed is an English translation of the Foreword by the French editor of this French edition. It is deemed of interest not to mention that the first paragraph of Chapter One of the original edition in English is omitted from the French edition. This is perhaps because the French suspected what Yardley said in the above named paragraph, “the secret activities of the a-b-c, which directed ceased in 1929 . . . “was a misstatement of fact.” The translation seems to be a good one.

Item 604.2

Yardley, Herbert Osborne, Buratusuku Chiemba, Japanese translation of The American Black Chamber, Tokyo: 1931, 467 pp.

Translation of **Item 604** into Japanese, The title Buratusuku Chiemba, of course, means Black Chamber. This Japanese version caused a great furor in Japan and aroused not only the anger of the Jingoists and the war party in that country, but also caused some bitter feelings among Japanese people in general. The reason for this was that the book describes how at the Washington Disarmament Conference in 1922, American State Department officials engaged in negotiations allegedly receiving translations of the messages between the Japanese Representatives at the Conference and their superiors in the Foreign office in Tokyo. Enclosed is a note entitled: Japanese translation of The American Black Chamber. This should be read for its useful information and criticism of the translation.

Item 604.3

Yardley, Herbert Osborne, Secret Service in America, the American Black Chamber, London: Faber & Faber, Ltd., 1940, 265 pp.

This is the London edition of the preceding **Item 604**, but with a different title. However, it bears the sub-title The American Black Chamber. This London edition was first published in 1931 as The American Black Chamber. A second impression was issued in 1937. The first time the book was published with the title, The Secret Service in America, was 1940, and this item in the FC is the latest named edition. The copy was presented to WFF, “with the compliments and gratitude of H.M.G. on 19 March 1943.” The donor was a member of the British cryptanalytic organization during WWII but the letters H.M.G. are not the initial letters of the donor’s name. They stand for “His Majesty’s Government.”

Item 604.4

Stevens, David H., Typescript of Commentary Prepared by Dr. Stevens on The American Black Chamber, 15 pp.

David H. Stevens was a member of the staff of MI8 during WWI. Later he became Director of Humanities, The Rockefeller Foundation 1930-1950. Dr. Stevens places this “assessment” of MI8 and Yardley’s book in the Library of Congress to “be bound for easy reference in conjunction with the text.” Even though the author of this item was a member of MI8 in WWI, there are many inaccuracies. Page 1: “No contemporary estimate of its contents appeared, in the two years since its printing, no individual aware of details behind its pages has made public comment.” Not true! The reviews and editorial comments and criticisms were legion. Page 2: “William H. Friedman, in close contact with [Manly] also came to Washington.” Not true. WFF was at Riverbank Laboratories until June of 1918; at GHQ AEF from June to November 1918 and stayed there by orders to write up the history of the Code and Cipher Section at GHQ, AEF from whence he returned to the U.S. in April of 1919. Page 2, para. 2: Final Sentence - the “report” was a rumor, a war story fiction, and the instruction of personnel in MI 8 certainly did not come from “the trunk full of books brought by WFF from Riverbank Laboratories.” WFF was never in MI8 in Washington, no trunk full of books was EVER sent to MI 8 from Fabyan. Although WFF and ESF had deciphered secret messages for all departments of government from the very beginning of the war and though at least the first seven months before MI8 was launched, what MI8 had as a gift was the solution of such messages in the files, and thus they had “cribs” even before beginning work on spy ciphers and the like. (In practically every mention since WWI of Col. Fabyan or of WFF, this above-mentioned fact has never been stated, at least to the knowledge of WFF and ESF. Page 5, re a new code made in three weeks for use at the peace conference: “The code gave total secrecy of communications across the Atlantic.” The implication here is that the secrecy would be eternal. That is true of no code. It gives “total secrecy” only so long as an enemy has not acquired sufficient copies of messages to begin to “read” those messages in whole or in part. Page 6: It was [Professor] Knott whose technique finally disposed of the Baconian claims of Col. Fabyan on the authorship of Shakespeare. NOT TRUE. Nobody, not even any group of persons was ever quite able to silence or dispose of the world-furor raised by the Gallup-Fabyan claims. Page 8: Yardley’s description, here quoted

concerning his night time flash of genius which solved the Japanese code, is part of Yardley's fiction. The fact is that Livesey made the original solution. The remainder of Dr. Steven's long commentary is devoted to "lessons" to be learned from WWI and from Yardley's book as he sees them. A later letter from Dr. Stevens stated that he had indeed sent the commentary to the Library of Congress, although WFF recommended that he not do so. Other items in the file:

- 1) Photo of Yardley's Black Chamber Group, but Yardley was away.
- 2) Yardley's obituary, Washington Post, Friday, August 8, 1958.
- 3) Sadao Asada, "Japan's Special Interests" and the Washington Conference, 1921-22," AHR 67,1 (October 1961), pp. 62-70.
- 4) Review of The American Black Chamber by Carl van Doren in The New Yorker, August, 1931, pp. 18-19.
- 5) Copy of War Department Directive on "Preservation of Secrecy in Regard to Code and Cipher Work." WFF believes it was drawn up by Yardley and yet this was the very rule he broke by writing The American Black Chamber. On Yardley, see David Kahn, The Codebreakers, ch. 11 and David Kahn, The Reader of Gentlemen's Mail.

Item 604.6

Yardley, Herbert O., The American Black Chamber, New York: Blue Ribbon Books, 1931.
HB no DJ.

Item 605

Aurand, A'Monroe, Jr., Cryptograms, No. 2, How to Solve Them and the Answers, Harrisburg: The Aurand Press, 1932, 48 pp.

A small book of the most simple type of cryptograms, with solutions. Short introduction. Another example of the appeal which cryptograms hold for the general public. Another edition was published in 1931. See Galland, p.10.

Item 606

Morton, Lt. C.G. and Lt. H.H. Bandholtz, Manual of Military Signaling for the use of the Regular Army, National Guard, Military Schools and Colleges, Fort Thomas, Newport, Kentucky, 1894, 57 pp.

Next to Myers, the first Chief Signal Officer of the Army, this book appears to be the very first manual of instruction on military signaling in the American Army. Instructions for the use of the U.S. Army cipher disk are given on pp. 42-43. Contains paragraphs (pp. 114-119) devoted to ciphers. Very rare and valuable even in photostatic form. This copy is an original. Once the property of 1st Lt. Charles de F. Chandler, Signal Corps USA. This publication was not an official document, having been put on sale at a price of 50 cents.

Item 607

Baudouin, Roger (Capitaine), Elements de Cryptographie, Paris: A. Perdone, 1939, 336 pp.

Autograph to “Mr. le Colonel Friedman en souvenir des heures passées en Alsace en 1918, avec la 32 D IV S - 14 Février 1942. R. Baudouin.” Unfortunately WFF has no recollection of having met Capitaine Baudouin in 1918. Captain B worked with British cryptologic organization after the fall of France in WWII. He was killed in an airplane disaster during this service with the British. Attempts have been made to have this book translated into English and published by a commercial publishing house in London by certain Englishmen were unsuccessful. See correspondence file under Stevens, Geoffrey

Item 607.1

Baudouin, Roger (Capitaine), Elements de Cryptographie, Washington, DC: GPO, 1946, 212 pp. Restricted.

Translation of **Item 607** made by Dr. Albert E. Highley of the Army Security Agency, and autographed “to my esteemed mentor Mr. Friedman.” This translation was, of course, never put up for sale by the Superintendent of Documents, GPO. WFF thought poorly of the 1941 translation (**Item 607.2**) made by Lt. Boone (Navy Censorship Office) hence requested this 1946 translation by Dr. Highley. 2 copies.

Item 607.2

Baudouin, Roger (Capitaine), Elements de Cryptographie, Paris: A. Perdone, 1939, 408 pp.

Another translation of the Baudouin book made by Lt. Boone, an officer in the Naval Censorship Office in 1941. Carbon copy of a typescript. Also three bound copies.

Item 608

Flynn, John T., The Roosevelt Myth, New York: Garden City Publishing Co., 1948*

*Actually this is a reprint of the 1948 edition of Devin-Adair and bears the date 1949.

Further diatribes against FDR and his alleged double dealing with the American people.

Item 609

Pélissier, Léon G., “La cryptographie de Simon-Cattaneo - Note sur quelques documents cryptographiques italiens,” Memoires de la Société Nationale des Antiquaires de France, Paris: 56, (1895), pp. 161-192.

Another discussion of Italian cryptographic documents. The paper was read at the meeting of the 8th of November 1893. The first few pages (161-177) contain a discussion in French of the work of Cattaneo, followed by four letters in Italian by Cattaneo, the first one dated 20 June 1499, last one 19 July 1499.

Item 610

U.S. Army Signal Corps, Signal Book, United States Army, Circular No. 7, with changes No. 1, Washington, DC: GPO, 1912, 83 pp.

A general manual for telegraph and radio operators and for locating and operating signal stations. A historically important item, reflecting early usage of radio-telegraphy in the U.S. Army. Published when James Allen, B.G. was Chief Signal Officer of the Army and approved by the order of the Secretary of War, Leonard Wood, Maj. General, Chief of Staff. "The Changes No. 1" enclosed consist of 11 pages of such changes by a new C.S.O. George P. Scrivener. The document is full of historical information.

Item 611

Arnold, Benedict, Benedict Arnold's Treasonable Cow Letter, South Hadley Falls, MA: Hampshire Paper Company, 193?

Dated two weeks before the plot to surrender West Point was exposed by the capture of the British Spy, Major Andre. This apparently innocent communication was in code that has never been deciphered. This is an interesting specimen of what is often called "open code," in which veiled language is used to express certain pre-arranged meanings. Other items in the FC contain additional examples of secret messages sent by Arnold in his plot to sell West Point to the British. 6 copies.

Item 612

Wenger, Joseph (Lt.), Recognition Tactics in the Battle of Jutland, Washington, DC: U.S. Navy, Office of Naval Operations, March 1932, 31 pp.

The problem of recognition and identification is one of very considerable importance in the field of cryptology. Dedicatory note: "To WFF in appreciation of many years of fine cooperation." Joseph N. Wenger, 28 April 1942. Xerox. 2 copies.

Item 613

Anonymous, Sequoyah, Statue of, Proceedings in Statuary Hall of the U.S. Capitol upon the unveiling and presentation of the statue of Sequoyah by the State of Oklahoma, Washington, DC: GPO, 1917, 65 pp. House document No. 240.

It is believed that the American Indian named Sequoyah accomplished a feat of very great importance, for entirely unaided, he developed an alphabet for writing the language of his tribe. It is quite possible that he had no knowledge of the mechanics and virtues of an alphabet such as that used for English and other alphabetic languages when he accomplished this feat. This document contains the addresses made by many senators and representatives giving voice to laudatory tributes to this remarkable and untutored Native American.

Item 614

Signal Corps, U.S. Army, Converter M-209, M-209A, M-209B (cipher), Technical Manual 11-380, Washington, DC: GPO, May 1947, 170 pp.

A technical manual on the use of the Hagelin cryptograph which in the U.S. Army was designated as "Converter M-209." In those days it was considered a security violation to refer to such things as "cipher devices" or "cryptographic machines."

Item 615

Stilhane, H., Hemlig Skrift, coder och chiffremaskiner; Stockholm: Lindfors Bokforlag, 1934, 279 pp.

Hagelin told him that most of the material in this book was lifted from here and there by the author and that there was nothing original or of importance in it. Gift to WFF by Boris Hagelin and autographed by him.

Item 616

Ceiller, Rémi, La cryptographie, Paris: Presses Universitaires de France, 1945, 134 pp.

A French doctor of science writes a text on elementary cryptography treating simple transposition and substitution methods. Purchased by WFF in Paris: 23 October 1946.
2 copies.

Item 617

Galland, Joseph S., An Historical and Analytical Bibliography of the Literature of Cryptology, Evanston, IL: Northwestern University, 1945, 209 pp.

This volume was published as No. 10 in "Northwestern University Studies in the Humanities." This book is dedicated and autographed to WFF. An obituary of Professor Galland in the Northwestern University Alumni News will be found inside the front cover. It is by far the most extensive and the most scholarly bibliography of the subject produced thus far by any person in any country. On p. 210 will be found an explanation of the marginal notes referring to the items in the Mendelsohn Collection at the University of Pennsylvania. Numbers preceded by

the letter F refer to items in the Friedman Collection. Photostat negative copy in a 3-ring black binder.

Item 617.1

Galland, Joseph S., An Historical and Analytical Bibliography of the Literature of Cryptology, Evanston, IL: Northwestern University, 1945, 209 pp.

Photostat positive, gift of Professor Galland, of **Item 617** minus preface and perhaps other such parts as appear in the book. This is copy # 1. Copy #2 - positive photostat was given to the American Cryptogram Association and sold to add to their much depleted treasury some years ago.

Item 617.2

Review of Galland's book An Historical and Analytical Bibliography of the Literature of Cryptology by Albert H. Carter. Typescript: carbon, unpublished. Prepared for circulation in wartime organization. Includes a list of works by Galland left out.

Item 617.3

Galland, Joseph S. and WFF, Correspondence in re his book An Historical and Analytical Bibliography of the Literature of Cryptology.

Item 618

Harris, Frances A., (S-Tuck), Solving Simple Substitution Ciphers, Burton, Ohio: The American Cryptogram Assn., 1943, 42 pp.

This publication of the American Cryptogram Association aims only at what is stated in the title and is good so far as it goes. On her publications see Galland, pp. 84-85.

Item 619

Hulbert, J.R., "John Mathews Manly," Modern Philology 38, 1 (August, 1940), 8 pp.

This is a memorial to John Matthews Manly of the University of Chicago, greatest of Chaucerian scholars. Professor Manly was with the Cipher Bureau in Washington for a time in WWI, having previously been known as an amateur cryptographer of some note. This reprint was sent to WFF "with the compliments of the English Department and the Alumni Office." Beautiful photograph of Manly on the frontispiece.

Item 620

Smith, Laurence Dwight, "Wanted: Books on Cryptography," Publishers Weekly, March 20, 1943, pp. 1264-1268.

A curiosity of advertising with regard to books on cryptography. Its utility is very dubious. Two copies. Copy 1 is the original sent to WFF with “Compliments of Mrs. K. N. Rosen” who operated the International Book Service and with whom WFF had a considerable correspondence. 2 copies. Short bibliography. Also refers to the “faintly romantic subject of cryptography” and “crypto taught at universities.”

Item 621

Meister, Aloys, “Zur Kenntnis des Venetianischen Chiffrenwesens,” Historisches Jahrbuch, München 17 (1896), pp. 319-330.

A treatise on Venetian cipher systems.

Item 622

Tolosani, Demetrio, “Storia dell’ Anagramma,” Almanacco Italiano, Vol. 45, Firenze 1940.

An Italian article on anagrams, with many examples not generally found in the literature of that type of cryptogram. Not mentioned in Galland. WFF feels some uncertainty about the authorship. In the same binder as **Item 623**.

Item 622.1

Scelbi, I., “La guerra delle onde,” Almanacco Italiano, Vol. 45, Firenze, 1940, pp. 151-160.

An Italian writes about the radio war, spies and cryptography during WWI. In the same binder as **Item 622**.

Item 623

Richer, Casseliet and Pons, Langue Imaginaire et Langue Secret Chez Swift, 44 pp.

Photostat of a work on various words in Swift’s Gulliver’s Travels (**Item 1748**) that are undoubtedly cryptologic in nature. The three authors in **Item 623** attempt to unravel the Swift terms. Three articles published in a French journal Cahier du Sud. A fourth section is a French translation of Swift’s “Letter to Milord Oxford.” It deals with a proposal for “the correction, perfection and fixing of the English language.” See Encyclopedia Britannica, Swift entry. Swift anticipated G.B. Shaw and James Joyce by about two centuries.

Item 624

Mendelsohn, Charles Jastrow, “Cardan on Cryptography,” Scripta Mathematica 6, 3 (October 1939), pp. 157-168.

Another scholarly paper on grille ciphers, first described by the mathematician Jerome Cardan. Beautiful engraving of Cardan. See Sheldon, EAW, 72-76. 4 copies.

Item 625

Hermann, Arthur Joseph, Nouveau système de correspondance secrete, Méthode pour chiffrer et dechiffrer les dépêche secretees, Paris: A. Hermann, Librairie Scientifiques 1892, 23 pp.

The author of the preceding item writes on a method of enciphering and deciphering secret dispatches. Stresses cryptographic sides of secret messages. Cf. Galland p. 88.

Item 626

Mendelsohn, Charles Jastrow, “Blaise de Vigenère and the Chiffre Carré,” Proceedings of the American Philosophical Society, March 22, 1940, Vol. 82, No. 2, pp. 103-129.

Dr. Mendelsohn writes in a scholarly fashion of the Vigenère system. Dr. Mendelsohn died suddenly on September 27, 1939 after this notable paper was prepared but undelivered as an address, or published. WFF was the natural person to proofread and see it through publication, since WFF was named by Dr. M’s family to be the latter’s literary executor. For details of Dr. Mendelsohn’s distinction, see the editors footnote on page 1. 4 offprints.

Item 626.1

Mendelsohn, Charles Jastrow, “Blaise de Vigenère and the Chiffre Carré,” Mendelsohn’s original manuscript of the article, **Item 626**.

This is the first genuinely scholarly treatise on the Vigenère cipher square. Dr. Mendelsohn, after many years of study of this so-called Vigenère cipher says that “Vigenère does not claim to have invented the cipher,” which enjoys an exaggerated reputation for safety, even today. He adds that Vigenère’s only original contribution to the cipher has never been credited to him, namely the shifting coordinates for the plain text and key letters. For further details, read this paper. It is one of the truly important documents in the history of cryptography.

Item 626.2 and 626.3

Mendelsohn, Charles Jastrow, “Blaise de Vigenère and the “Chiffre Carré,” Proceedings of the American Philosophical Society, March 22, 1940, Vol. 82, No. 2, pp. 103-129.

Galley and page proof, with WFF’s corrections.

Item 627

Evans, John, The Evans Basic English Code, Chicago: John and Clarence Evans, 1947, 100 pp.

This is not a code in the military or diplomatic sense but an abbreviation code for stenographers, telegraphists, and the like, similar to the Philips Code, **Item 126**. For use in telegraphy, teletype, teletypewriter, telemeter, stenography, stenotype, Braille writing and alphabetic shorthand.

Item 628

Kühl, Heinrich, Geheimnisse und Lösungen Verschiedene Anwendungen der Gedächtniskunst, Darmstadt, 1912.

Substitution of numbers by colors.

Item 629

Freeman, T.J.A. (S.J.), "Cipher - "UOaO&IOU" - (.)," The American Catholic Quarterly Review, 18 (1893), pp. 858-849.

A historical item about the composition and solution of ciphers. Gift of Father Petersen. 2 copies. Original and 1 photostat positive. Cf. Galland p. 66.

Item 630

Milliken, Donald D., "The Japanese Morse Telegraph Code with some notes on the Japanese Language," QST Magazine, West Hartford, CT: 26, 9 (September 1942), pp. 23-25, 120.

QST is the official publication of the American Amateur Radio Relay League.

Item 631

Blair, William, "Cipher," Ree's Encyclopedia, London: 1809.

No pagination, only signatures. These boards contain the pages of an article of "Cipher" from an original copy of Ree's Cyclopedia which was first published in London in 1802. See Galland for an extensive comment. Very probably a unique item in the U.S. and certainly a valuable one in the FC. Very valuable plates in the back of the volume. Blair's "inscrutable" was solved by WFF who later learned the cipher had been solved by a Michael Gage. Mentions Aeschylus, Hieroglyphics, Pliny, fire signals, Romans, Cleoxenes and Democlitus, Polybius, Aeneas Tacticus. See, Sheldon, EAW. Cf. Galland p. 72.

Item 632

French, Norman R. and Charles W. Carter, Jr. and Walter Koenig, Jr., "The Words and Sounds of Telephone Conversations," The Bell Telephone Conversations, The Bell System Technical Journal 9, 2 (April, 1930), pp. 290-324.

Further important statistical studies by research workers led by Norman R. French. See **Item 435**.

Item 633

De Mille, James, The Cryptogram. A Novel, New York: Harper & Bros., 1871, 261 pp.

One of the earliest romantic novels employing a cryptogram. The FC includes most of such novels, a study of which would probably result in the production of a much better account of the use of cryptology in “whodunits” than Bond’s. See under Bond, **Item 873**. Illustrated.

Item 634

Gerber, John, “Secret Language of War,” Facts Magazine, Chicago 4, 2 (February 1944), pp. 13-18.

A journalist writes for a pulp magazine. A hodge podge of fragments he has picked up from numerous newspapers and magazines, plus perhaps a leak or two from untold sources. About our cryptographers breaking the Japanese naval code just before the Battle of Midway.

Item 635

Martens, Georg Friedrich von, Cours diplomatique, extracts from Berlin: A. Mylius, 1801.

Photostat positive, bound. A basic (for that time) but superficial treatise on cryptography for diplomats.

Item 636

Yule, G. Udny, The Statistical Study of Literary Vocabulary, Cambridge: Cambridge University Press, 1944, 306 pp.

A famous British statistician attempts to employ statistical methods in cases of disputed authorship. This item is of interest in connection with the Shakespeare-Bacon controversy. It is also interesting to note that the author discovered the theory and the principles of the index of coincidence as used in cryptanalysis and, moreover, adopted the very same Greek letter kappa as did WFF when he originated the concept in 1919-1920, first published in 1922 (See **Item 167**) to represent that Index. A gift from Walter J. Freed, Capt. Signal Corps, USA.

Item 636.1

Yule, G. Udny, “On Sentence Length as a Statistical Characteristic of Style in Prose; with application to two cases of disputed authorship,” Biometrika, Vol. 30, Parts II & IV, (January 1939), pp. 363-90.

Excerpts from Bacon, Coleridge and Macaulay.

Item 637

Anonymous, Notes and Queries, References to Ciphers and Cryptography, with comments, notes and queries.

This famous British journal carries items, both minor and major, on almost every literary subject under the sun. The excerpts date from 1870 to 1939, inclusive. WFF has positive photostats of all mentioned by Galland. Contains bibliography and notes on books.

Item 638

Wallace, Edgar, "Code No. 2," Ellery Queen's Mystery Magazine 3 (Spring 1942), pp. 64-77.

Pulp fiction. Edgar Wallace also wrote secret service stories. He was one of the most versatile detective writers of all time.

Item 639

Wade, John Reed, "Secret Messages: Can You Solve Them?" Strand Magazine, London: (December, 1944), pp. 71-73.

A popular article written in a London journal during WWII. Related correspondence in file.

Item 640

Morland, Nigel, "Codes and Secret Writings," Lilliput Magazine, London: (November, 1943), pp. 351-354.

This copy of a magazine popular in the British Armed Forces was sent to WFF by P.W. Filby, a former librarian at Cambridge University. Filby served as secretary to Sir James Frazer, author of The Golden Bough, for eight years before becoming an employee of GCHQ. The forwarding letter is enclosed. It contains a reference to **Item 650** of the FC, about Room 40 and Sir Alfred Ewing. Cf. David Kahn, The Codebreakers, pp. 266ff.

Item 641

Clift, Denison, The Spy in the Room, New York: Metro Publications, 1944, 126 pp.

Annals of the British Cipher Bureau of WWI (Room 40 O.B.) are used as the basis for a spy thriller. Gift of Mr. Revilo P. Oliver - - in the days when he was a college professor serving in the Armed Forces - years before he became so infamous with his right-wing activities.

Item 642

Salisbury, Sir John and Robert Chester, Poems by Sir John Salisbury and Robert Chester. With an introduction by Carleton Brown. Bryn Mawr College monographs, Monograph Series, Vol. XIV, Bryn Mawr, PA: Bryn Mawr College, 1913, 86 pp.

Many of these poems, written circa 1550, contain complex but quite authentic acrostics. See in this connection TSCE (Item 1691). Valuable item of great importance in the area of literary ciphers. The acrostics can be found on pages 8-9, 13-14, 35-38, 47-52, 54-56, 61-62, 68-69.

Item 643

Boccaccio, Giovanni, Amorosa visione di Messr Gio. Boccaccio, Venice: 1558.

This well-known work contains what at present is believed to be the longest acrostic in the whole of literature - an acrostic comprising 1501 letters which form I Sonati and a madrigal. The acrostic letters are the initial letters of the first line of each *terzina*. More amazing yet is the fact that the three-stanza acrostic poem itself contains a secondary acrostic in its initial letters. A gift autographed by Prof. E. Vincent, later President of Corpus Christi College, Cambridge University, and a leading authority on Italian literature. Beautiful book, beautifully boxed, by Cmdr. Mindte, who found proof that this volume was printed with type made by Aldus Minutius of Venice in 1501. See enclosed letter. A beloved and valuable item in the FC.

Item 644

Weiss, Wilfred, "WRS VERUHW!" Mechanix Illustrated, NY: 43, 1 (May, 1950), pp. 98-101, 184-185

An article of no importance but of popular interest for the amateur or merely a general reader. The writer himself is obviously only an amateur or general reader, for the material is extremely elementary. The article claims to show how cryptanalysis helped us win two world wars. Had pictures of a Hagelin machine.

Item 645

Feis, Herbert, The Road to Pearl Harbor, Princeton, NJ: Princeton University Press, 1950, 356 pp.

A detailed and scholarly exposition of the coming war between the U.S. and Japan by the former advisor on economic affairs in the State Department. The book includes selections from the intercepted "Magic" messages which were placed in the public domain by the various official investigations into the attack on Pearl Harbor. Included is a review from the Journal of Modern History 24, 3 (September 1952). The writer of the review is Hyman Kublin. Also included are two pages of handwritten notes by WFF concerning significant passages of the book. One of the

few scholarly and unbiased volumes written concerning the Pearl Harbor incident. David Kahn, The Codebreakers, pp. 1-67.

Item 646, 646.1

Anonymous, Miscellaneous items and correspondence on extra-sensory perception.

It was WFF's considered opinion, that until one of the important and wealthy foundations sponsored a very large-scale research project to ascertain the facts and cast out the chaff from the wheat, not much will be accomplished in this field. WFF thought there was something in it but just what and to what degree is undemonstrated. NSA can and should do nothing about this. ESP = Every Sucker's Pseudo-science. He was right. Duke University has never succeeded.

Item 647

Principe, John Dyneley, "Mene, mene, tekel, Upharsin" an historical study of the fifth chapter of Daniel, Baltimore, MD: Johns Hopkins University, 1893, 128 pp., Ph.D. dissertation.

The handwriting on the wall is treated as a transposition cipher. Included is a long letter by Father Theodore C. Petersen. Also some handwritten notes by WFF concerning a book entitled The Modern Reader's Bible by Richard G. Moulton, University of Chicago, Macmillan, 1924. Also brief references to other books on the question of the mysteries presented by the account in the fifth chapter of Daniel. Cf. Kahn, The Codebreakers, and Sheldon, EAW pp. 32.

Item 648

Viaris, Gaëtan, Henri Léon (Marquis de), Les dépeches secrètes et les conventions internationals, Paris: Printed for the author, 1893, 61 pp.

This item deals with the international telegraph regulations regarding secret telecommunications. This copy bound by Cmdr. Mindte in blue boards. This copy contains Viaris' signature, date 1894. WFF received this item as a souvenir, after the German Office Pers. Z/S was taken over at the end of WWII. This copy was in the library of the German Foreign Office Cryptanalytic Bureau known as Pers Z/S.

Item 649

Boetzel, A., Elements de cryptographie et de correspondance, télégraphique et téléphonque secrète, Paris: Librairie Fischbacher, 1898, 91 pp.

It will be noted that this book, published more than half a century ago contains a portion devoted to secrecy in telephony. However, the crypto machines described by the author are not of a mechanical or electrical nature, and moreover, are not elementary and impractical for serious

governmental usage. A work of little consequence, but a rare item historically, because of its date.

Item 650

Strachey, Oliver, Transposition Systems, London: 1932, 58 pp.

Cf. **Item 804**. **Item 650** is also a very valuable item. Only 100 copies were printed, of which this copy is No. 10. A British War Office publication, with no classification designation, but undoubtedly official and with a very narrow distribution. The following is quoted from the footnote on p. 1: The Old War Office Manual of Cryptography, 1911 (**Item 90**) says: Transposition ciphers, owing to the greater attention now paid to the science, are no longer looked upon as sufficiently secure.” More strangely, Col. Parker Hitt (U.S. Army) in the second edition of his Manual for the Solution of Military Ciphers printed in 1918 says: “It is the consensus of opinion of experts that the transposition cipher is not the best one for military purposes.” WFF felt the Colonel knew very little about transposition ciphers, and apparently nothing about recent events that he might have heard of; for the fact is that from August 1914 onwards, the Central Powers relied almost entirely on different forms of transposition for their field work. This copy was a gift from the author, presented in 1943 when Mr. Strachey was in Washington on an official mission and was our guest for dinner on two occasions. An obituary of Mr. Strachey, whose death occurred in 1960 is pasted inside. No date is given in the manual itself.

Item 651

Verne, Jules, A Journey to the Center of the Earth and a Winter's Sojourn in the Ice, Philadelphia: Office of the Evening Telegraph, 1874, 123 pp.

Edgar Allen Poe and Jules Verne are the two earliest authors in literary history to make use of ciphers. The English translation was made expressly for the Philadelphia Evening Telegraph by Stephen W. White. This item is a reprint from that journal. Included is a negative and positive photostat of p. 112, the positive showing corrections to the cipher by WFF.

Item 652 and 652.1

McCracken, George F., “Athanasius Kirchner's Universal Polygraphy,” ISIS, Official Quarterly of the Journal of the History of Science Society, 39, 4 (November, 1948), pp. 215-228.

Kirchner was a German mathematician and scholar born in 1601, who settled in Rome in 1635. In some of his works, he claims credit for being the first to call attention to Egyptian hieroglyphics. Actually, the solution of the former was delayed by Kitchner's pedantry. Kirchner also failed miserably in his attempt to solve the Voynich Manuscript. He was supposed

to be an expert in cryptography. Very interesting autograph to WFF by the author. A reprint of this article is **Item 652.1**. Also one photostat negative. "To F. Master of those who know the unknowable, with the affectionate regards of his pupil, assistant and admirer." 20 February 1949. On Egyptian cryptography see also David Kahn, The Codebreakers, pp. 71-73.

Item 653

Signal Corps, U.S. Army, Historical Sketch of the Signal Corps (1860-1941), Ft. Monmouth, NJ, Eastern Signal Corps School, U.S. Army, 1942, 131 pp.

This history of the U.S. Army Signal Corps includes some interesting material on Federal Army Ciphers and Civil War cryptology. Important item to anyone having an interest in the now-defunct arm of the services, the former Signal Corps, U.S. Army. Covers the Civil War, the Spanish American War, and WWI.

Item 654

Brown, Herbert Janurin, Is it Shakespeare's Confession: The Cryptogram in His Epitaph, Washington, DC: A.S. Witherbee & Co., 1887, 20 pp.

An American government official news-writer/publisher writes a "spoof" on the numerous "cryptograms" in the inscription on the Shakespeare tombstone. Such "cryptograms" appeared in considerable numbers between 1880 and 1900. This spoof was so expertly done that the Baconians accepted it as one more proof in the Bacon-Shakespeare controversy. See the enclosed letter written by the late Dr. E.E. Willoughby, bibliographer of the Folger Library, on the life and activities of Herbert Januvin Browne. Willoughby's categorical statement that this item is a burlesque on the methods of the "Baconians" makes this pamphlet a unique and valuable item.

Item 655

O'Neill, Hugh, "Botanical Observations on the Voynich MSS," Speculum, (January 1944,) pp. 126-127.

The author attempts to identify flowers in the Voynich. While some of the drawings are "conventionalized or otherwise altered beyond recognition, other drawings can easily be assigned to one of the several species." Fol. 25 for example is a species of nettle. Fol. 93 is the common sunflower (illus.) Folio 100 is *Botrychium Lunaria* L. Fol. 101 shows a fruit that is not European but suggests capsicum, a genus strictly American, known in Europe only after 1493. Seeds of the sunflower were brought to Europe for the first time from America in 1493 by Columbus on the return of his second voyage. This would give a *terminus ante quem* for the Ms.

Item 656

Powell, Walter M., The Bible, fountain stone of Anglo-Saxon civilization, shown by a Russian scientist to be verbally inspired, England: n.d. but earlier than 1944.

Numerology used as the basis for “interpreting” the Bible. Gift of Prof. Vincent of Corpus Christi College, Cambridge University. Autographed to him by WFF.

Item 656.1

Moulton, Richard G., The Modern Reader’s Bible, extracts from New York: Macmillan, 1924.

1) An interpretation of the cipher in the Book of Daniel “*mene tekel upharsin.*” See EAW pp. 32.

2) The Abingdon Bible Commentary, edited by Frederick C. Eiselein, pp. 572.

3) Interpretation of *mene, mene tekel upharsin.* The King James Translation.

These three interpretations of the famous words pretty much all agree. See David Kahn, The Codebreakers.

Item 656.2

Anonymous, Specimen Verses of the Principal Languages and Dialects in which the Holy Scriptures Have Been Translated and Printed, New York: American Bible Society, 1919, 64 pp.

The Book of a Thousand Tongues is probably the source of specimens in this small booklet. Unfortunately, the preceding named book is out of print and was unobtainable by WFF in spite of many efforts.

Item 657

Asher, Stewart, “Solving Codes,” Reprinted from the Philadelphia Inquirer in the International Digest 1, 1 (June 1, 1944), pp. 35-36.

Reprint on the subject of cryptanalysis being “a new career for hundreds of men and women.” The note in ink “dated June 1944 but appeared in March” was on this item when received, probably from the late Major D.D. Milliken, a WWI student of WFF. The latter suspects that Stewart Asher was a pseudonym for Milliken who was at that time very busy in teaching cryptography (unauthorized by the U.S. Government). WFF’s comment: It is sad to have to say it, but this article is nothing but “self-eulogistic tripe.”

Item 658

Annual Report submitted to the governments of the American republics (Emergency Advisory Committee for Political Defense, report of), Montivideo: July, 1943. English edition distributed by the Pan-American Union, Washington, D.C.

The memorandum to Col. Carter Clarke on the inside of the front cover indicates the anxiety generated in the War and Navy Departments by the publication of a long series of secret messages originating from a German espionage network in South America and disclosed by the FBI during the early part of WWII. Much of the source material was unwittingly furnished by the cryptologic unit of the Treasury Dept. situated in Coast Guard Headquarters for easy access to radio traffic. The section was headed by Mrs. Elizabeth S. Friedman. This unit was moved in to the Navy Communications Annex (later called the Navy Security Station in WWI).

Item 659

Anonymous, Förbinselerna mellan chefen för Lantförsvarets Kommando-expedition och tyske militärattachen I Stockholm, 1939-45, Stockholm: Kungt Boktryckeriet, 1946, 51 pp.

This item deals with the exposé of German espionage in Sweden during WWII. The brochure contains the translations of many cipher messages. It is not clear how the Swedish government obtained these translations. "Received from Mr. Higgs, Acting Chargé, American Legation, Stockholm, Sweden, 15 October 1946," in WFF's handwriting.

Items 660-669.7

From Friedman back file card. Printing telegraph cipher machine and solution, data in re. Correspondence and data, including methods, keys, tapes and challenges for solution to WFF and his associates at the Riverbank Laboratories, of the cipher printing telegraph machine developed by the AT&T Co. in 1917-18. It is believed that this machine was the first cipher printing telegraph machine in the world. It employed a crypto-principle which has come to be known as the "Vernam Rule" after the name of its inventor Gilbert S. Vernam who at that time, about 1916, was an engineering employee at AT&T. The FC contains all of Vernam's patents on cryptographic apparatus, all autographed. Note: In a conversation held on April 5, 1956 at the home of WFF, the well-known inventor, Dr. Rudolph Hell, declared that the Russians should be credited with priority in this invention because they used a cipher printing telegraph machine in 1916 in their WWI military operations. It would be very interesting to have their statement authenticated or disproved. The typescript of the unpublished paper resulting from WFF's study of the machine after the challenges of solution had been met, appears in **Item 1056**. The full story of this remarkable chapter in the history of printing telegraph cipher machine has never been told. Cf. David Kahn, The Codebreakers, pp. 394ff.

Item 660

Strong, Leonell C., “Anthony Askham, the Author of the Voynich Manuscript,” Science, June 15, 1945, pp. 608-609.

Almost a quarter of a century after Professor Newbold of the University of Pennsylvania had made his claim of having deciphered a short passage from the mysterious Voynich Ms. Then in the magazine Science of June 15, 1945, appeared this short article by Dr. Strong of the Yale University School of medicine. He claims that the author was Anthony Askham, the text is in Medieval English, and it deals with the pharmacology of plants and diseases of women. A letter prepared by WFF associates who were experts in medieval English was never sent. Original article.

Item 660.1

Strong, Leonell C. and William F. Friedman, Correspondence Between WFF and Dr. Strong over a three-year period 1942-1945. See **Items 660, 660.2 and 660.3**.

Strong discusses his theories on Askham and wants to see a photograph of the Voynich Manuscript.

Item 660.2

Askham, Anthony, Herbal, Photostat copy of two pages from the copy of Anthony Askham’s Herbal at the Folger Shakespeare Library.

Item 660.3

Strong, L.C. and E.L. McCawley, “A Verification of a Hitherto Unknown Prescription of the 16th Century,” Bulletin of the History of Medicine 21, 6 (Nov/Dec 1947), pp. 898-904.

Stung by the protests raised by his publication of a “deciphered passage” in the Voynich Ms, Dr. Strong and a colleague tried out his pharmacology “recipe.” Both researchers declared it to work and hence, they proclaimed that the original decipherment must be correct. The second copy and offset, was the gift of Howard T. Oakley on September 25, 1959. See enclosed news item from the New York Herald Tribune, June 21, 1945.

Item 661

McManaway, James G., “Where are Shakespeare’s Manuscripts?” The New Colophon 8 (1950), pp. 357-369.

The perennial search for Shakespeare's manuscripts received a severe blow from an Elizabethan scholar who explains why there are no such manuscripts or at least why none may ever be found. Inscribed to WFF by J.G. McManaway.

Item 662

Evans, Bergen, "Good Friend for Iesus Sake Forebeare," "Was Shakespeare Really Shakespeare?" Saturday Review of Literature, (May 7, 1949), pp. 7-8, 39-40.

The author of this article, a professor of English literature at Northwestern University and at present [1956] a figure in several T.V. programs, is distressed by the continuing controversy as to who wrote Shakespeare. Dr. Evans expresses eloquently a plea to non-Stratfordians to "cease and desist" in their fanatical beliefs. Original magazine, and photostat negative.

Item 663

Peck, Wallace, The Golden Age of Patents, A Parody on Yankee Inventiveness, New York: Frederick A. Stokes & Bros. 1888, 55 pp.

Autographed to WFF by Dick Mindte, 1955. A quaint and amusing little booklet of 55 pages, with illustrations of everything from an automatic bull-catcher to the Metropolitan Lasso Co. The dedication itself adds to the quaintness : ". . . to the Purchaser by his eternal friend the author."

Item 664

Kent, Sherman, "How Effective is Our Intelligence?" The Reporter Magazine, September 12, 1950.

A brilliant analyst in the field of U.S. Intelligence writes an appraisal of our ability. His analysis is derisive of the U.S. intelligence capability. Copy. Washington Post clipping "MacArthur Aid Says he Gave Warning of Attack on Korea." Sherman Kent would go on to a brilliant career in writing about intelligence. This article presages a lot of what the CIA now does.

Item 665

Stone, Earl E., "Communications and Electronics - The Most Essential Tools of Joint Command," Journal of the Franklin Institute, 249, 2 (February, 1950), pp. 109-116.

A general article on communications. Autographed by the author. He was the first Director of AFSA; he held the rank of Rear Admiral.

Item 666

Friedman, William F., Diary of a Trip to Europe, 1945.

Marked missing in WFF backfile. Reclassified by NSA. Held in secure folder in vault at Marshall Library.

Item 667

Stendahl, (Henri Beyle), La Chartreuse de Parme, extracts from.

This is an extract from a romantic tale which involved cryptography. It is unusual to find a world-famous author using cryptography in one of his romances. 3-page typescript explanation. The hero of the story, Fabrizio del Dengo, is arrested and imprisoned and corresponds with his lover outside the prison by means of light signals.

Item 668

Thouless, Robert H., "A Test of Survival," Proceedings of the Society for Psychical Research, Part 175, Vol. 48, (July, 1948), p. 253-263.

The following is extracted from the first paragraph of the article: "There have been many attempts to prove survival after death which have taken the form of depositing a sealed envelope which contains some object or message which the depositor hopes to be able to describe through a medium after his death." The test which the author devised involved enciphering a very short passage (66 letters) by a well-known method of encipherment with a key word which the author hoped to remember in the afterlife. He was sure the passage could not be solved. However, at least two persons did reach a solution, one being Prof. E.R. Vincent of Cambridge University, and the other a young man named William May of the Army Security Agency. WFF also solved the first so easily, he did not waste time on the second. The article itself was presented to WFF by Professor Vincent and is autographed by him. It contains correspondence which will be found to be of much interest.

Item 669

Friedman, William F., Methods for the Solution of the AT&T Machine Cipher, Riverbank Labs, Geneva, IL: 1919.

Items 669.1, 669.2, 669.3, 669.4, 669.5

Vernam, Gilbert S., U.S. Patents on Cipher Printing Telegraph Systems and Machines.

All of the printing telegraph cipher machine patents of Gilbert S. Vernam autographed to WFF. These are also of much historical importance and value. Vernam was the inventor of the "Vernam rule" or "Vernam addition" method in printing telegraph cipher systems. WFF knew

Vernam in 1918 when he was an engineer of the AT&T Co. He later joined the engineering staff of Western Union Telegraph Co. Vernam died in 1959.

Also in this box but completely unrelated is an article by David Kahn, "Modern Cryptology," Scientific American (July, 1966) (**Item 669.5**). It was sent to WFF by Max Bowers. On p. 42 there is a section on WFF, Parker Hitt and Lt. Mauborgne marked "untrue." There is a suggestion that a letter be written to David Kahn asking him to correct any future editions of The Codebreakers.

Item 670

Hamming, R.W., "Error Detecting and Error Correcting Codes," The Bell System Technical Journal Vol. 26, 2, (April, 1950), pp. 147-160.

"Codes" in the sense of permutations of "space" and "mark" bands and similar symbols for printing telegraph systems or other communications systems. Photostat positive. Bound in brown cardboard.

Item 671

Pratt, Fletcher, "Why Ten Thousand Died," Coronet Magazine, (February 1937).

Pratt here turns his attention to the cryptologic operations of WWI connected with the Battle of Scapa Flow.

Item 672

Brewster, Sir David, "On Christopher Wren's Cipher, Containing Three Methods of Finding the Longitude," Report of the British Association, Aberdeen: 1859 (29th Mtg), p. 34.

Photostat of article. Sir Christopher Wren, the great architect, also knew something about cryptography. This little item is of much historical interest. See also Notes and Queries, 5th series IX, 23 March 1878, pp. 226 and 5th series XII, 18 October 1879, pp. 316. Sir Christopher Wren's cipher with his solution to Longitude was found among Sir Isaac Newton's papers. Of course, it was ultimately solved by Harris.

Item 673

Mellin, William I. (as told to Meyer Berger), "I Was a Wire Tapper," Saturday Evening Post 222, 11 (September 10, 1949), pp. 19-21, 46.

A personal experience story of intercept operations based on wire tapping. Interesting and useful in any study of such operations (1967). Much under discussion re: the so-called bugging

and wire-tapping. It is of interest to note that Mellin wrote about his activities as a federal agent. He started tapping in 1910.

Item 673

Has pictures of wall-contact mikes, wire-tapping from dog-collar mikes. Racketeers caught and taped: Lucky Luciano and Dutch Schultz. People were tap conscious. In those days, you just cut into a line with a head set and listened in (a raw tap.) Not on shelf.

Item 674

Bryan III, J., "Never a Battle Like Midway," Saturday Evening Post, (26 March 1949), pp. 24 ff.

In the beginning of this article there is a reference to the part played by an unidentified "young American cryptanalyst" one of the earliest accounts of Midway.

Item 675

Schachmer, Nathan, Aaron Burr, a Biography, extract from New York: Frederick A. Stokes & Co., 1937, 324 pp.

A significant item dealing with the cryptologic side of the Burr-Wilkinson conspiracy in Louisiana before 1800. This item contains a letter from Burr to Wilkinson dated July 29, 1806. The letter was in cipher and the key to the cipher is included. Typescript copy. Photostat negative of coded letter, photostat positive. Also in folder. A newspaper item: "Today's mechanized codes have Old-Time Rivals, but modern Ones are Nearly Proof against Betrayal," by Herman R. Allen. The Sunday Star, Washington, DC, June 24, 1951. There is an article on codes since the Revolutionary War by Edward Baykin. "George Washington used a baffling succession of numerals and decimal points, somewhat akin to the dot-dash telegraph code, to communicate with spies behind the British lines. After the war, Washington destroyed his code and ciphers and all data that might identify the spies who had served him. Washington used invisible ink invented by the brother of John Jay. The most notorious code in American history was devised by a woman - Peggy Shippen Arnold. From West Point she engaged in a lively correspondence with Major Andre. Letters written to and from General James Wilkinson. For a fuller detail, see Roscoe R. Hill, Descriptive Catalogue, pp. 495, Library of Congress. Aaron Burr's celebrated cipher letter and key - photostat positive.

Item 675.1

Burr, Aaron, Decipherments of Letters dealing with the Burr Conspiracy.

Secret correspondence and cipher keys applicable to messages dealing with the Aaron Burr-General Wilkinson plot to seize Louisiana and part of Mexico in 1800. Included is a lengthy

article from the Washington Sunday Star of 1951, at a time when there was great world furor over the defection of two British Foreign Service officers (Burgess and MacLean.

Item 675.2

Wilkinson, James (General)

Index of Items in the Spanish Archives to and from Wilkinson with cipher passages, etc. Archivo General de India, Seville, Papelas de Cuba, photofilm enlargements made July 9, 1930, property of the Library of Congress. Contains references to letters. This item, despite the peculiar title, has to do with secret writing in the Burr-Wilkinson conspiracy.

Item 675.3

Burr, Aaron

Photostats from a book giving some of the ciphers used by Burr and Wilkinson. See also **Item 675.2** on Wilkinson.

Item 675.4

Seegert, Ruth, "Blennerhassett Island - Cradle of Conspiracy," The Highway Traveler 13 (March, 1941), pp. 16-19, 43-47.

This article is most interesting for its "on the spot" details on the man Blennerhassett - his island in the Ohio River, and his cooperation with Aaron Burr in the conspiracy to take over the West, starting in Louisiana, and create a "Burr empire" in 1805. On p. 44, it is related that Burr's correspondence with Wilkinson had been carried on by "cipher letter." Maj. General James Wilkinson, commander of the western forces, by appointment of Jefferson, was tried as was Burr and also Blennerhassett. All were acquitted but their innocence has never been really proved. (You don't have to in America - - your guilt has to be proved).

Item 676

Hindenberg, Carl Friedrich, Über Gitter und Gitterschrift; fernere Äusserung des Ungenannten, Verbersetzung der von ihm (Arch. III S. 348) mitgetheilten geheimen Gitterschrift; u.s.w. Archiv der Reinen und Angewandten Mathematik, Berlin, Heft V, 1796, pp. 81-99; Heft IV 1797, pp. 347-351; Heft VII, facing title page.

An interesting and historically important item relative to grilles and their use in transposition ciphers. This item was a gift to WFF from Professor Charles J. Mendelsohn, and there is included with the photostat some correspondence between Prof. Mendelsohn and the Keeper of Rare Books, Boston Public Library.

Item 677

Rochambeau, Letters with code passages.

Authentic documents of the American Revolutionary period. Photostats (negative and positive) of General Greene and Rochambeau correspondence, including actual interlinear decryptments of the code syllabary used. This material was presented as a problem to WFF for the solution for certain unsolved correspondence of General Greene and Rochambeau. WFF did the solution work for the Historical Division of the Carnegie Institution. See also **Item 534**.

Item 678

This is the same as the syllabary on pp. 1-4 of the Force Book of Ciphers in the Library of Congress. But this version came from the Jefferson Papers in the Library of Congress. This syllabary serves for letters dated 8 August 1782, to John Jay from Robert Livingston, 5 June 1782, WFF. In a letter dated Philadelphia, 9th August 1782 sent to Franklin by Livingston on a page marked 248, there appears the following: "Mr. Jay, I write to him in your cipher being no. 4 of the cipher which Mr. Morris sent you, this is also written in the same cipher - I would wish you to use that as I have no great reliance upon the one you have written in formerly, it had passed through too many hands."

Item 679

Franklin, Benjamin, Cipher used by Benjamin Franklin.

A very historic document showing the cipher system that Benjamin Franklin used with considerable success, much in advance of the art of his day. The original papers, from which these photographs were found in the Papers of the Continental Congress at the Library of Congress. Photostat Positive 11 x 15 photos. The five enclosed photographs show the encoding and decoding sections of a code used by Thomas Jefferson in his private correspondence. The originals of this code can be found in the Jefferson Papers at the Library of Congress, Vol. 11, Doc. No. 1887, 1888, 1890, 1889, 1897, 1898 (no date). This information was gotten for WFF by Mark Rhoads from L. C. Burnett, pp. 332, note 15 says "This is the earliest of these numerical codes which the writer has come upon."

Item 680

Hall, Admiral Sir W. Reginald and Amos J. Peaslee, Three Wars with Germany, Edited and illustrated by Joseph P. Sims, New York: G.P.Putnam's Sons, 1944, 309 pp.

A highly interesting book by the WWI Chief of 40 OB, the British "Black Chamber," and the U.S. Chief Counsel for the American sabotage claimants before the Mixed Claims Commission, a trial at the end of WWI which lasted 17 years and "finally exposed Germany's perfidies and brought awards to the American claimants of over 55 million dollars." The trial exposed many

very interesting plates of explosions caused by German sabotage in WWI such as the “Black Tom” case and the Kingsland Case, etc. See pp. 140-143 and 151-153. On page 153: “During that time [Oct. 1914 - Feb. 1919] we succeeded in integrating and deciphering upwards of 15,000 German secret communications in the form of cablegrams, radiograms, invisible writings, and other codes, ciphers, and secret communications.” Cf. Galland p. 84.

Item 681

Friedman, William F., WFF’s Army Commission in WWI and papers relating thereto.

Letters of commendation, a citation from Military Division, 24 October 1945 for WFF’s services to GHQ-AEF. Item missing?

Item 682

Friedman, William F., “Solution of Ciphers,” The Earliest Form of “Synoptic Table for Cipher Analysis.” 2 copies.

The first time a table of this type had even been devised for the “diagnosis of cipher methods.” A historic document. WFF’s first “invention” in cryptanalysis. Several copies enclosed, originating from different sources, each of which seemed intent on hiding WFF’s authorship, such as the one found in The Black Chamber when the War Department removed same from Yardley’s directorship (snipe at Yardley). Mauborgne, the man who later became Chief Signal Officer ordered it printed without credit to WFF, when J.O. Mauborgne was a captain at the Signal Corps School at Leavenworth. See **Item 15** and **Item 15.1** and the notation inside the cover. (“a diagram for cipher analysis obviously a copy of my original idea and diagrams.”) The method involves counting the vowels and the consonants of the two conventional groups. Determine from extraneous circumstances the language of the message. Note the recurring groups of letters as constituting similar words (Hitt, p. 47). Construction of Tentative Diagram on which alphabets are based. Done at Riverbank Labs. This was an insert to Mauborgne’s Data for the Solution of German Ciphers.

Item 683

Hoover, J. Edgar, Department of Justice exhibit in the Gustav Rumrich case (n.d.)

A photostat positive copy of an exhibit in the case of a German spy. A cipher message, containing evidence used in the case, with German inter-linear translation; a cipher key inside a match case, and a cipher key found on one of the spies. Interesting WWI information as prepared for the public by the FBI.

Item 684

de Vries, FNU, Statistische methoden in de crypto-analyse, Rapport 2W, 1953-014, Mathematisch Centrum, Amsterdam, 31 October 1953, 15 pp.

This paper is an introduction to statistical analysis of ciphers. A one-page review of the paper by Dr. H.H. Campaigne accompanies this item. The author treats enciphering as a succession of transformation, each taking letters of the plain text into cipher letters. If the transformations are all of the same type, differing in a parameter, then the succession of parameters is called the "Key." One particular important type of transformation is the monoalphabetic substitution cipher by which a plain letter is taken into the same cipher every time it appears.

Item 685

Hagelin, Boris C.W. and Dr. Edgar Gretener, A.G., The Hagelin-Gretener System, 31 March 1949, No.158.

A dittoed brochure translated August 1949, dealing with an electrical printing telegraph cipher system. This system proved to be completely impractical.

Item 686

McCracken, George, Secret Writing in the Revolutionary Period, A Publication of the Historical Unit of the Signal Security Agency, OCSigo, War Department, Washington, DC: 1945, 21 July SPSIS - 1. Restricted.

An authoritative but brief account. A college professor from Des Moines was an army officer associate of WFFs in WWII. This paper was prepared by him after VE Day. Prof. McCracken was a thorough scholar and his documentation is perfect - - rare in a brief paper. The two parts are 1) American Systems, and 2) British Systems. See also Lewis F. Acker, "Communications Systems of the American Indians," The Signal Corps Bulletin in: Articles on Cryptography and Cryptanalysis, Washington, DC: 1942, pp. 220-226. Note: Caution should be taken concerning the terminology current in the 18th century. The words "code" and "cipher" were used interchangeably, not as separate ideas, as in modern literature. On Thomas Jefferson's cipher device, see David Kahn, The Codebreakers, pp. 192-195.

Item 687

Paltsits, Victor Hugo, "The Use of Invisible Ink for Secret Writing During the American Revolution," Bulletin of the New York Public Library 39, 5 (May, 1935), pp. 361-364.

Photostat negative. The NYPL received a gift of a holograph letter written by John Jay to Robert Morris dated September 15, 1776 which forms an interesting link in the evidence of the secret dispatches that Silas Deane sent over from France for the information of the Continental Congress. General Washington was also furnished with the ink. The importance of this secret

fluid in relation to Washington's spy system is most interestingly confirmed by modern research. This letter was not published along with John Jay's other letters.

Item 688

Huie, William Bradford, The Case Against the Admirals, seven-page abstract from, pp. 110-111, 1946.

This extract blames the attack on Pearl Harbor to the failure of officials in disclosing intelligence gained from deciphering messages to the man who was directly concerned with the Air Defenses of Waikiki. Extract of a book written after the Congressional investigation of Pearl Harbor. The extract cites one more tiny thread in the tangled web. Interesting to historians. "Much of this sort of material had been received in Hawaii by Admiral Kimmel but not one bit of it had been passed on to General Martin, the man who was directly concerned with the air defense of the island. And even more amazing, not one bit of this information has been disclosed to General Arnold, the Chief of the Air Force in Washington.

Item 689

No card, 8 x 10 glossy photos of Trithemius (1462-1516), Abbot of Spanheim, Father of Cryptography.

Item 690

Churchill, Winston S., The Second World War, New York: Houghton Mifflin & Co., 1948-1953.

What the master diplomatist has to say concerning Pearl Harbor, the basic principles of war, the Battle of the Atlantic, the Battle of Britain, and the drawing of the curtain on WWII. Much censored. See p. 356, footnote 2, Vol. 3 for Churchill's strong insistence on seeing "authentic documents . . . in their original form." "I do not wish such reports as are received to be sifted and digested by the various intelligence authorities."

Item 691

No card, no item, no shelf list card

Item 692

Baldwin, Hanson W., The Price of Power, extracts from New York: Harper Bros, 1947, p. 203, 204, 208-209, 218-219.

Extracts having reference to communications intelligence and labeled in the typewritten copy thereof. "Security Violations" by which is meant, merely that Baldwin was publishing information considered by WFF detrimental to the security of the communications intelligence

activities of the U.S. There is no indication as to the source of Baldwin's information. Pages 218-219 cover questions raised about CIA - what should its role be? Even in its early days, the CIA seems to have been very controversial. P.S. Footnote #3 to Chapter IX reads as follows: Warning [with regard to Pearl Harbor attack] should have been available before Pearl Harbor, for the essential information was available, if it was not properly processed and analyzed. WFF's comments: Baldwin was wrong in saying the information was not properly processed, but correct in saying it was not analyzed properly. Considering the date of Baldwin's book (1947) one can only be convinced that he was truly prescient. Now, two years later, the second go-round of speculation re Pearl Harbor is pouring from the presses - - mostly full of errors. Baldwin believed 90% of intelligence derived from open sources. There is much on Magic. He thought code-breaking would not have importance in the future because codes could be changed so quickly. David Kahn, The Codebreakers, pp. 1-67.

Item 693

Wiener, Norbert, The Human Use of Human Beings, Boston: Houghton Mifflin Co., 1950.

On pp. 136-137 of this item, this well-known mathematician and physicist has something to say about the way in which cryptograms are solved. There is also reference to the solution of the Egyptian hieroglyphics and Wiener has an erroneous idea about both accomplishments. He believed epigraphers were like code breakers. On Linear B, Rosetta Stone etc. see Sheldon, EAW.

Item 694

American Antiquaries Society, Those Human Puritans, extract from. Proceedings of the American Antiquarian Society, 1940, 81 pp.

A well-known husband and wife of colonial days had their own cipher system. Their letters remained undeciphered for nearly 300 years. The couple was John and Martha Winthrop who, like others of their time, had to send letters without envelopes, since such covers were non-existent. Anyone can read the letters by breaking the simple seal on the folded paper. Photostat positive of letter in the Winthrop Code.

Item 695

Halsey, William F., Admiral, Admiral Halsey's Story, extracts from New York: McGraw Hill, 1947. Photostats of p. 145, 155-157, 168, 179, 220, 221, 227, 235, 242, 243, 247 and 267.

This portion of the Halsey story, the whole of which describes his experiences in the Pacific in WWII, relates some details concerning the solution of Japanese codes, transmission security

and the death of Admiral Yamamoto. WFF believed that Halsey's story about how Yamamoto's end was brought about is the first time this important episode of the war in the Pacific was "leaked." The Navy cryptanalytic staff was very much disturbed about this. Page 220 relates an episode which caused Halsey much anguish because of the fact that the initial "padding" of a certain message fitting in so well with the actual text of the message. Yamamoto was to arrive at Ballale Island on April 18th. Eight P-38s from the Army's 339th Fighter Squadron based at Henderson field were assigned to make the interception over Buin, 35 miles short of Ballale. LTC Thomas Lanphier, Jr. shot it down.

Item 696

Starling, Edmund W. (Col.), Extracts from Starling of the White House, New York: Simon & Shuster, 1946, pp. 215-219.

Chapter XV, pp. 215-218 entitled "The Oil Scandal" covers the Walsh investigation of the so-called Teapot Dome Scandal, following which investigator Albert Fall, Secretary of the Interior, went to prison for accepting a bribe of \$100,000. A caustic story, for Starling was accused himself of being mixed up with "The Ohio Gang." See **Item 843**, revealing copies of messages solved for the investigating committee by WFF and **Item 1798**.

Item 697

Korostovetz, Vladimir de, "The Black Chamber," The Contemporary Review, No. 951, (March 1945), pp. 162-165.

Further revelations about the Russian black chamber, perhaps a relative, (son or nephew) of the author of **Item 878**. The Russian Foreign Office was very good at solution of secret messages, but the Russian Army was very poor. "Sometimes we found out that the enemy had discovered the secret of our code." Lots on bribes and blackmail.

Item 698

Mendelsohn, Charles Jastrow, "Bibliographical Note on the 'Di cifris' of Leone Battista Alberti," Isis 32 (1941), pp. 48-51.

Dr. Mendelsohn writes on a particular cipher system which was devised by Alberti and which is treated by Aloys Meister. An important item. Photostat negative. "De cifris was commented on by Vigenère and Brown but otherwise ignored in cryptographic literature until early in the 20th century. Cf. David Kahn, The Codebreakers, pp.125-156.

Item 699

Boucard, Robert, "Les secrets du chiffre," Gringoire, Paris: 30 April, 7 Mai, 14 Mai, 21 Mai, 28 Mai, 4 Juin, 11 Juin, 18 Juin 1937.

Of the same character as the preceding item. Would be quite interesting if an English translation were available. First issue is missing. There is a photograph of Bazeries and a description of his cylindrical cipher device. Photostat negative copy. See Galland, p. 27.

Item 700

Wallis, John, Johannis Wallis S.T.D., *Geometriae professoris Saviliani in celeberrima academia Oxoniensi, Opera mathematica et miscellanea*, Oxoniae 1693-1699.

Photostat positive from New York Public Library. For a detailed commentary upon this work and its author, see Galland, pp. 196-197. John Wallis (1616-1703) was not only one of the most celebrated mathematicians in his day, and became celebrated all over Europe, but he also became celebrated as the father of British cryptography. His feats in deciphering resulted in the creation of the Office of the Decipherer. See Kenneth Ellis' *History of the British Post Office (Item 1728)* for extremely interesting details about Wallis and that secret office. John Wallis probably originated the British policy of secrecy concerning cryptology which is still followed today by the British Government. See also **Items 295** and **1728**, and David Kahn, *The Codebreakers*, pp. 166-170.

Item 701

Zacharius, Adm. Ellis M. (USN, Ret), "The Inside Story of Yalta. Neither Sell Out Nor Blunder," *United Nations World Magazine*, (January 1949), pp. 12-16.

Admiral Zacharius, U.S. Navy, published his story of WWII in 1946 (**Item 896**). He was a captain in command of ships in the Pacific. He was fluent in Japanese and was an intelligence officer. Upon retirement after WWII, he wrote profusely. He was a man of strongly independent thinking and insisted on making his opinions known. One xerox copy.

Item 701.1

A second article in the folder: "The A Bomb Was Not Needed. The Inside Story of Nippon's Secret Peace Bids through Vatican City and the Kremlin," *United Nations World Magazine*, (August, 1949), pp. 25-29.

This article appeared in August 1949, the fourth anniversary of Hiroshima. Admiral Zacharias writes forcibly here, without (he claims) revealing any classified facts about the Japanese making peace moves in June 1945, therefore the dropping of the A-Bomb need not have been introduced into international politics.

Item 702

Eighty-two, "Yankee Expert Decoded Jap Secret Orders," Behind the Headlines Magazine 1, 1 (September 1940), p. 4.

An article about Herbert O. Yardley's appointment in Chungking. The author "eighty-two" even has Yardley's name misspelled throughout. This magazine article is typical of the misinformation and (sometimes deliberate) deception in general news articles about a specialized subject not understood by the general reading public. Herbert O. Yardley did do work for the Chungking government for a year. Yardley himself doubtless told "82" the so-called Yardley "successes." WFF was especially suspicious of the statements in the last paragraph. Yardley actually got his start by using the plain text and keys of the German messages solved by WFF and ESF during the first eight months of WWII which were commandeered from the Riverbank Laboratories by the War Department, when the Cipher Bureau was founded in Washington. In China, he claimed to have solved most of the Japanese Military systems. He also claimed that Chungking wanted to renew his contract after a year, but that he himself refused to stay. Information from other sources in Chungking when Yardley was there claim that the Chinese got rid of him because he was constantly drunk (ESF's comment). This article is a tissue of lies just as Yardley's American Black Chamber (**Item 604**) is full of exaggerations and many downright untruths. There is much more than could be said on this subject by WFF and ESF.

Item 703

Friedman, William F., The Papers of Thomas Jefferson, excerpts from, Princeton: Princeton University Press, 1950, Vol. 1, 1760-1766. Edited by Julian T. Bond.

Footnote No. 3, pp. VIII, refers to Jefferson's "Wheel Cipher" and quotes a section of a much longer communication contributed to the editors by WFF on 17 November 1949. Dr. Boyd regarded WFF's communications content as so important that although the whole subject would not appear until probably Vol. II of the Jefferson Papers, he inserted this footnote in the Introduction. He mentions Jefferson's invention of the wheel cipher and its contribution to cryptographic science far in advance of its time. A century had to elapse before a similar invention was independently made by a second inventor. 2 copies, one photostat positive, one photostat negative. On Jefferson's cipher wheel, see David Kahn, The Codebreakers, pp.193-195.

Item 704

Anonymous, Enigma, chiffriermaschinen, Handelsmaschine. Chiffriermaschinenm Aktiengesellschaft, Berlin, n.d., 16pp.

Photostat positive. The Enigma cipher machine was the earliest of the type using electric rotors in cascade. This machine, with certain modifications, played a role of the highest importance to both sides in WWII. It was invented by the Germans and was covered by patents

in many countries. This small brochure is probably unique and very valuable to collectors. Gift of Boris Hagelin when WFF was in Stockholm in October 1946. WFF believes this brochure to be pre-Hitler because WFF bought an Enigma machine from the manufacturer for study by the War Department before 1933. However, the machine described herein was probably a forerunner of the later Enigma which became the official German cryptographic device for all services. Hitler put a freeze on all literature concerning the machine and the Enigma machine itself when he came to power. On page 6 is a photograph of what may have been merely a gleam in the eye of the inventor. It is a printing model. WFF does not believe that such a model was ever sold, and may never have actually reached a stage of development beyond a trial model, tried out by one German service, if that.

The whole story of the Enigma cipher machine had not been told when WFF wrote this. The literature is quite large including work on the Polish contribution. See "Enigma" in *Wikipedia* for the bibliography. See **Items 856** and **1959**.

Item 705

Hebern, Edward H., Brochures on Hebern cipher machines.

Originals and photostats. Hebern was the first American inventor of rotor cipher machines. This folder contains many brochures published by Hebern on his machines, as well as two articles in magazines (See **Item 705.1** and **705.2**). Shortly after Hebern's death, his estate brought suit against the U.S. in the Court of Claims for alleged infringement of his patents; a hearing was held in the Navy Department in 1952. At the time of ESF's comments (1956) the court had denied most of the claims. Hebern Electric Code, 1921, 31 pp. S.R. Winters, A Radio Code With Eleven Variations, Radio Broadcast (May, 1923), 2 pp. H.H. Dunn, Electrical Machine Can Make Eleven Million Codes, Popular Mechanics 38, 6 (December, 1922). One photostat negative copy. This article describes an early model of the Hebern machine which was a one-rotor machine. (See **Item 73.1**). There are two photographs which clearly show a one-rotor machine. There is no question about this, but by 1924 Hebern had developed a 5-rotor machine. WFF persuaded the Signal Corps to buy two of these 5-rotor machines. Hebern had given the Navy two machines, claiming that he had at least conceived a way of absolute security. WFF challenged the latter claim and demonstrated that only ten messages were necessary for solution. This was a new principle for solution and has been in use ever since. H.H. Patent Developing Co., Eighth Annual Report, Oakland, CA April 1920, pp. 10, 11, Electric Code Wheel. Department of Justice, Ellie L. Hebern et. al vs. the U.S. Court of Claims, No 21-3-3-53. Signed by Judge Advocate General, Department of the Army and Warren Burger, Asst. Attorney General. Compensation for infringement of patent. Hebern had five patents. The U.S. Military stole the design and made the machines based on his patent design. See David Kahn, The Codebreakers, pp. 415-420.

Item 706

Reitman, Francis, Psychotic Art. A Study of the Art Products of the Mentally Ill, London: Routledge and Kegan Paul Ltd., 1950, 180 pp.

According to WFF and ESF, the art productions of the mentally ill were no stranger than many of those in modern literature, painting and drawing. Related to the works on the cult of intelligibility (1967).

Item 707

Candela, Rosario, Isomorphism and its Applications in Cryptanalytics, New York: Cardenus Press, 1946, 31 pp.

The best thing that can be said about this work is that it is a beautiful example of high-flown and florid language in the expression of very simple ideas. Candela was a visiting lecturer in cryptanalytics at Hunter College (night school).

Item 708

Smith, H. Allen, Lost in the Horse Latitudes, New York: Doubleday, Doran & Co., 1945, 223 pp.

The reader of this bibliography need not wonder too much about the presence of this item in the collection when he learns that it contains a perfectly hilarious article about Gertrude Stein and the kinds of writings that are often referred to by WFF as literary products of the cult of intelligibility. See p. 104.

Item 708.1

Smith, H. Allen, Lost in the Horse Latitudes, Garden City, NY: Doubleday, 1945.

Photostat positive of the pages ridiculing Gertrude Stein as belonging to the cult of intelligibility.

Item 709

Hull, Cordell, The Memoirs of Cordell Hull, New York: The Macmillan Co., 1948, 2 Vols. Vol. I, pp. 1-916, Vol. II, pp. 917-1804.

Mr. Hull as Secretary of State during all of President Roosevelt's years in the White House. There are typescript citations of security violations within the volumes. An important Pearl Harbor item.

Item 709.1

Many clippings enclosed in a separate folder. Washington Post, 24 July 1955, Cordell Hull's obituary. Washington Post & Times Herald, July 24, 1955, "Secretary Hull Held Post Longest," Evening Star, Washington, DC, February 14, 1948, serialized section of Cordell Hull's memoirs. Washington Star, 18 February 1948. "Roosevelt's Personal Code." Former Ambassador Bullitt sheds light on passages in Mr. Hull's memoirs.

Two copies, typescript carbons "Security Violations from Hull's Manuscript." List of passages with no explanation, all having to do with Japanese codes.

Item 710

Wood, Alexander, The Cavendish Laboratory, Cambridge: The University Press, 1946, 59 pp.

This is a souvenir, autographed by WFF to Professor Vincent, who accompanied him on a visit to the Cavendish Laboratory on V-J Day in WWII. It was there that some of the earliest experimental apparatus in connection with splitting the atom was demonstrated to us by the then head of the laboratory. A very interesting history of the Cavendish Laboratory, it was there that Peter Kapitsa did his advanced studies in physics. Soon after V-J Day, he defected and went back to the U.S.S.R.

Item 711

Smyth, Henry D., Atomic Energy for Military Purposes, Princeton: Princeton University Press, 1945, 264 pp.

This book is in the collection because of its historical importance and not because it has anything to do with cryptology. It was published very soon after the atomic explosion in Japan and the revelations, many quite carefully disguised, probably upset the scientific as well as the unscientific world. While not rare, this book will someday acquire an importance which justifies its inclusion in the FC. **Item 711** is "the full text of the Official Report."

Item 711.1

The full text of the new and enlarged edition, including statements by the British and Canadian governments. Many people believe that this book should never have been published because it gave a great deal of hitherto unknown information to the Russians. It is curious to note that the title page of both reports contains a statement "written at the request of L.R. Groves, Major General."

Item 712

Marshal, Robert E., Eldred C. Nelson and Leonard I. Schiff, Our Atomic World, Albuquerque: University of Mexico Press, 1946, 58 pp. plus several plates.

Further materials on the question of atomic energy. All three authors were staff members at Los Alamos Atomic Bomb Laboratory.

Item 713

U.S. Government, Hearings Before the Special Committee on Atomic Energy, U.S. Senate 79th Congress, 1st Session, pursuant to S. Resolution 179, Washington, DC: GPO, 1945-46, Part 1, pp. 1-184, Part 2, pp. 185-362, Part 3, pp. 363-452.

These are not cryptographic but early items in the discussions as to whether civilian or military controls would be placed over atomic energy by the government. WFF played a minor role here, by interesting the editors of the Washington Post in the discussions. This newspaper gave the matter careful study, then supported civilian control forcefully and effectively and, it is believed, influenced the outcome.

Item 714

Lilienthal, David E. et. al., A Report on the International Control of Atomic Energy, Washington, D.C. GPO, 1946, 61 pp.

The Chairman of the Atomic Energy Commission makes a basic report at the time of the proposal in the United Nations Assembly on international control of atomic energy. The report was addressed to the Secretary of State under day of March 17, 1946. It was signed by Dean Acheson as chairman, with the following distinguished gentlemen assisting him: Vannevar Bush, James B. Conant, Leslie R. Groves, John J. McCloy. Very important document (though not about cryptography).

Item 715

Watt, Sholto (Editor), Into the Atomic Age; A Plan of Action for Canada Now, Montreal: The Montreal Standard Pub. Co., 1946, 86 pp.

Articles by 16 of the most eminent men of the time - - Albert Einstein, Julian Huxley, Field Marshall Jan C. Smuts, etc. At the time when atomic energy was a deep secret, this seems to have been the very first leak.

Item 716

Condon, Edward U., "Sharpshooting at the Atom," Popular Mechanics, 74,1 (July, 1940), pp. 1-5 and 143A.

The first of a series of three articles dealing with atomic energy. These are believed to constitute the earliest public disclosure of the possibility of producing atomic energy. It is also

believed that the U.S. Government made an abortive attempt to suppress these articles or to recall the three issues of the magazine. **Items 716.1** of September 1940 and **716.2** of January 1941 contain subsequent articles (anonymous) dealing with atomic energy.

Item 716.1

“Harnassing the Atom,” Popular Mechanics, (September 1940), pp. 402-405, 127 A.

Item 716.2

Langer, Dr. R.M., “The Miracle of U-235,” Popular Mechanics, (January 1941), 1-5, 149 A.

Item 716.3

Fermi, Laura, “That Was the Manhattan District,” New Yorker, (24 July 1954).

An item of much interest in connection with the history of the development of the atomic bomb and atomic energy. The widow of the first distinguished atomic scientist to die, writes of her husband and family while the project was being carried on. Fermi was perhaps the most notable and distinguished of the group. The Fermi Prize of \$50,000 is awarded by the U.S. government to the person making the greatest contribution to nuclear science.

Item 716.4

Neumann, John von, “Can We Survive Technology?” Fortune, (June, 1955), pp. 106-108, 151-152.

The distinguished mathematician, then a member of the U.S. Atomic Energy Commission, writes on atomic energy. This copy of the magazine is autographed to WFF. Clippings are enclosed from several magazines about this great genius, also his obituary from the Washington Post. Dr. von Neumann was a pioneer in the invention of modern digital computers.

Item 716.5

Friendly, Alfred, “Death of Earth, seen from A.D. 15,000,” The Washington Post and Times Herald, 26 June 1955.

An autographed copy of an article on atomic warfare and its frightful possibilities. Alfred Friendly was a colleague of WFF’s in WWII and since has been a devoted friend and admirer (ESF). After Alfred Friendly left military intelligence at the end of WWII, he became managing editor of the Washington Post. WFF convinced Friendly that the struggle, then going on in Congress re: military control vs. civilian control must have assistance from a powerful press. Friendly persuaded the Post to adopt a campaign for civilian control, which had a great influence in the ensuing outcome. “18 Nobel Prize scientists - refrain from using atomic power in statesmanship.”

Item 716.6

Times, London August 7, 1945.

This issue contains the first disclosure in London of the dropping of the atomic bomb on Hiroshima, Japan.

Item 717

Stimson, Henry L. and McGeorge Bundy, On Active Service in Peace and War, New York: Harper and Bros., 698 pp.

This book is important in that it contains references to the American Black Chamber of the Yardley period and gives Stimson's views on the ethics of maintaining such an activity. Stimson later changed his mind. WFF learned from H.O. Yardley that it was not Stimson but the President himself who ordered the closing of the Black Chamber. With Yardley's reputation for disregard of the truth, if that suited his purposes, his statement may be discounted. For an unflattering biography of Stimson as Secretary of War (1911-1913) and Secretary of State (1929-1933) see Richard Current, A Study in Statecraft, **Item 1432**. Chapter 16 "The War Begins." Photostat positive of Stimson's book, pp. 382-395, 454-455, 342-391. See also, David Kahn, The Reader of Gentlemen's Mail.

Item 717.1

Certain correspondence between WFF and William Bundy, brother of McGeorge Bundy, Asst. Secretary of State for Eastern Affairs in 1966. The information in this item is of vital importance in connection with the activities of closing out H.O. Yardley and the so-called Black Chamber.

Item 718

U.S. Government. Committee on the Pearl Harbor Attack. Joint Investigation on the Pearl Harbor Attack. Report of the Joint Committee on the Investigation of the Pearl Harbor Attack pursuant to U.S. Congress, Resolution 27, 79th Congress, Washington, DC: GPO, 1946, 580 pp.

The summary of the long and detailed investigation of the events leading to the attack on Pearl Harbor. This volume contains the views of the majority and the minority. It is accompanied by some 39 volumes of testimony. Proceedings of the Army Pearl Harbor Board 1-10, 11-20, Vol. 20-27, Vol. 30-37, Vol. 38. Proceedings of Hewitt Inquiry, aerial photos and maps. There are two copies of Volume I, one was apparently a preliminary run-off. It does not contain the Minority Report which is on pp. 495-573 of the Final Edition. See **Item 718**. That edition is bound in green buckram. Correspondence on Safford testimony in separate box; see **Item 2112**.

Item 718.1 (1)

U.S. Government, Investigation of the Pearl Harbor Attack. Report of the Joint Committee on the Investigation of the Pearl Harbor Attack. Congress of the United States pursuant to Senate Congressional Resolution 27, 79th Congress, Washington, DC: GPO, 1946, 492 pp. with 4 maps.

The same as **Item 718** except it does not contain the views of the minority. Cf. **Item 718.2**. Two copies.

Item 718.1 (2)

Ferguson, Homer and Brewster, Owen, Pearl Harbor, Report on Investigation of the Pearl Harbor Attack; views of the Minority. Senate document, Joint Committee, Washington, DC: GPO 1946, 79 pp.

This report of the minority, in the Joint Congressional Investigation of the Pearl Harbor attack forms a part of the final report. The preliminary volume to the 39 volumes of the testimony and exhibits studied by the Joint Committee. The most important of all the accounts, official and unofficial, dealing with the sudden attack at Pearl Harbor on 7 December 1941, this set of 40 volumes is out-of-print and difficult now to obtain. They constitute a mine of information concerning "Magic" the then-used code name for communications (Signal) intelligence. The FC contains a large number of items concerned with Magic, how it was used, unused, or misused before the attack; the views of the "revisionists" expressed in books, brochures, newspaper articles, editorial comments, accounts in periodicals and a seven-volume unpublished analysis of the events prepared by a member of the scientific staff of the Rand Corporation of Santa Monica, CA, later published as Pearl Harbor: Warning and Decision by Robert Wohlstetter. See **Item 177.5**. Cf. David Kahn, The Codebreakers, pp. 1-67.

Item 718.2

U.S. Government, Congress of the U.S. Senate, Joint Committee, Investigation of the Pearl Harbor Attack, Minority Views, S. Con. Res. 27, Washington, GPO, 1946. Pearl Harbor; intercepted diplomatic messages sent by the Japanese Government between July 1 and December 8, 1941. Printed for the use of the Joint Committee on the Investigation of the Pearl Harbor Attack, Washington, DC: GPO, 1945, 253 pp.

This document is of special interest in connection with studies dealing with the attack on Pearl Harbor since it contains the translations of several hundred messages of Japanese origin together with indications as to the service which obtained the solution (Army or Navy), the dates of interception, and other items of importance. All of these messages appear in Part 12, one of the volumes of the 39-volume report of the Joint Congressional Committee on the Investigation

of the Pearl Harbor Attack. Inasmuch as such a complete disclosure of cryptanalytic successes has never been made heretofore by any government, this document is of historical interest and value. "When the U.S. dropped the atom bomb on Hiroshima, warfare was changed forever; when the Joint Congressional Committee printed its report, it changed the character of cryptanalysis forever.

Item 718.3

Flynn, John T., The Truth About Pearl Harbor, New York: John T. Flynn, October 1944, 31 pp.

Deals with Magic and its alleged misuse by President Roosevelt and his cabinet. A way-out right-winger, (According to WFF) Flynn had several articles privately published. See David Kahn, The Codebreakers, pp. 1-67.

Item 718.4

Flynn, John T., The Final Secret of Pearl Harbor, New York: John T. Flynn, September 1945, 15 pp.

One of the extreme radicals against the Roosevelt regime writes a pamphlet in which "Magic" figures prominently. Another privately printed diatribe by one of the most violent of the so-called "revisionists." He believed Roosevelt knew about the attack and purposely kept Kimmel and Short in the dark. The intercepted codes told the whole story. Cf. David Kahn, The Codebreakers, pp. 1-67.

Item 718.5

U.S. Government, Hull, Cordell, Secretary of State, Peace and War. U.S. Foreign Policy, 1931-1941, Washington, DC: GPO, 1942, 144 pp. Department of State Publications 1853.

One of the State Department's papers throwing light upon U.S. Foreign policy during the critical years 1931-1941. Printed in 1942 release date January 2, 1943.

Item 718.61

Chamberlain, John, "Pearl Harbor," Life Magazine, (September 24, 1945), pp. 110-120.

"The justification for Roosevelt's precise course of action will probably be argued until doomsday." pp. 110. See also pp. 101-109 on the Incas.

Item 718.7

Marshall, George C. and Thomas E. Dewey, "Marshall-Dewey Letters," Life Magazine, (December 17, 1945), pp. 19-22.

This letter (and an almost exact duplicate of it) from General Marshall to Governor Dewey contains the most damaging revelations to the cryptanalytic successes of the U.S., principally on Japanese government messages. (The second version gives the reasons for its existence). The letter was written with the purpose of imploring Gov. Dewey to refrain from using, in the 1944 Presidential campaign, knowledge he had gained about the “Magic” available before the Pearl Harbor attack. This knowledge was “leaked” to Governor Dewey by some unknown person high up in either the Army or Navy or possibly in the State Department whose identity was never disclosed. The publication of these letters changed the history of cryptography forever. Dewey was a true patriot and he never revealed anything. As of this writing it was never discovered who leaked the story either to Dewey or to the magazines. The British were extremely agitated and upset by all this. See **Item 1039**.

Item 718.62

Sargent, Winthrop, “Dali,” Life Magazine, (September 24, 1945), pp. 63-68.

This belongs with other items having to do with the cult of intelligibility but specifically in the field of modern art. In the same folder as **Item 718.61**. Same copy of Life. “Dali himself admits he hasn’t any idea of what the picture actually means.”

Item 718.63

Anonymous, “The Incas,” Life Magazine, (September 24, 1945), pp. 101-109.

This belongs with that part of the FC which deals with the Central American and South American early civilizations. Beautiful Illustrations. Some material on the decipherment of *quipu*, but mostly on architecture.

Items 718.64

Anonymous, “The Secretaries of State,” Life Magazine, (September 24, 1945), pp. 84-90.

This issue of the magazine contains some fine photographs which WFF thought might be useful some day as illustrations for an article or a book.

Item 719

Tossijn, Ph., Codes Engeheimschriften, Brussels: De Pijl, 1946, 61 pp.

A very elementary treatise on cryptology by a Flemish writer, probably a journalist. Picture of *scytale* on p. 9, on which see Sheldon, EAW.

Item 720

Ryan, Willis, Government Circles - featuring Monroe Cripps, Ph.D.

A set of cartoons drawn by a member of the Army's Signal Intelligence Service during his WWII service at Arlington Hall Station. The cartoons are amusing and interesting to "*cognoscenti*."

Item 720.1

Murray, Don and Rip Poons, Cartoons of World War II (Navy) at Naval Security Station, Washington, DC: Hoist the Ensign.

Item 721, 721.1, 721.2

Goodwin, Robert K., "Russia and the Portsmouth Peace Conference," The American Slavic and East European Review, Vol. IX, No. 4, pp. 274-291.

An excerpt from a book which has something to say about cryptography in the negotiations which closed the Russo-Japanese War. Two other articles in the same volume.

Item 721.1

How, M.A. De Wolfe, George von Lengerke Meyer. His Life and Public Service, New York: Dodd & Co., 1919.

An excerpt from the life of Theodore Roosevelt's ambassador to Russia. In a letter to President Roosevelt, Meyer states that the Russians had the U.S. Codes. WFF thought this was probably correct.

Item 721.2.

Dennett, Tyler, Roosevelt and the Russo-Japanese War, extracts from, New York: Doubleday & Doran 1925.

Very interesting historically concerning a code message sent by Theodore Roosevelt to the Tsar of Russia during the Russo-Japanese War. Part of the message appears.

Item 722

Spaulding, Thomas M., The Cosmos Club on Lafayette Square, Washington, DC, 1949, 56 pp.

Item 722.1

Cosmos Club - clippings.

Item 722.2

Lehman, Milton, "America's Choosiest Club," Saturday Evening Post, January 13, 1951, pp. 34-35, 108-110.

An article on the professional and scientific club in Washington, D.C. founded by Alexander Graham Bell. WFF was a member from 1946 to his death.

Item 722.3

Cosmos Club, The Savile Club 1868-1958, Privately printed for members of the Club.

The Savile Club is a London Club which grants reciprocal privileges to Cosmos Club members. WFF stayed at this club when in London on official business several times between 1946-1958.

Item 722.4

The Cosmos Club, Membership of the Cosmos Club 1878-1968, Washington, DC 1968.

Item 723

Kobler, John, "JCHEW GISEY PYMOP UQRPD. How to Crack Enemy Codes," Collier's Magazine, 28 October 1950, pp. 22-23, 46-50.

A journalist pays tribute to the American Cryptogram Association and its then President William G. Bryan. An attempt to arouse interest on the part of the general public in the subject. WFF wrote that after Mr. Bryan's death, the American Cryptogram Association began to deteriorate. On Caesar's cipher, *skytale*, etc, see Sheldon, EAW, David Kahn, The Codebreakers, pp. 62ff.

Item 724

Urquhart, Sir Thomas, A Challenge from Sir Thomas Urquhart of Cromartie, Oxford: Printed for the Luttrell Society by Basil Blackwell, 1948, no. 4, 14 pp. plus 31-page introduction.

Urquhart was interested in optical secrets, mysteries of natural philosophy, calculating longitude. See his Logopandecteisio, 1653. Introduction to the Universal Language.

Item 724.1

Urquhart, Sir Thomas, The Works of Sir Thomas Urquhart of Cromarty, excerpts from. Edinburgh: Knight, 1834.

EKEKYBALAGRON or the discovery of a most exquisite jewel, etc. pp. 199-205, 233-237, 292. Title page of the Logopandecteision, photostats negative and positive. He had a tremendous vocabulary and strung words together to compose unintelligible sentences (2 pages long).

Item 724.2

Urquhart, Sir Thomas, The Works of Sir Thomas Urquhart of Cromarty, excerpts from. Edinburgh: Knight, 1834.

Logopandecteision or an introduction to the universal language. pp. 315-321, title page, p. 298 engraving, p. 296.

Item 724.3

Urquhart, Sir Thomas, The Works of Sir Thomas Urquhart of Cromarty, excerpts from, Edinburgh: Knight, 1834. "The Trissotetras," pp. 118-119. "Proquiritations" (finis page) 417.

Item 725

Friedman, William F., Mock court-martial of WFF, January 4, 1946.

President of the Court
 Trial Judge Advocate
 Defense Counsel
 4 members
 2 witnesses

"Do you have scrambled alphabets with Bacon controversy for breakfast, alphabet soup for lunch and a collection of hashed messages for dinner? Is it not true you are now working on a project of inverting, developing, and putting into practice a system of communications which requires only a typist at each end motivated by extra-sensory perception?"

Item 726

Nyquist, H., "Enciphering - Effect of Redundancy in Language," Bell Telephone Laboratories Paper, May 30, 1944.

This cipher has to do with information theory and cryptanalysis. The first sentence of this important paper reads: "this is to discuss a property of written language and spoken language which appears to make the latter fundamentally more difficult to encipher. The property may be called redundancy." Dr. Nyquist became a consultant to NSA after his retirement from Bell Telephone Laboratories. He was a distinguished mathematician.

Item 727

Mendelsohn, Charles J.

Miscellaneous Notes and Manuscripts Taken Over by WFF as literary executor. On the shipment of Manuscript Collection to Penn plus inventory. Handwritten notes, translations, Kasiski, Cardan on Cryptography.

Item 728

Eisenhower, Dwight D., Report by the Supreme Commander to the Combined Chiefs of Staff on the Operations in Europe of the Allied Expeditionary Force, Washington, DC: GPO, 1945, 123 pp.

The official report as against the personal account in **Item 864**. Greatly condensed. No mention of codes, ciphers, intelligence, or the like. This was sold to the general public by GPO.

Item 729

Fraser, Hugh Russell, "Man of Mystery," Pathfinder Magazine, Washington, DC: 56, 3 (February 9, 1949), pp. 18.

Biographical article on WFF and family.

Item 729.1

Anonymous, "Mystery of Codes and Ciphers," Pathfinder Magazine, Washington, DC: (September 7, 1929), pp. 20.

An article with no information of any significance, written by an anonymous person who probably culled his material from other unauthorized newspapers or magazine articles. Picture of WFF. "Signal Corps. Code expert."

Item 730

Sinkov, Abraham et. al., SIS Record, SIS in the Far East, Signal Intelligence Service in the Far East 1942-1946-historical and pictorial record. Privately printed by the SIS Record Association, Melbourne, 1946, 106 pp. numerous cuts.

This is a very interesting and historically important record of the non-classified aspects of the Signal Intelligence Service in the Far East in WWII. This item is a gift copy from the Editorial Board of the SIS Record and was presented to WFF on 3 March 1947. It contains autographed photographs of a number of the members of the Signal Intelligence Service in the Far East, including Maj. Gen. S.B. Akins, Col. Abraham Sinkov, Lt. Col. Harry L. Clark, LTC Hugh S.

Erskine and Maj. Charles E. Girhard. There is not in this document a single word of what this group really did.

Item 731

Franco-Prussian War

- 1) A file containing data concerning a certain micro-writing episode of the Franco-Prussian War and the Siege of Paris 1870-1871. 2) An extremely interesting exchange of letters in the years 1938-1939 between WFF and Dr. Irvin Stuart, the Director of the Committee of Scientific aides to Learning. 3) Dr. L. Bendikson, Department of Photographic Reproductions, Huntington Library. Other items in this folder are 4) a reprint of a Bendikson article on microfilm. 5) a photographic copy of an article by Mon. Dagrom in French giving the story of the microfilm message in code during the Siege of Paris 1870-71 6) a meticulous copy of the message in a French handwriting, provenance unknown. 7) a fragment of a work-sheet of WFF. 8) enlarged copy of the microfilm itself, the reproduction showing the faded and dim condition. The article by Mon. Dagron states the microfilm code messages were actually sent by carrier-pigeon. As will be noted, WFF was discouraged from exhausting his personal time in attempts at solution of the message, since it was clearly a code, and not a cipher, therefore probably considerably more material than a simple message.

Item 732

Anonymous, Code and cipher revelations concerning WWI, 1930. "One Night before America's First Attack," Sunday Star 4/20/30. "Our Secret War," No. 7, Codes by Thomas M. Johnson, Seattle Sunday Times 6/22/30 and "Einzifferte Geheimschriften," Dresdner Anzeiger, 2/16/30.

Espionage before the surprise attack at the Battle of Catigny, captured code book. A German naval code seized by the Americans paved the way for the greatest German submarine losses of any given week during the war.

Item 733

No card, no item. Shelf list card identifies it as correspondence from ESF.

Item 734

Friedman, William F., and George Fabyan, Correspondence, 1 (June 14, 1915 to December 5, 1923), 2 (January 10, 1924 to September 29, 1958).

In 1915, George Fabyan was just beginning to launch some departments at his Riverbank Laboratories, and the hiring of WFF (and attempts at hiring others) occupy the early letters. The first mention of Cipher Code - aside from the Baconian ciphers - is in a letter dated April 2, 1917, from "The Chief of the War College Division" then the plans for Captain Mauborgne to

come to Riverbank. Thence to the launching of the Riverbank Cipher Department to serve all branches of government. The letter of November 26, 1917, from Fabyan to Col. Van Deman, Chief Military Intelligence Division, reveals that at the time, the War Department wished to commission WFF in the regular army -- a fact WFF only learned about after the war was over. In November 1917, appears the letter to WFF in France telling him to come home -- "the war is over, his salary has been going on." He should return at once to Riverbank. (WFF was under orders to remain at GHQAEF until the history of the war years re codes and ciphers was completed, which was March 1919. On December 9, 1918 WFF wrote a reproving letter to Fabyan stating (he) Fabyan had concealed facts and mail. Of course, Fabyan denied every charge. (See letter to ESF dated January 6, 1919). On April 25, 1919, a letter from H.O. Yardley offering ESF and WFF a position in his then-being formed Black Chamber. But Fabyan managed with delaying tactics, as well as more unpleasant methods, to prevent their leaving Riverbank. War Department plans for commissioning WFF did not succeed in working out either. (For appt. to the Regular Army, WFF had to take a physical and intellectual achievement test at Camp Grant. (George Fabyan's brother-in-law was in command at Camp Grant.) Major Mauborgne, at that time in charge of R&D in the Signal Corps, was determined that we should come to Washington, and so they did go, both as civilians, after getting away from Riverbank with ultra-scheming so as to prevent Fabyan from knowing until they were packed for their train out. They reported to the Signal Corps for work on January 2, 1921. In view of the fact that both WFF and ESF were drawn into cryptography and cryptanalysis through George Fabyan and Riverbank Laboratories, this correspondence (**Item 734**) is important. It sheds light on the many facets of George Fabyan's character and his schemes and plans. The file goes up through the 1930s and beyond the colonel's death in 1936 and Mrs. Fabyan's death later. WFF had urged the Col. and Mrs. Fabyan to give the Fabyan Collection of old cipher books to the Rare Book Division of the Library of Congress. Fabyan refused, but Mrs. Fabyan acceded. After her death, WFF received the bulk of the Riverbank pamphlets and brochures which he was certainly entitled to since he was author of all but two and had never been given any credit for them. They have for many years been collector items (They are now available in LC). In fact, the Index of Coincidence, which was unpublished when WFF and ESF left Riverbank, was published by Fabyan in France secretly in 1922. It has been called the foundation of all modern cryptanalytic methods and to have launched a whole new era in the science. The correspondence in the later years has to do with the tax-exempt status of the Riverbank Laboratories. The estate on the Fork River was left by Mrs. Fabyan to the State of Illinois to be used as a park, except for the Engineering Laboratory which is the only surviving activity of the several ambitious projects in other fields that George Fabyan began. See also article "Col. George Fabyan. Eccentric Genius" Midwest Magazine September 25, 1960. Folder also contains correspondence about the Wheatstone cipher device.

Item 735

Hoyle, Fred, The Black Cloud, New York: Signet Books, Inc., 1962, 190 pp.

Enclosed note from Gilbert King of IBM was sent along with this paperback to WFF in 1957. It is reminiscent of the “Messages from Mars” flurry in 1924. See Jenkins, **Item 782**. Appealing to an alien intelligence to save earth. Hoyle was a lecturer in mathematics at Cambridge University and a visiting professor of astronomy at the California Institute of Technology and a staff member of the Mr. Wilson and Palomar Observatories.

Item 736 (card in back file)

Childs, J. Rives, Correspondence with WFF.

Correspondence between WFF and former Captain, then in 1956, Ambassador Childs on the subject of code-compilation for the AEF in 1918 in France, and other matters of concern and interest to the above-named colleagues of WWI at GHQ AEF in the solution of field codes. On Childs see David Kahn, The Codebreakers, ch. 11.

Item 737

Baines, Howard R., Report of Code Compilation Section, AEF from December 1917 to November 1918. Original report in typescript, carbon copy.

Of important historical interest, and probably unique - - unless the original typescript is among the WWI records of the Signal Corps (very doubtful) or is among those at the National Archives. See notations on cover by WFF. Barnes signature also appears on the covers. The WWI records were re-classified. In black binder returned from NSA.

Item 737.1

Barnes Howard R., Report of Code Compilation Section, AEF from December 1917 to November 1918, Washington, GPO, 1935, 44 pp.

In 1934, WFF thought the report by Barnes, **Item 737**, was worthy of being printed as one in a series of papers on WWI cryptology, as important to students of the subject and to historians.

Item 738

Churchill, Creighton, “Tentative Conclusions for the Analysis and Apprehension of Musical Codes, Ciphers and Patterns,” 6 February 1942.

A memorandum dealing with the possible means by which music could be used as the basis for secret communication. Fanciful!

Item 739

Priestley, R.E., The Signal Service in the European War of 1914-1918, extracts from, pp. 28-29, 105-106, 151, 240.

Contains references to cryptography. A Briton writes of WWI cryptology, particularly faulty practices, resulting often in the loss of many lives. He also covers wireless apparatus as used in France in WWI. Classic examples of obstinate stupidity “orders repeated in full over the telephone by a Brigade Major to one of his battalions.” Hundreds of brave men perished.

Item 740

“Orphan Annie,” Radio Orphan Annie’s Secret Society, 1937.

An American comic strip artist devises a cipher for children and a society is formed which uses the simple cryptographic device for the exchange of messages between members. Includes “sunburst” membership pin and cipher device. Extremely popular among devotees, young and old, of the comic strip in the 1930s and 1940s.

Item 740.1

Major Jet’s Magic Decoder.

Silver Star member gets secret message ring in Sugar Jets Cereal. Made up of red glasses and red/green messages.

Item 741

Paffrath, Joachim F., “I was a Hitler Agent in the U.S.A.,” Liberty Magazine, (April 20, 1940), pp. 33-39.

A German secret agent before WWII, who revolted from the Nazi Party, reveals some of his experiences and tortures by U.S. Nazis. Also a fair amount of information on radio and the use of cryptography. Pages removed from magazine and forwarded to WFF by “Jom,” whose note concerning this appears in red pencil at the top of the first page. “JOM” was the invariable signature used by Joachim F. Paffrath.

Item 742

Anonymous, “Secret Writing,” New York Times, 18 May 1873. Note early date.

Eight pages of typescript, carbon copy, extract. Sent to WFF by anonymous donor.

Item 743

Artaxerxes (Pseudonym), Analyzing Cryptograms.

An elementary paper on cryptanalysis sent to Mr. Friedman in 1937 by his WWI student, the late Major D.D. Millikin, who at the time was conducting an evening course in cryptography at Hunter College in NYC. Artaxerxes is the pseudonym of A.L. Smith, Mildred, PA. Typescript on green paper.

Item 744

Hutchinson, G. Evelyn, "Marginalia," The American Scientist, 36, 2 (Spring Issue, April 1948).

Items of extrasensory perception. The work of Soal, Holdney, and J.B. Rhine are discussed.

Item 744.1

Skinner, B.F., S.G. Soal, and G.E. Hutchinson, "Card-guessing Experiments," American Scientist, 36, 3 (Summer Issue, July, 1948),

Photostat negative and one positive of an article embodying notes or letters from or by the three authors indicated. Another item in the FC which has devoted some attention to the question of telepathy and allied phenomenon as communications. Category, extra-sensory perception.

Item 745

Shulman, David, "Sherlock Holmes, Cryptanalyst," The Baker Street Journal, NY (1948), pp. 233-237.

Shulman analyzes the cryptographic phases in the Sherlock Holmes case, New York, 1948. Vol. 3, 2. This item is a reprint autographed and sent to WFF by the author. Sherlock Holmes was well-advanced in his cryptography. "There were many ciphers I would read as easily as I do the apocrypha of the agony column; such crude devices amuse the intelligence without fatiguing it."

Item 746

U.S. Coast Guard, "History of the Distress Radio Call SOS," Communications Bulletin, No. 62, (March 1935).

An interesting historical note; it contradicts popular misconceptions of the origin of the distress signal SOS. Typescript of 2 pages. It is not really SOS but . . . - - - . . . and is sent as one signal. It does not stand for Save Our Souls or Save Our Ship.

Item 747

Knox, Ronald A., "The Authorship of "In Memoriam," Chapter 8 of Essays of Satire, London: 1928, pp. 227-235. Photostat negative.

The Bacon-Shakespeare controversy has often aroused non-believers to satirize upon the authorship of works whose authorship has never been questioned. In this article, the author employs typical "Baconian" reasoning methods to "prove" Queen Victoria was the author of the Tennyson poem, "In Memoriam."

Item 748

Updegraff, Robert R., "Let Your Subconscious Solve it," The American Journal of Sociology 40, 3 (November, 1934), pp. ***

An article which is pertinent when one raises the question as to how sometimes suddenly the cryptanalyst gets an idea which enables him to proceed and pass the mental road block that hampered his progress. Typescript copy also.

Item 748.1

Waller, Willard, "Insights and Scientific Method," American Journal of Sociology 40, 3 (November 1934), pp. 285-297.

Gestalt and the principle of insight.

Item 749

Corbin, S., "Ascolti di Messagi segreti," L'Ala d'Italia, Rome, 20.10 (13-15 Maggio, 1939), pp. 52-58.

A popular article on secret communications. Mentions the Greeks and Romans, Plutarch, Suetonius, Caesar's cipher, Middle Ages. See Sheldon, EAW and David Kahn, The Codebreakers, pp. 82ff.

Item 750

Anonymous

System in use by the Germans between Berlin and Constantinople in WWI. Solution of German transposition and substitution ciphers. The Italian and southeastern front. These are cryptanalytic items of deep interest in connection with WWI operations in that area. See also **Item 1054** which contains these as well as much other material of similar character.

Item 751

Gamba, Vittorio (General), "On Cryptography," Translations of two articles appearing in The Encyclopedia Italiana, Originally published in 1931.

A publication of the Historical Unit, SSA; The Signal Security Agency. General di Gamba was one of the foremost Italian cryptographers of his day. English translation prepared by the Chief Signal Office, 6 June 1945. SPSIS-1. For material on Demaratus, Aulus Gellius, Suetonius, and Caesar's Cipher see Sheldon, EAW, and David Kahn, The Codebreakers, pp.82ff.

Item 752

Pratt, Fletcher, "G-2 Stuff," The American Legion Magazine, (Jan. 1939), pp. 8-9, 46-47.

This indefatigable journalist does an article on the German cryptology of WWI, mentioning the Battle of Jutland, and the sinking of the German battleship, Emden. Given to WFF by Col. Hayes (Dink) to whom it had been sent by a friend. Jutland—the German succeeded in stealing part of the British naval code simply by watching when the British dreadnoughts signaled each other by search light. The Germans would flash the recognition signals that identified English ships. When the destroyers answered they blew them out of the water.

Item 753

Shannon, C.E., "A Mathematical Theory of Cryptography," Mimeographed Publication, (Sept. 1, 1945) 114 pp. of the Bell Telephone Laboratories, MM-45-110-92,

Dr. Shannon became one of the members of the NSA's Scientific Advisory Board. He told one of the other members, after he had learned something about cryptology that he would have never written this paper had he known what real cryptology is like. In this paper, Shannon refers several times to Fletcher Pratt's Secret and Urgent, a book written by a journalist, not a cryptologist. This copy of Shannon's brochure is autographed to WFF.

Item 754

Bakhaven, V., On Ciphers, Publication of the Union of Russian Social-Democrats (abroad) Geneva, 1902, 24 pp. Photostat positive.

Photostatic copy of a pamphlet of 24 pages giving several cryptographic systems used or intended to be used by the Russian revolutionists of 1902. The pamphlet was put out by the Russian Social-Democrats, and carries on its title page the famous slogan "Proletarians of all countries, unite!" After the revolution of 1905, ruthlessly suppressed, the Revolutionaries continued to work. Bakhaven was one of the foremost leaders in the later successful revolution. Tells Russian anarchists how to communicate secretly. Item **754.1** Partial English translation.

Item 755

W.F. Flicke, Die rote Kapelle, Holden/Rhein: Vier-Bruken-Verlag, 1949, 377 pp. DJ.

The author was one of the leading figures in the German cryptanalytic organization of WWII. This item deals with Communist espionage nets in Europe, for which the name “The Red Band” was used by the Allies.

Item 756

Scarborough, J.B. and R.W. Wagner, Fundamentals of Statistics, New York: Ginn & Co., 1948, 145 pp.

A treatise on statistical theory used at the U.S. Military Academy circa 1950. This item was given to WFF by the Commander of the Academy when WFF lectured at West Point in 1949. Fourteen exercises in that course as given at West Point in 1951 will be found in **Item 756.1**.

Item 756.1

Scarborough and Wagner, Statistics Course, U.S. Military Academy, Spring 1951. Mimeographed sheets and hand written notes.

This was the proposed set of lessons based upon the text mentioned in **Item 756** (Fundamentals of Statistics), but with special references to the fundamentals of probability as they might be applied in cryptanalysis. Some exercises in cryptanalysis were proposed in 1951, but the pressure for attention to other subjects made this impossible. WFF gave a lecture to the cadets of the U.S. Military Academy in 1952. It gave a general account of the history and development of cryptology, fully illustrated with Lantern slides.

Item 757

Upson, William Hazlett, “Confidential Stuff,” The Saturday Evening Post, (March 30, 1940), pp. 14-15, 64-69.

The story involves what purports to be a long “cryptogram” which is believed to have been made up purely at random. The author was a classmate of WFF at Cornell University. He wrote a long series of stories on the “Earth Worm Tractor Co” but this is believed to be the only one with cryptographic aspects. IBM printout of code. Handwritten notes solving the cryptogram.

Item 758

Sparkes, Bayden, “Writ on Rocks,” The Saturday Evening Post, (March 30, 1940), pp. 9-11, 118-128.

This is an article which makes some archaeologists see red. It deals with the writing on the so-called Kensington Stones. When one has finished reading it, one does not know whether to

believe that the author was trying to point out a fact or a hoax. As of now (1967), the authenticity of the Kensington Stone is still disputed. For bibliography, see Sheldon, EAW. Good, illustrations.

Item 759

Voska, Emanuel V. and Will Irvin, All the character ffrom WWI-Von Papen. A series of articles in The Saturday Evening Post, May & June 1940. "Spy Counter Spy" May 4, pp. 12-13, 42-48. May 4, "We trail the Dynamiters," pp. 20-21, 56-67. May 18, "Women Make Wonderful Spies," pp 26-27, 45. May 25, "We Lift Dr. Albert's Portfolio," pp. 24-25, 99-106. June 8, "Canadian Invasion and Black Tom," pp. 26-27, 71-79. June 15, "Germany Moves to Mexico," pp. 23, 68-75.

This series represents an echo out of days long gone by—WWI. Interesting because it has references to Dr. Albert, the Black Tom, and Kings and Disasters, etc. Voska was a Czech who had come at 19 years of age to America and became a citizen, made a good-sized fortune and devoted his life to establish The Czech Republic. Before and during WWI, Voska was an intelligence agent and a counterspy, and aided in tracking down German spies and saboteurs in several countries. One of the bravest of the brave was Voska's agent Anna Chaloupkova. She left her bridegroom of one day to accept a dangerous mission. She never saw him again. She died in Prague a week before he arrived. See "Spy and Counter Spy" on Madame Dumba. "No other foreign woman in Washington had such a foothold in official circles." The Viennese Charmer, Madame Dumba, who played an important role on the pro-German side. See also Emma Destinn who was an Opera Star for the Met and an invaluable secret agent. See "Keeping Posted" in the first of the article included (May and June 1940).

Item 760

Marshall, Joseph, "The Lost Code," The Saturday Evening Post, (Aug 5, 1944), pp. 16, 74-80.

Another example of ciphers in romantic tales. Just a "tale."

Item 761

Chamberlain, John and Charles A. Willoughby (Maj. Gen), "OSS," Life Magazine, (Nov 19, 1945), pp. 119-130.

Deals largely with the career of Maj. Gen William J. Donovan who organized the OSS in WWII. Chamberlain, the arch revisionist, for once found someone and something in the U.S. Govt. worthy of praise. Good pictures of Donovan, professors, scholars, and screwballs. "Gen Donovan would like to see a permanent fact-gathering and fact-pooling organization set up under the control of the U.S. President who is the sole administrative officer capable of coordinating the work of Army, Navy, Air Force, & State Dept." The Republic needs its sentinels. For the

most recent biography of Donovan, see: Douglas Waller, Wild Bill Donovan. The Spymaster Who Created the OSS and Modern American Espionage New York: Simon & Shuster, 2011.

Item 762

Wickware, Francis Sill, "The Secret Language of War," Life Magazine, (Nov. 26, 1945), pp. 63-70. Excellent copy of Bazeries cylinder. Subtitled.

Breaking Japanese Code before Pearl Harbor was climax of an unceasing and unknown battle. Slide rule device for substitution ciphers.

Item 763

Chamberlain, John and Charles A. Willoughby (Maj. General), "The Man Who Pushed Pearl Harbor," Life, (April 1, 1946), pp. 85-97.

An article about Sen. Homer Ferguson and how he insisted upon a full scale investigation of the attack on Pearl Harbor. Senator Ferguson belongs to the revisionist school concerning events leading up to the attack, and Chamberlain was an unceasing critic of the administration. It is worthy of note that Ferguson was a member of the Joint Committee and was a signer, along with Senator Owen Brewster of the minority report at the end of the Congressional investigation. "Senator Homer Ferguson thinks the recent inquiry proves the need for a new intelligence service and a candidly open foreign policy."

Item 764

Chaver, M.E., A Method of Deciphering Code Messages in which the code-groups of the coded message are derived from the normal code-groups by adding a series of key-numbers. Typescript of 9 pages, 1923.

A small brochure on the solutions of additive methods for the encipherment of code messages. This item is not only unique and historically quite valuable, it is probably the first time in U.S. cryptanalytic history that a method for solving this type of super-encipherment was invented and described and by an "amateur." Chaver was a paper hanger! Sent by the author to WFF in 1923. A modest man: -- he did not even have his name on the article. See correspondence under Chaver. WFF relates that this was a spectacular feat and WFF found the facts astounding that this was done by an amateur, but did not dare tell him that he had "stumbled upon" something known only in the most secret of cryptanalytic circles.

Item 765

Wadsworth, Decius, Cipher Device.

Photographs of the cipher device invented by Wadsworth and misc. papers, information, and correspondence concerning him and the device. Decius Wadsworth was an Army officer for the greater part of his life, during which time he was an Inspector of Arms and Ammunition and later the first Chief of Ordnance of the U.S. Army. Through his official duties he became acquainted with Eli Whitney, whose factory at Hamden, CT was manufacturing U.S. ordnance supplies. How Wadsworth became interested in cryptographic apparatus is unknown, but he invented and either built or had built for him a beautiful model of a disk or wheel cipher device, the operating principle of which was believed to have been invented about 1875 by Sir Charles Wheatstone (see **Item 478**). Wheatstone himself believed and claimed that the invention was his. In 1947, WFF quite by accident, discovered the existence of the Wadsworth device in the museum of a small town in CT (Hamden). The Wadsworth device bears the engraved date on its face "1817" thus proving that Wadsworth invented this principle approximately 60 years before Wheatstone. Very little is known of Wadsworth's life. Some pages photostated from a book published in 1884 described Wadsworth's invention of the stock trail gun carriage. The National Intelligence, Washington, DC published an article at the time of Wadsworth's death and Col. Wingate Reed from a book entitled "The Beginning of the U.S. Army," mentions Wadsworth's Command of West Point. These dates comprise all the information which has been obtained thus far. The correspondence included in this item reveals how this device came to light and how it came to be submitted to WFF for examination. Cf. David Kahn, The Codebreakers, pp. 195-196.

Item 765.1

Reed, C. Wingate (Colonel), "Decius Wadsworth," Army Ordnance Journal, (May-June 1943), pp. 527-530; July- Aug. 1943, pp. 113-116.

Photostat positives, 2.

Photostat negatives

Photostat negative of letter by Wadsworth.

Wadsworth article written by ESF in the 50s for William & Mary Quarterly -- never submitted.

Cf. David Kahn, The Codebreakers, pp. 195-196.

Item 766

Wiener, Norbert, Cybernetics, or Control and Communication in the Animal and the Machine, New York: John Wiley & Sons, Inc., 1948, 194 pp.

One paragraph of this book deals with the solution of the Egyptian hieroglyphics, which the noted author terms the greatest feat in cryptanalysis. He was quite wrong because the solution of the Egyptian hieroglyphics was much more a problem of discovering the grammar and mechanism of an unknown language than the solution of a cryptogram, although it is true that the processes of elementary substitution played an important part in the early steps in the ability to read Egyptian hieroglyphic writing. Prof. Wiener's book may be considered one of the basic

treaties leading to the original design of modern electronic digital computers. The Wiener book was a gift to WFF's old friend and classmate Dr. Ramsay Spillman in Oct. 1951. In turn, this was a gift to Dr. Spillman at Christmas in 1949 from a medical colleague of his. See Sheldon, EAW On Egyptian cryptography see also David Kahn, The Codebreakers, pp. 71-73.

Item 767

Rogers, W.G., When This You See, Remember Me: Gertrude Stein in Person, New York: Rinehart & Co, Inc., 1948, 247 pp.

A memoir about Gertrude Stein by a personal friend. An item in the cult of unintelligibility. Very interesting material about Rogers and his relationship with Miss Stein on the jacket of the book.

Item 768

U.S. Government, Patents on Cryptographic Machines.

Patents by Damm, O'Brien, Scherbius, Bernstein, Fanning, Hagelin, Friedman, Hebern, Hitt, Koch, Moll.

Item 769

Mansfield, Louis C.S., One Hundred Problems in Cipher, London: Alexander Maclehose & Co., 1936, 223 pp.

Elementary problems for amateur cryptanalysis. Actually a compilation of the type of puzzles found in newspapers.

Item 770

Durning-Lawrence, Sir Edwin, Bacon is Shakespeare, New York: John McBride Co., 1910, 286 pp.

The library itself, and all the furniture and contents, which belong to Sir Edwin Durning-Lawrence were bequeathed to the University of London where they form a magnificent addition to the university's own library. Sir Edwin was one of the foremost Baconians and was for many years President of the Bacon Society of England. Although the subject-matter of the book is complete nonsense, it has many interesting and valuable plates.

Item 771

Theobald, Bertram G., Francis Bacon Concealed and Revealed, London: Gail Palmer, 1930, 389 pp.

This book should be in the collection of any persons who have an interest in numerology. It undertakes to explain what the believers in the Baconian authorship use as their “proof.” It also attempts to explain what are referred to as mysteries concerning the authorship of the works of Spencer, Marlowe, and others.

Item 772

Baker, Ray Stannard, Woodrow Wilson; Life and Letters, Extracts from Garden City: Doubleday, Doran Co. 1935. [with 3 Photostats]

Extremely interesting because these extracts contain not only references to cryptography and secret communications but also disclose the small code used between President Wilson and Co. House, when the latter was in Europe for the President. It appears that President Wilson either did not trust the State Dept. cryptographic systems or feared “leaks” of information by Departmental personnel through whose hands the messages would pass. This item contains examples and a list of messages. Mrs. Wilson acted as “code clerk” for her husband. The President’s Papers reveal Mrs. [Edith Bolling] Wilson helped her husband translate the codes well into the night. She, with the secret code keys and spelling out the messages word by word, and he at the typewriter setting them down. Sometimes they switched. “The poor President has had an epidemic of cipher dispatches.”

Item 773

U.S. Government, Military situation in the Far East. Hearings before the Committee on Armed Service and the Committee of Foreign Relations, U.S. Senate, Washington, DC: GPO, Pt 1, 724 pp.

An inquiry into the military situation in the Far East and the facts surrounding the relief of Gen. MacArthur of his command in that area. Important historical documents.

Item 773.1

Anonymous

Korean War. Clippings in regard to the relief of Gen. MacArthur from his command. This episode in the U.S. history is one which will be discussed for many years. WFF thought it would be interesting to read what the newspapers of the day had to say about the relief of Gen. MacArthur by Pres. Truman. MacArthur repeats his call for Economic Blockade of Red China to reduce war potential. Washington Post, 3 June 1951. Among the reason for his ouster “MacArthur repeatedly misjudged the enemy he was opposing.” Evidently he disregarded the intelligence reports available to him about the entry of the Chinese communists in force. He also paid scant attention to the warnings from the Joint Chiefs about the disastrous physical split between the Eighth Army and Tenth Corps. According to ESF’s notes: MacArthur got drunk at

the American Club in Tokyo and started greeting his friends with “Well what do you know—a necktie salesman fires Jesus Christ!”

Item 774

Willoughby, Edwin Elliott, The Bible Cryptogram Book: Solving Cipher Puzzles from the Bible, Boston: W.A. Wilde Co., 1949, 36 pp.

This is a small book containing cryptograms in simple cipher based upon passages in the Bible. The late author was one of the great Shakespeare scholars of modern times and was the bibliographer of the Folger Shakespeare Library. A great Shakespearan scholar who also loved cryptograms. Autographed by the author who made this little book a gift to WFF. Not to be confused with real ciphers in the text itself. On ancient material, see Sheldon, EAW and David Kahn, The Codebreakers.

Item 775

Coupling, J.S. (Pseud), “Chance Remarks,” Astounding Science Fiction Magazine, New York: 44, 2 (Oct. 1949), pp. 104-111.

Three original journals plus photostat positives. Not fiction but a journalistic commentary by J.S. Pierce (Pseudonym, “Coupling”), on communication theory, cybernetics and the like. The basics of the Couplings interest was the science fiction story of 1943. “Fifty million monkeys” in which was utilized a “semantic analyzer.” Important in connection with the study of “modern literature.” Method of mechanically generating propaganda.

775.1

Coupling, J.S. (Pseud.), “Ergodic Prediction,” Astounding Science Fiction Magazine, New York, 44, 6, (Feb 1950), pp. 128-130.

Coupling imagines a machine for generating propaganda. A spoof on “modern literature” by demonstrating certain methods of producing such literature by purely statistical processes.

Item 775.2

Coupling, J.S. (Pseud), “Science for Art’s Sake,” Astounding Science Fiction Magazine, New York, 46, 3. pp. 83-92.

A suggestion for a statistical method of producing “modern music.” Coupling is, as noted above, a pseudonym for Pierce, one of the staff of Bell Telephone Laboratories. WFF requested Dr. Claude Shannon to ask Pierce for references to the statistical studies referred to on p. 84 (lower right). It turned out that these were rather sketchy and were never published.

Item 776

Cipher Bureau, A method of obtaining the primary alphabet from any one of its secondary alphabets.

Carbon copy of a type script of five pages, dated 5 January 1918, from “Cipher Bureau” to “Chief, Military Intelligence Section,” Washington. Professor Manly and H.O. Yardley of the WWI Cipher Bureau describe a “discovery” in cryptanalytic procedures—after Riverbank Laboratories had published its paper on the subject. WFF and ESF were the authors, see **Item 159**, Riverbank brochures, Number 15, published in 1917. The contents of this paper (**Item 776**) dated Jan 8, 1918—shows a change of one word in the title. The author of the memorandum refer to “Col. Fabyan’s method” meaning, of course, the Riverbank pamphlet published several months before.

Item 777

Wolf, J.M., Sliding strips to accompany his course in cryptanalysis, together with a mimeographed list of corrections to his text.

Professor Wolfe gave a course in cryptanalysis during World War II at one of the universities in New York, Brooklyn College of Brooklyn, New York.

Item 778

Devos, J.B., Les Chiffes de Philippe II et du Despacho Universal durant le XVIIe Siècle, Brussels: J. Buculot, printer for the Royal Belgian Academy, 1950, 576 pp.

A monumental and beautiful work setting forth many of the copies used by the monarch Philip II. The book, originally in paper covers, was beautifully bound and boxed for WFF’s collection by Brigadier John Tiltman. This book is a must for scholars interested in the history of cryptology.

Item 779

Devos, J.P., The Ciphers of Phillip II and of the Despache Universal during the 17th century.

Typescript translation into English, 41 pages of the most significant portions of **Item 778**. Original typescript and one carbon copy. With **Item 778**, this embodies almost every famous name in the history of cryptography before 1700. Pp. 40-41 contain conclusions of Devos and are of special interest.

Item 779.1

Carbon Copy. Missing.

Item 780

Levison, William, England and the Continent in the Eighth Century. Excerpts from the Ford Lectures.

Delivered in the University of Oxford in the Hilary Term, 1943. Important notes on cryptologic history are to be found in the references to the monks at Fulda and their cryptographic practices. The subject matter deals with usages that were very, very old cryptographic puzzles and acrostics of St. Boniface (Section VIII); how the Anglo-Saxons brought their “secret script” to England and how the Continental influence came to pervade England.

Item 781

Murdock, Walter, 72 essays, a selection, excerpts from two essays from (1) “The Balfour-Conrad question” and (2) “A question settled” Sydney and London: Angus & Robertson, 1947, pp. 120-125.

An anti-Baconian writes caustically about the disputed authorship question. Interesting and better yet, amusing. Nine pages (Photostat negatives). 1 copy (Photostat positive).

Item 782

Green, Fitzhugh (LT Commander), “Could We Decode Mars Messages,” Popular Science Monthly, (August 1924), pp. 27-28.

Photostat (negative) copy of an article; also a letter from John P. Ferriter, 5 Sept. 1924, and photographs (xeroxes) of “signals” recorded such signals from 1pm, August 22 to 5pm, August 23, 1924. (In 1924 Mars made one of its close approaches to earth). These signals were probably nothing but static, but the question arose: were they *bonafide* signals sent from Mars, and if so, could they be interpreted by beings on earth (1956)? The question of extra-terrestrial communications has of late become of great importance because of the past ten years of exploration into space. From Ferriter’s Letter: “They [the signals] consisted in part of dashes of six seconds duration separated by intervals of seven seconds. These dashes continued for several minutes and were followed by a voice pronouncing words. They were isolated words from one to four syllables. Evidently this was a test of some sort but we have been unable so far to find out who was doing the testing and we can’t understand the words. This was reported to the Chief Signal Officer as a matter of routine. Also in the folder, a memo from Robert Brochman NSA with an unclassified publication attached. NSA Technical Journal, Special Mathematics and Engineering issue. See L.D. Callimahos, Extraterrestrial Communications, pp. 117 and David Kahn, The Codebreakers, ch. 26.

Item 783

Babbage, Charles, Passages from The Life of a Philosopher, excerpts from London: 1864.

Charles Babbage is credited with the invention of the first adding machine, also a form of computer. This is a chapter in his biography which deals with cryptology, acrostics, and literary ciphers, verbal puzzles, how to go about solving the latter. A chapter entitled “Picking Locks and Deciphering” is a delight. WFF met a grandson of Charles Babbage in England in WWII, when the son was utilizing an inherited gift for ingenuity as an employee at GCHQ. No Card. Photographs from the Smithsonian of letters. G. Washington to Meshech Weare et al. Headquarters. Circular letter of Farewell to the Army. Newburgh. NY 8th June 1789. GW’s papers at Library of Congress. Washington’s resignation letter. 2 copies Photostat positives.

In the same folder: Passages from the Life of a Philosopher by Charles Babbage, London 1864. Chapter XVIII, Picking Locks & Deciphering. Cf. David Kahn, The Codebreakers, pp. 204-207.

Item 784

Anonymous

Codes, Rum-runners. Captured by the Coast Guard during the Prohibition Era. Photo- static copies of three codes seized when rum-runners’ vessels were meeting in rendezvous off the Atlantic Coast in the 20’s. One of these shows a 2-letter difference in construction of the code-groups’ proof that someone engaged in the world of liquor smuggling had had some authentic cryptographic training. During that decade Lt. L.M. Meals of the Coast Guard appealed to WFF for advice and some aid in connection with solution of rum-runners’ codes and cipher’s. From 1925 following, ESF acted as a “Special Agent,” solving rum-runners’ secret systems, first as a Dept. of Justice “agent” assigned to Capt. Root USCG, the sole Intelligence Agent in the Coast Guard; later she was appointed by the Investigative Service of the Bureau of Customs, to carry on the same activities. (See **Item 77**). Captured with raids conducted by Prohibition Forces on Atlantic Seaboard off NJ in Oct. 1929.

Item 785

Trithemius, Photographs of a statue of Trithemius.

A photograph of the head of Trithemius from a statue and a photograph of the whole statue, presented to WFF by Dr. Huttenhain, one of the top German cryptologists in WWII. Dr. Albert Highley of CIA obtained these photographs for WFF from Dr. Huttenhain sometime in 1954 or thereabouts. Dr. Huttenhain’s handwritten note “für Herr Friedman” appears on the back of the photograph. Kirche Neumusisks in Wurzburg.

Item 786

(WFF backfile Part IV)

Friedman, William F., Manuscript of proposed article for Popular Science Monthly, in 1930.

Prepared at the solicitation of one of the editors but never completed for submission to the magazine in final form. Popular Science asked for revision. They asked for specific examples of cipher messages and how they were solved. The piece “presumes too much knowledge of the subject in the part of the reader for our purposes.” “Why Businessmen Use Ciphers and Codes,” “Extraordinary Mechanical Code-Write,” “Cryptograms,” and “Cipher Devices in the Commercial World.”

Item 787

Clarke, Carter W., “Stalking Enemy Radio Stations.”

Carbon copy of the type script of 15 pages written for publication by King Features Syndicate. A signal corps officer discourses on the thrills of radio goniometry and radio interception. Captain Clarke was then Chief of the Signal Corps Message Center. Men who risk their lives intercepting enemy radio messages and locating enemy radio stations. Goniometric and Intercept Service.

Item 788

Lima, Alvaro Jansen Serra (Lt.) or Serra Lima, Criptografía, Provenance unknown, 1937, 94 pp.

An elementary book on cryptography by a Spanish military officer. Translation by Tenl. Carlos Soria Galvarro C. Gift to WFF by Capt. Wayne Barker, 1951. Stamped with name Oscar Luna Cordero.

Item 789

Acoustical Society of America, 22, 6 (Nov. 1950).

Contains important articles; Stevens S.S, “Introduction: a Definition of Communications,” pp. 689-690. Faro, R.M., “The Information Theory point of view in speech Communications,” pp. 691-696. Wiener, Norbert, “Speech, Language and Learning,” pp. 691-697. Joos, Martin, “Description of Language Design,” pp. 701-708. Straus, Oliver H., “The Retaliation of Phoenetics and Linguistics to Communication Theory,” pp. 709-711. Lotz, John, “Speech and Language,” pp. 712-717. Miller, George A., “Language Engineering,” pp. 720-725. Bavelas, Alex, “Communication Patterns in Task-Oriented Groups,” pp. 720-730, and other articles of interest in this field. See pp. 734 for “The First Known Phoenician Alphabet.”

Item 789.1

Stevens, S.S., “Introduction: A Definition of Communications,” Journal of the Acoustical Society of America, 22, 6 (November 1950), pp. 689-690.

Item 789.2

Fano, R.M., "The Information Theory Point of View in Speech Communication," Journal of the Acoustical Society of America, 22, 6 (Nov. 1950), pp. 691-696.

Dr. Fano was one of the leading authorities in the field of information theory.

Item 789.3

Wiener, Norbert, "Speech, Language and Learning," Journal of the Acoustical Society of America, 22, 6 (Nov 1950), pp. 696-697.

Item 789.4

Joos, Martin, "Description of Language Design," Journal of the Acoustical Society of America, 22, 6 (Nov, 1950), pp. 701-708.

Item 789.5

Straus, Oliver H., "The Relation of Phonetics and Linguistics to Communication Theory," Journal of the Acoustical Society of America, 22, 6 (Nov. 1950), pp. 709-711.

Item 789.6

Lotz, John, "Speech and Language," Journal of the Acoustical Society of America, 22, 6 (1950), pp. 712-717.

Item 789.7

Miller, George A., "Language Engineering," Journal of the Acoustical Society of America, Vol. 22, 6 (1950), pp. 720-725.

Item 790

Cooke, Alistair, A Generation on Trial: U.S.A. vs. Alger Hiss, New York: Knopf & Co., 1950 excerpts from pp. 162-165.

Another item in the Security Investigations Field. See pp. 162 for the importance of the secret documents. Sumner Wells said that "breaking of a great code by a foreign power always entails a betrayal." [Mr. Francis Sayre, who was Hiss's boss in the State Dept at the time, testified in the second trial to the same effect.] Some of the documents were too secret even to publish in 1948 without asking the National Security Agency. "What was disastrous was the certainty that the Russians had broken the most secret cipher of the U.S. Government (thanks to the pumpkin papers)." Breaking U.S. diplomatic ciphers. For an update on the history of the Hiss trial, see G. Edward White, Alger Hiss's Looking-Glass Wars: The Covert Life of a Soviet Spy, Oxford University Press, 2005; Allen Weinstein, Perjury: The Hiss-Chambers Case (2d rev. ed.). Knopf, 1997; Athan Theoharis, (Ed.) Beyond the Hiss Case: The FBI, Congress, and the Cold War,

Temple University Press, (1982); Allen Weinstein and Alexander Vassiliev, The Haunted Wood: Soviet Espionage in America--The Stalin Era, 1999; and Haynes, John Earl, Klehr, Harvey and Vassiliev, Alexander, Spies: The Rise and Fall of the KGB in America.

Item 790.1

Toledano, Ralph de and Victor Lasky, Seeds of Treason, the True Story of the Hiss-Chambers Tragedy, excerpts from New York: Funk & Wagnalls, 1950.

Further data with regard to the National excitement caused by the Alger Hiss case, pp 26-27; 130-143, a view of the disturbing Hiss case by two radical writers, Elizabeth Bentley's testimony.

Item 791

Baconiana, excerpts from.

This is a fragmentary, source unknown. Collection of items dealing with the Shakespeare authorship question. Marked "missing" on card and shelf list.

Item 792

Goulding, Captain, "Essay against Too Much Reading," London, 1728.

Photostats of pp. 12-15. Earliest, thus far discovered, of reference to or doubts about the authorship of the Shakespeare works. (See TSCE, **Item 1691**). Basic data for origin of the authorship controversy.

Item 792.1

Anonymous, Story of the Learned Pig (1786), Photostats of pp. 34-37, frontispiece and title page.

Basic data for origins of authorship (Shakespeare) controversy. 2 copies photostat negative/positive.

Item 792.2

Lawrence, Herbert, Life and Adventures of Common Sense, 1769.

Photostats of pp. 144-149. This book is often referred to as the first indication that Bacon wrote Shakespeare. Within the last generation an earlier book was acclaimed by the Baconians as the first indication of Baconian authorship of the Shakespeare works. See Goulding, Captain in **Item 792**.

2 photostat positive pages. 2 photostat negative pages.

Item 793

Mann, Frederick Wharton, The Owen Cipher, A paper read before the Witengeniote on Friday evening, December 1, 1893, New York: De Vine Press, 1894, 32 pp.

Pertains to the so called “word cipher” evolved by Dr. Orville Owen to “prove” that Francis Bacon wrote Shakespeare. Dr. Mann, although a personal friend of Dr. Owen, completed a most damning critique of the latter’s cipher.

Item 794

Nesbitt, John, “The Black Chamber,”

A radio script delivered on 11 July 1944. This is a radio account of Yardley and the American Black Chamber. “For the number of inaccuracies and untruths in a less than five page radio script, this item would take grand prize.” This is a jumble of nonsense. See **Item 604**, Copy #1. Yardley had no official connection whatsoever with the U.S. Government in WWII, because of his indiscretions, although Yardley entreated the War Department to take him into Signal Intelligence, even getting Mrs. Roosevelt to intercede for him - - to no avail. Photostat negative.

Item 795

Carletti, Aurie, The Italian Telephone Interception Service during the War of 1915-1918. Presented before the 25th annual session of the A.E.I. Rome: Nov. 1920.

Translated from the Italian original in the L’Elettrotecnica, into Spanish in the Revista Telegrafica Buenos Aries, April 1921; Then translated from the latter periodical into English by F.C. Ryan, Radio Engineer, Signal Corps. An interesting story concerning the use of earth-telegraphy during the early part of WWI. Important for anyone interested in the history and study of earth-telegraphy and telephony. Photostat Negative.

Item 796.1

Anonymous, Syllabaries of the American Revolutionary Period.

- a) Worksheets and photostats: uncompleted work of WFF; works of Jefferson, Madison, Monroe and Adams.
- b) Colonial syllabaries and ciphers as used in diplomatic correspondence. A folder containing the work sheets and solutions on cipher messages and three categories of syllabaries which cannot be solved by any of the systems in present archives.

Item 796.11

Composition book with notes. Card?

Item 796.3

Ciphers, Colonial

1. A partially reconstructed code from the Burnett Papers in LC. It corresponds to Code "C6" of the Univ. of VA collection and to page 15-16 of Force Book of Cypher's. (Jefferson and James Madison). WFF said to keep this to compare with the correct version to see how accurate Burnett was in his work.
2. Miscellaneous papers. Continental Congress no. 59 Vol. I, pp. 326-334, 171-172, code sheet.

Cf. **Item 680** -See lantern slide and photo No. 238. Photograph of code sheet. "This and the three succeeding photos are photographs of a syllabary found in the papers of the Continental Congress at the Library of Congress. It is not known who used this syllabary, Feb. 26, 1935, WFF. Missing?"

Item 796.4

Force Book of Cyphers,

ESF had the decoding pages of this book photostated at the Library of Congress. The small numbers at the lower right correspond to page numbers in the Force Book. Also data on back of originals in Force Book have been copied at corresponding places on the back of these Photostatic copies. Copy of letter- President of Continental Congress to Benjamin Franklin, Philadelphia, 18 June 1783. "...enclosed in the above letter, is of a secret nature, I have wrote (sic) it in ciphers, and not having Mr. Livingston's, I thought it best to use Mr. Morris' to you which he has obligingly supplied me with, so that the Commissioners must be indebted to you for the deciphering of it."

- A) Randolph (?)
- B) Cypher to Read

Force Book of Cyphers: Mr. Jefferson from April 14, 1783 to Jan 30, 1787, Cypher to Read (2 copies).

Cypher to Write – Thomas Jefferson to James Madison, Jan. 30, 1787, pp. 13&14 in Force Volume.

Cypher to Read - Mr. Pendleton, a cipher, no date or indication of who used it. pp. 141 of #59 Vol, I, Papers of the Continental Congress, Misc. Papers. Mr. Monroe (James) cipher.

Item 796.5

In folder- Dumas Cypher. From the pages of the Continental Congress #59, Vol. 1, "Miscellaneous."

Labeled: Used by Dr. Franklin and Committee on Secret Correspondence (in old handwriting). Numerical Code – Marked E8, E9. Codes from Alderman Library, UVA put in same sequence as

in Force Ms, LC. A₁ A₂ A₃, and Code C6. Burnett pp. 332-33 and note 18 says this one is used April 1783 to May 1785 but not listed in Mrs. Fogarty list.

B4

B5

F10

F11

D7

H-15, a single sheet, appears in the collection. Evidently it is the work sheet of one editor which was either never issued or, if so, has been lost. G₁₂, I₁₄, H₁₃. This is (WFF thinks) the original of the Ms. labeled "Mr. Monroe Cypher" in Force Book of Cyphers in LC. See letter #699 in Letters of Members of the Continental Congress. Considered an original because it shows many hard corrections, etc., whereas the Force Book copy is clean. Photostat negative G₁₃. The material in lower right hand corner of each sheet is noted "Robert Patterson's cipher."

Item 796.11

Friedman, William F. and Elizabeth Smith Friedman, Correspondence with Colton Storm, Curator of MSS, The Clements Library, the Univ. of Michigan.

WFF was preparing an article on American and British cryptography of the American Revolutionary Period. Correspondence with Douglas Adair, managing editor of the William and Mary Quarterly. Correspondence concerning Thomas Jefferson's Cypher codes used for secret diplomatic correspondence. Edmund C Burnett, "Cipher's of the Revolutionary Period," AHR 22 (1916-17). Howard H Peckham, "British Secret Writing in the Revolution," Michigan Alumnus Quarterly Review, Winter 1938.

Item 796.2

Anonymous,

Syllabaries used for diplomatic correspondence by John Jay, 1792. Photostats of John Jay's correspondence with Robert Livingston and others with solutions where certain shown in blue and improved assignments shown in red. WFF's and work sheets.

Item 796.3

Anonymous

Syllabaries used by Jay, Jefferson, and Livingston, photostats of. A few work sheets are included with these photostats covering partially constructed solutions. Oversized.

Item 796.4

Burnett, Edmund C (edited by), Letters of Members of the Continental Congress, excerpts from, Washington, DC: Carnegie Institution of Washington, 1921, 8 Vols.

Covering letters in code. These relatively brief typescript excerpts cover all code correspondence to and from members of the Continental Congress. Included is a Photostat of the "Dumas Cypher-decypher table." From papers of Continental Congress No. 59, Vol I, "Miscellaneous papers." It is labeled "Used by Dr. Franklin and committee on secret Correspondence." (In old handwriting).

Item 796.5

Anonymous, Force Book of Cyphers.

Photostats of the decoding pages. The so-called Force Book of Cyphers in LC actually is a compilation of the Encode and Decode sections of syllabaries, copies of which have been found in papers of early American officials. There is also included some photostats from The Jefferson Misc. Papers which identify certain unexplained pages in the Force Book. Oversized.

Item 796.6

Anonymous, British ciphers of the American Revolution deciphered by James Lovell.

The American Revolutionary Period had its cryptanalyst. This person was James Lovell, member of the Continental Congress for a short period and a Massachusetts citizen who held various official and political positions in that state. Lovell deciphered numerous British ciphers in the Revolutionary Period. Chiefly, those used by Cornwallis. Also in this folder are copies of undeciphered correspondence between Cornwallis and Henry Clinton. Excellent source of unpublished material on this subject. See other items of the 796 series where there is much more material. WFF's work sheets. On Lovell, See David Kahn, The Codebreakers, pp. 181-184.

Item 796.7

Wilcox, William B., "Rhode Island in British Strategy, 1780-1781." Reprint from: The Journal of Modern History, 17, 4 (Dec. 1945), pp. 304-331.

Autographed to Mrs. Friedman; references to [**Item 322, 325**]; intercepted letters from Rochambeau to the Chevalier de la Luzerne, the French Minister in Philadelphia. It at first could not be deciphered in New York and was sent to London. The cipher is among the uncatalogued Clinton papers. The author could not find the deciphered version. Notes on Clinton's spies. See also **Item 796.6**.

Item 796.8

Anonymous, British cryptographic messages during the American Revolutionary Period. Photostats of.

From the Sir Henry Clinton Collection in the Clements Library, Ann Arbor, MI. The work sheets and notes in this folder are in connection with some uncompleted work done by ESF in 1952 on British revolutionary cryptographic systems found in the Clements Library. See other items of the 796 series.

Item 796.9

Jameson, J. Franklin and William F. Friedman, Correspondence between Carnegie Institution of Washington on the solution of British Diplomatic messages of 1794.

Messages and index included. See William F. Friedman. **Item 796.9.**

Item 796.10

Friedman, William F. and Elizebeth Smith Friedman, Correspondence with L.H. Butterfield together with photostats and work-sheets in connection with a code problem solved for Dr. Butterfield.

In the massive project, still being carried on at Princeton University on the Jefferson papers under the editorship of Julian N. Boyd as unsolved portion of a Jefferson code letter was submitted to ESF and WFF in 1952 for solution. Its briefness and uniqueness made it an interesting problem. Correspondence between above, together with photostats and worksheets in connection with a code- problem solved for Dr. Butterfield of the Institute for Early American History and Culture, Williamsburg, VA. Photostats of “cipher code used for secret diplomatic correspondence.” (16 items) **Item 56** of Jefferson papers of the Univ. of VA compiled by Constance Thurlow and Francis H. Berkely Jr. (Charlottesville, 1950).

Item 796.11

Friedman, William F. and Elizabeth Smith Friedman, Correspondence.

Correspondence with Mr. Douglass Adair, Managing Editor, William & Mary Quarterly, Mr. Francis L. Berkeley, Jr., Curator of Manuscripts, Alderman Library, University of VA; Mr. Colton Storm, Acting Director, Clements Library, Ann Arbor, MI. Re: American Colonial and Revolutionary ciphers. Correspondence related to numerous facets of the study of Colonial and Revolutionary ciphers, and the preparation of WFF and ESF to collect material for articles and possibly a book on the subject.

Item 797

Bibbero, Robert I. and Hans E. Hollmann and Ted Powell, "Telepathic Communications," Letters in Proceedings of the Institute of Radio Engineers.

1. March 1951 – Bibbero, Robert J.
2. July 1951 – Hollmann, Hans E.
3. August 1951 – Powell, Ted.

This is one of several items in the FC dealing with the subject of extrasensory perception. WFF has felt for a good many years that this field could well stand serious investigation by many skilled but unbiased scientists. See final sentence in the Hollmann article (July, 1951). "Even modern physicists and engineers should be very careful and open-minded, so that they will not be subject to the smiles of future generations as the generations of the past have been to us." Bibbero's comments are described as "entertainingly speculative" by Ted Powell.

Item 798

No card, no item

Item 799

Hotson, Leslie, "More Light on Shakespeare's Sonnets," Shakespeare Quarterly, 2, 2 (April 1951), pp 111-118.

Dr. Hotson sheds more light on the authorship controversy. Autographed by the author. Correspondence with WFF is enclosed. Hotson worked at Arlington Hall during WWII where WFF got to know him fairly well. Dr. Hotson did not return to teaching after the war, but has spent years in research and writing. His "detective" work has not received full recognition by Shakespeare scholars in general.

Item 800

Dudley-Smith, Cmdr., "The Trial of Mary Stuart, Queen of Scots: The Allegation that the Prosecution relied largely on Forged Cipher Material," March 1951.

A private note on the subject of the validity of some of the cryptographic evidence involved in the trial of the Scottish queen. Ms. of 8 pages, written specifically at WFF's request. Written by a British colleague of WFF in WWII. Cmdr. Dudley-Smith's paper is a summary of published material (up to 1950) concerning the "Babington Plot," history's name for the fateful story of the execution of Mary, Queen of Scots.

Item 801

Dickens, Charles, The Pickwick Papers, excerpt from Chapter XI: "Involving another journey and an antiquarian discovery." An inscription which is detailed within the Pickwick papers affords considerable amusement when deciphered. Dickens was poking fun at the antiquarians and archaeologists. ID taken from shelf list card. In separate file with clippings, see **Item 2112**.

Item 802

Seymour, Henry, A Cypher Within a Cypher, London: Dunlop & Company, n.d. (but circa, 1928), 12 pp., 1 original, 2 copies, one photostat positive and one negative.

Henry Seymour was a long and leading member of the Bacon Society of which he was for many years, President. He was one of the most ardent supporters of Elizabeth Wells Gallup. In this paper he goes even farther than Mrs. Gallup because he declares that Bacon's own example of the bilateral cipher in The Adventure of Learning contains a cipher message itself. Mr. Seymour's desire to find a hidden message there led him to a completely subjective finding. The title page plainly exhibits a cipher message based upon the Francis Bacon bilateral cipher. It was deciphered by WFF and reads as follows: "Note: Francis Bacon, the last of the Great Tudors was born in the Windsor Castle." Seymour was a fanatical follower of almost any kind of so-called cipher to prove Baconian authorship of Shakespeare. This item includes an engraved shelving of Cannonbury Tower (the present quarters of the Bacon Society) where Bacon lived for eleven years while Lord Chancellor. The Francis Bacon Society, Inc. www.baconsocietyinc.org.

Item 803

Clendening, Logan, "A Bibliographic Account of the Bacon-Shakespeare Controversy," The Colophon, September 1939, 9 pp.

A medical man, who was a Stratfordian, became an assiduous collection of items concerning the authorship controversy. Autographed by Dr. Clendening to WFF.

Item 803.1

(In same folder as **Item 803**)

Clendening, Dr. Logan, The Logan Clendening Collection of books about the Bacon-Shakespeare Controversy; San Francisco: Press of Zeitlin and Verbrugger, Catalog No. 10, October 1943, 26 pp. Copy 1 & 2

Catalogue of the Clendening Collection (on the controversy) when, after his death it was offered for sale. Two copies, one with copious notes. Copy #1 is autographed to WFF by Mr. Zeitlin (See also WFF's handwritten note on the introduction page). This same copy contains the notations in Mr. Zeitlin's markings concerning the purchases of various items in the Clendening Collection from Zeitlin and Vergrage.

Item 803.2

Clendening, Dr. Logan, Correspondence between WFF and Dr. Clendening in regards to Shakespeare-Bacon controversy.

Item 804

Strachey, Oliver, Note on short period substitutions used on code books. Undated.

Certainly a unique item in the U.S. and perhaps in the world. The author was a member of the British Cryptanalytic Organization. Very valuable. On cover: "Secret. For Official Use Only," Copy No. 47. This item was a gift to WFF from Brigadier Tiltman, 1943. De-classified 7/24/75. Originally "Secret" No. 47.

Item 805

Potapova, Nina, Russian: A Textbook of the Russian Language for English Speaking People, Part I. Moscow: Foreign Languages Publishing House, 1945, 311 pp.

Gift of Major L.B. Roy, Assistant Military attaché in Moscow at this date. Major Roy had been a student of WFF's before going to Moscow.

Item 806

Anonymous, La ciencia infusia; o'el arte maravilloso para escribir en Latin cartas en cifra, sin haber aprendido aquel idioma; y sin que se conosza que encierran un senti de oculo, Havana: Imprenta de P. Antonio Gil, 1812, 20 pp.

A photographic copy. Source unknown. A Spanish History of Cryptology. Printed in Havana in the early 1900's. Apparently based on Trithemius.

Item 807

Wilson, Richard, "Our Intelligence Blunders Can Destroy Us," Look Magazine, May 8, 1951, pp. 112-119.

Severe criticism of our intelligence mechanisms and how they are used. Wilson was, in 1951, Chief of the Washington Bureau of Look. The general subject matter can be deduced from the subtitles in the articles. He has lengthy recommendations for improvement in the intelligence system within the U.S. Government. "Correct intelligence is useless if it is rejected or ignored by the military high command." "Too many agencies have led to bias and confusion."

Item 808

Johnson, John Henry, Specifications of John Henry Johnson, "Composing and Translating Secret Correspondence," British Patent No. 1023, issued 18 April 1871.

One of the very earliest of the patents applicable to cipher devices. Historically very important. A gift from a British colleague, name now forgotten.

Item 809

Jefferson, Thomas, Jefferson's Wheel Cipher.

A large folder containing data concerning Jefferson's invention. Jefferson was the original inventor of the cipher cylinder; the invention of which was for many years attributed to the French cartographer Bazeries. Jefferson actually devised the system and described it in detail in a paper which is among his writings in LC. In the very first volume of The Papers of Thomas Jefferson, edited by Dr. Julian Boyd, he mentions this aspect of Jefferson's versatility. WFF prepared a small mimeograph at Dr. Boyd's request, which was to be used later, probably in Volume II of The Papers. But Dr. Boyd was so pleased to have his attention called to the "wheelcypher" that he made mention of Jefferson's genius in this respect in Footnote 3, Page VII, Volume I. A model of Jefferson's device has never been found, although his description was most detailed. Bazeries, on the other hand, received a patent in Great Britain in 1892; but his invention was never recognized or adapted by his own countrymen. This folder contains many other items directly applicable to this invention and the subsequent invention and re-invention of others such as Col. Parker Hitt and Major Mauborgne (cipher device type M-94). See entry under **Item 6**, also **Item 206** [Bazeries, Etienne]. Eugene Smith, "Thomas Jefferson and Mathematics," Scripta Mathematica, New York. Envelopes 1-4 EMPTY. On Mauborgne, see also David Kahn, The Codebreakers, ch. 10, 11.

Item 809.1

Original model of cipher device by Captain Parker Hitt in 1915. Correspondence between WFF and Parker Hitt. Official U.S. Army Signal Corps photos-Restricted.

Item 810

Friedman, William F., "A Cryptanalyst Looks at Literature," Notes for a lecture delivered at The Folger Shakespeare Library.

This lecture launched the project of WFF to write a book on the Shakespeare authorship controversy. Correspondence regarding lecture at Cosmos Club, "The Shakespearean Ciphers Examined" after publication of the book, November 18, 1957, 8:15 pm. There were items exhibited with the lecture "A Cryptographer Looks at Literature."

Item 810.1

Text of a talk given 13 June 1951, before Ladies of Maxwell AFB; "A Cryptographer Looks at Literature." This talk followed the lines of the talk given at the Folger Shakespeare Library on the same subject. Much of the material was later incorporated in the book published by The Cambridge University Press. Also given at the Cosmos Club.

Item 811 and 811.1

Manly, John M., Papers relating to a series of articles for Collier's Magazine on Edgar Allen Poe and all the cipher phrases of Poe's career AND exposition of German spy's (WWI) cipher message.

Professor Manly's work sheets re Pablo Waberski, testimony and narrative of trial. Professor John M. Manly, famous Chaucer scholar of the years before WWI, was an amateur cryptographer and hence was chosen as one of the "professionals" to join the Cipher Bureau formed with H. O. Yardley as its head in late 1917. Manly was made Vice-Director of this group. His name attracted publishers as well as the name of the work he was engaged in, namely ciphers and codes. He arranged with Collier to do several articles, but for some reason, they were never published. His papers were all inherited by his brother Basil at John Manly's death. Some of the papers herein relate to official work, that is, to Military Intelligence, commonly known as MI-8, wherein The Cipher Bureau of WWI was located; some of these revelations have not appeared in public print because Manly wrote in a thoroughly uncensored fashion. See folders labeled "Waberski Cipher."

Item 811.1, proves that it was Manly who made the "break" in the famous spy case of Waberski and no H. O. Yardley who (by implication at least) claims in his American Black Chamber that he, Yardley did. It was Manly who testified in the spy Waberski's trial at Fort Sam Houston; the very work sheets used and the report of the whole case appear here in Manly's works and handwriting. It was natural that Professor Manly's brother Basil would be his executor; the brother was the writer of a series of comments and questions in handwriting on the 8 x 10 plain white papers. (Separate sheets). These would indicate that the brother hoped, still in the late 40's, to publish his deceased brother's articles or perhaps use the material in them for a biography of his brother. Other unpublished articles in addition to the drafts of the series prepared for Collier's are several on Poe, which at least one is claimed by Professor Manly to have been written by Poe; also some letters and a long memorandum passing between the legal counsel for the Mixed Claims Commission and Professor Manly in 1932.

WFF and ESF first met Professor Manly in 1916 when he came to Riverbank Laboratories where they were in the process of examining The Biliteral Cipher of Francis Bacon, as "deciphered" by Elizabeth Wells Gallup. He had a world-wide reputation as an English literature scholar and the world's leading authority on Chaucer. He had also had for a long period of years been credited with a knowledge of ciphers in literature and thought of himself as the only true authority in that field. He showed instantaneous rejection of Mrs. Gallup's work, in an abrupt and scornful manner. Professor Manly, however, was so impressed with the analytical ability of the young WFF that he never ceased to praise his scientific capacity. It was Manly who requested that he be accompanied by WFF in 1921 when Professor Newbold made his revelations concerning the Voynich Manuscript to audiences in Philadelphia, and for some years thereafter, Manly and WFF kept in close touch regarding the mysterious manuscript. These papers were given to WFF by Basil Manly, brother of John, many years after the latter's death.

Basil Manly was one of the commissioners of the Federal Power Commission for more than a dozen years. Includes material on secret ink messages by German agents in WWI. On Yardley and Waberski, see David Kahn, The Codebreakers, ch. 12. On Yardley and Manly, see David Kahn, The Reader of Gentlemen's Mail, pp. 29-30, 43-45, 51, 90, 104-5, 119-120, 122, 128-29, 237.

Item 812

Thurber, James, "Exhibit X," The New Yorker, March 6, 1948, pp. 26-28.

A highly amusing article by a noted humorist who served as a cryptographer for the State Department during the Peace Conference following WWI in Paris. He was a code clerk. He mentions Yardley. He was sent to Paris because of a mistake in a code asking for clerks instead of Books.

Item 813

Yardley, Herbert Osborne, "Double-Crossing America," Liberty Magazine, October 10, 1931, pp. 38-42.

Photostat negative. About deciphering Japanese wireless messages. See David Kahn, The Reader of Gentlemen's Mail, p. 139.

Item 814

American Telephone and Telegraph Company, Rebus, example of New York: AT&T n.d.

A rebus for children from the AT&T Company's trade publication. A rebus is a form of very simple cryptography. Well, maybe not so simple. See R. M. Sheldon, "The Sator Rebus: An Unsolved Cryptogram?" Cryptologia 27, 3 (July 2003), pp. 233-287. Truly for children-it says so.

Item 815

No card, no item, no shelf list card.

Item 816

Bazeries, Etienne, Three-page photostat negative. British patent on the cylindrical cipher device.

See **Items 11, 324**. This is a photostat of the description of the Bazeries cipher cylinder as contained in the patent applied for in July 1891 and granted him by The British Government on 14 May 1892. It is believed that the principles are exactly the same as in the device described in his book, first published in 1901 (See **Item 206** in these annotations) except that whereas he

proposed 20 disks in the device described in the book, the patent shows only 15. There are a number of other minor infractions in the device described in the patent. This item is of very considerable historical importance and interest, Bazeries failed to interest even his own government in his invention. Bazeries was anticipated in this invention by about 100 years by Thomas Jefferson. See WFF article, "Edgar Allen Poe, Cryptographer," (**Item 393**) and British patent on the cylindrical cipher device. An addendum thereto in Article on Cryptography and Cryptanalysis (Item 148.1) or "Edgar Allen Poe, Cryptographer," in Army Security Review for May-June 1950, (**Item 393.2**).

Item 817

Shreve, Royal Orman, The Finished Scoundrel, scattered excerpts from Indianapolis: Bobbs-Merritt Company, 1933. Photostat: 1 negative, 1 positive, pp. 14-15, 158-15-, 212-213, and 216-217.

More about the Burr-Wilkinson Conspiracy. These pages describe the cipher method used between the two conspirators—a method based on a small pocket dictionary, revealed in the trial of Burr, but a complicated manner of using the dictionary was employed, making the method actually a double encipherment. This part of the conspiracy story has not been confirmed by other writers, at least so far as we know. (WFF & ESF).

Item 818

Badovin, Roger (Capitaine), "Ciffre et Cryptographie," Revue de L'armee de l'air, No. 114, January-February 1939 and No. 115, March-April 1939. Photostat positives.

A two part article on cryptography by the author of an excellent book on the subject. Cf. **Items 607, 607.1, and 607.2**. First page discusses: Egypt, Persia, Julius Caesar, and Spartans. Cf. R.M. Sheldon, EAW, and David Kahn, The Codebreakers, pp. 82ff.

Item 819

(WFF back file) Part V

Friedman, William F., Cancelled USA passports. Item with family?

Item 820

Anonymous, Codex Arabic Ambros H75.

Enciphered text from discourses of the Koran. Photostats. PP. XVII and XVIII. Deciphered by E. Anzar, Army Security Agency, 1948. See his note regarding translation.

Item 821

(WFF back file) Part IV

Friedman, William F., Cryptogram solved for Warden, Ohio State Penitentiary in 1934.

Encrypted letter taken out of OHP between criminals planning another heist. (“quote from letter”). See **Item 849**.

Item 822

(WFF back file) Part IV

Friedman, William F. and D. M. Crawford,

An account of and photographs pertaining to a hunt for buried treasure, that perennial attraction for men, pursued by WFF and Major Crawford, an associate and officer in The Signal Corps. An extracurricular activity, because there seemed to be a cryptogram involved in this fruitless search. We learned upon arrival that there was no cryptogram, only a “map,” the meaning of which needed “solving.” Another example of the not quite normal persons who develop an *idée fixe*. “Treasure Hunt,” in Louisiana in 1931. See Friedman, William F. **Item 822**. Treasure supposedly buried in Broussard, LA by elderly founder of a bank. He died with the secret. File contains map. Pictures of WFF in Broussard, 1931.

Item 823

Cunningham, Wallace M., Papers relating to WFF’s investigation for Col. Theodore Roosevelt, Jr. of Doubleday-Doran Company, of Dr. Cunningham’s “Masonic Code,” in 1938, Masonic Anagrammatic Code.

Dr. Cunningham’s “code” was purely a figment of his imagination. Col. Roosevelt telephoned WFF to ask that he grant an interview to Dr. Cunningham, then in New York City with the manuscript of a book the publishing house was considering. This WFF gladly did. The “cipher” part of the story of Dr. Cunningham’s and his disciple, Mario Bauer, is told in Chapter XI of The Shakespearean Ciphers Examined (**Item 1691**). The papers in **Item 823**, when arranged properly, tell an interesting story of the mental aberrations relating to authorship, common to brilliant and plain minds alike.

Item 824

Part III

Friedman, William F., International Telegraph Conference of Brussels, 1928 and of Madrid 1932; papers relating to attendance at conference.

WFF was Secretary of the American Delegation to the International Telegraph Conference at Brussels, 1928; Representative of the United States to The International Telegraph Conference, Madrid, 1932; and also as Technical Advisor to the American Delegation to the Madrid Conference, 1932. After an International Conference in Washington in 1927, at which WFF

served as Technical Advisor, a conference on “Telegraph” was set for 1928 at Brussels. WFF wrote a brochure in that year, which was used as a sort of Bible at the Brussels Conference. The result was a classification of the regulations concerning transmission of units in electrical signals in communications, especially the counting of “words.” Friedman’s delegate card from Brussels Belgium when he was technical Advisor to the U.S. Delegation to the International Radiotelegraph Conference in Madrid, September 3, 1932.

Item 825

No card, no item, no shelf list card.

Item 826

Friedman, William F. and L.D. Callimahos, Cryptanalysts Manual, Washington, DC: GPO, 1940.

A very extensive compilation of statistical data of a general nature useful in cryptanalytic work. Technical, statistical and frequency data for various languages and data applicable to all languages. No Item. Description from WFF backfile. At NSA.

Items 826.1, 828.2, 826.3 missing

Item 826.4 missing

Item 826.5 National Security Medal

Item in George C. Marshall Museum.

Item 827

(WFF backfile) Part I

Friedman, William F. & John M. Manley, Correspondence, 1921.

The world-renowned Head of the Dept. of English, University of Chicago, became a member of the Cipher Bureau in the Military Intelligence Division of the General Staff, U.S. Army, in WWI. Interesting letters will be found in this file with reference to the disclosures made by Yardley in the American Black Chamber. Also items concerning Newbold and his alleged solution of the Voynich manuscript. Manley felt Yardley’s comments were justified on the insecurity of the code. See manuscript collection numbered series **827**. See detailed history with **Item 811**. Cf. David Kahn, The Reader of Gentlemen’s Mail.

Item 828

(WFF backfile)

Friedman, William F., Articles in Time, Newsweek, and U.S. News & World Report in regard to reward of \$100,000.

Congress passed an appropriation to compensate WFF for \$100,000 for seven code machines he invented but could never exploit commercially because they were (in 1906) still top secret. The House passed it; the Senate gave its approval April 30, 1905. It was signed promptly by Pres. Eisenhower. In a letter to the NewYork Times of May 15, the director of intelligence, Military Intelligence Service, said it should have been a million, tax free. They met at Riverbank Labs. She converted him to cryptology and he converted her to Mrs. Friedman. He was 64 when he got the prize and had served 35 years of Govt. Service. Who's Who in American Men of Science entry and correspondence.

Item 828.1

(WFF backfile) Part V

Friedman, William F., Government Retirement Ceremony, Oct 12, 1955.

Papers, programs, invitations, newspaper notices, speech at NSA, invitation list.

Item 828.2

(WFF backfile) Part I

Friedman, William F., Correspondence letters of thanks for special services.

This file contains numerous letters acknowledging indebtedness for special services or talks given at various institutions, both military and civilian, from about 1917 to 1956. The file also contains letters relating to participation in international conferences dealing with telecommunications matters.

Item 828.3

(WFF backfile) Part V

Friedman, William F., Papers relating to membership in The Society of Sigma Xi, Cornell Chapter.

Through the good offices of his college classmate, Dr. Ramsay Spillman, WFF was deemed to have made sufficient contributions to scientific knowledge to be elected a member of the Cornell Chapter of The Society of Sigma Xi, forty years after his work at Cornell.

Item 828.3

No Card

Sigma Chi paraphernalia. Bylaws of Cornell chapter.

Item 828.4

Friedman, William F., Certificate of retirement, Honorable Discharge from USA Ret. WWII Honorable Discharge from National Army WWI.

Commission as LT. COL. in AUS, Retired. Shakespeare award. Separate folder. Marked missing on card. Marked over sized on OUT card. See rubbing of inscription from Shakespeare's grave. No number. Large folder with folio sheet advertising The American Black Chamber by Herbert O. Yardley and a large certificate (damaged in upper left hand corner) Fifth Annual Shakespeare Award to William F. Friedman- Elizabeth S. Friedman. Marked missing on shelf card list.

Item 828.5

Friedman, William F.

National Security Medal certificate. Item in the George C. Marshall Museum.

Item 828.6

Friedman, William F., Exceptional Civilian Service Medal, gold disk with U.S. emblem on a blue ribbon.

The highest civilian decoration of the U.S. The Medal for Merit, was presented by direction of President Truman to William F. Friedman by Brig. General John Wecherly, of the War Dept. General Staff at the Pentagon, for "exceptionally meritorious conduct for his outstanding service 8 Sept 1939 to 2 Sept 1945 while Director of Communications Research, Army Security Agency." Item in the George C. Marshall Museum.

Item 828.7

Friedman, William F., War Dept. Exceptional Civilian Service Award and Army Service Forces Meritorious Civilian Service Award.

Certificates, negatives of certificates.

Item 828.8

Friedman, William F., Biographical data.

Correspondence, War Dept. Personnel forms, Obituaries on WFF.

Item 829

(backfile) Part I

Friedman, William F. and Vernon E. Whiteman, Correspondence regarding Sorting System Patent and negotiations with IBM.

Whiteman had been an employee of the U.S. National Bureau of Standards, but at the same time of this joint invention was employed by the Eastman Kodak Co. In 1967, the inventors were ahead of their time. The "Sorting System" was conceived on 1 June 1936. WFF asked The Signal Corps to proceed at once with processing and development of the invention, but the War Department refused, giving as their reason that there was no practicable Government usage for it. The application received the patent (No. 138468) on 16 May 1940. A license to this patent was sold to IBM in Oct 1940, but was never put into practical use by IBM. This invention was the forerunner of what is now known as electronic data processing. The "license" was purchased by IBM for \$2500 (1/2 going to WFF). A quarter of a century later, IBM was renting out to government agencies their electronic data-processing equipment at the rate of \$250 a month per customer. To the discomfiture and distress of almost every citizen, one might add, in wishing it had never been invented.

Item 830

Hynd, Alan, "Sabotage in the U.S.A.," Liberty Magazine, Oct 31, 1942, pp. 8-10, 41-43.

A laudatory article concerning how U.S. agents learned the secrets of the German saboteurs. Information undoubtedly furnished by the FBI who was furious because the spies and saboteurs were actually spotted and picked up by the Coast Guard. This story should be taken with a generous grain of salt, like many others, written by journalists who believe J. Edgar Hoover sacrosanct. (ESF).

Item 831

Hearne, Thomas, "Publishers Appendix to his Preface," Peter Langtoft's Chronicle, extract from Oxford, 1725, pp. CLVIII- CLXXIII.

WFF does not recall how this item came into his possession. Intercepted cipher letters were claimed to have been solved by John Wallis, famous in the annals of British cryptology. Wallis was the "Chief Decipherer" who occupied the secret "Office of the Decipherer" for many years. He was born in 1650, educated at Trinity College, Cambridge, became a barrister in London, probably as a cover for his "secret office." See Ellis, Kenneth, **Item 1728**.

Item 832

Carnegie Foundation for Peace, Official German Documents Relating to the World War, excerpts from, New York: Oxford University Press, 1923 Carnegie Foundation for Peace Documents.

Two folders. Photostats regarding these two folders contains some of the basic documents which were used by WFF and Charles J. Mendelsohn in their account of the background of the

British solution of the famous Zimmermann telegram. See **Item 1009**, The Zimmermann Telegram, etc. These documents were translated from reports of the Committee called The German National Constituent Assembly, “to inquire into the responsibility for the war.” These important documents pertaining to WWI are in 2 parts. Part I in both German and English. Part II in English only.

Item 833

(WFF backfile) Part I

Friedman, William F, A Small Cipher Device for Banking uses, correspondence concerning.

WFF was requested by the Guaranty Trust Company, of NYC to devise a cipher method for a certain type of banking communications. The device was invented but, as the correspondence herein shows, was never manufactured.

Item 834

Anonymous, “Bibliography of Books useful to MIB,” Library of Congress Bulletin, 1918.

Military intelligence sought information from LC in WWI, and this extensive bibliography was supplied. It, however, furnished little, if any aid in the field of cryptography and cryptanalysis. Prepared for the newly organized Cipher Bureau (M18) of the General Staff in Washington. “A unique item” - WFF.

Item 835

Wrenn, Christopher (Sir)

Cipher left by him, which was not solved for many years. This historic cryptogram was composed by Sir Christopher Wrenn and presented to the Royal Society when Sir Christopher was over 80 years old. The item also contains some data which explain the circumstances under which it came to the attention of the scientific world and how a solution was reached by a Prof. Brown of Dartmouth College. The cipher came to the attention of WFF independently and was solved by him in ten minutes.

Item 836

(WFF backfile) Part I

Friedman, William F., “The Game of Secrecy.”

A game involving cryptography for teenagers. Cipher game he called “The Game of Secrecy.” Correspondence on “The Game of Secrecy.” Patent application for cryptographic devices. Item in George C. Marshall Museum.

Item 837

Anonymous, "Ciphers: Secret Language of War," Popular Science, Nov. 1942, pp. 86-89 and 22-224.

A journalist records a hodge podge of fact and fancy concerning a subject which held exciting interest at the time the article was written.

Item 838.1

Keyhoe, Donald E. and John T. Daly, "Treachery in the Air," American Magazine, Sept. 1940, pp. 45-46, 161-162.

Radio spies in America from Germany, Italy, etc. The FCC curtailed amateur operations drastically off 55,000 licensed amateur stations, spies have pirated. The FCC has listening posts in Alaska, Puerto Rico, and Hawaii.

Item 838.2

Jerome Beatty, "Eavesdropping on the Enemy," American Magazine; Dec. 1943, pp. 42-43, 118-212. A popular article on intercept work during WWII.

Item 838.1, 838.2, 838.3, 838.4, 838.5

Spies, article on (various authors). These involve aspects of cryptography. Edson J. Shawbart, famous Treasury Law Enforcement Officer, Customs Service, is featured in the first article, as is J. Edgar Hoover in two of The American Magazine articles. The Dec. 1943, American is the story of Axis radio stations and what the U.S. did with the output of those stations.

Item 838.3

Hoover, J. Edgar, "Hitler's Spying Sirens," American Magazine, (Dec. 1944), pp. 40-41, 92-94.

Female spies for Hitler. They failed in America because we had good counter-espionage. Hugo Sebold was their main recruit in Hamburg. Velvalee Dickson, Lucy Boehmler, Lilly Stein, Evelyn Clayton Lewis.

Item 838.4

Hoover, J. Edgar, "How the Nazi Spy Invasion was Smashed," American Magazine, Sept. 1944, pp. 20-21, 94-10.

7,000 dangerous Axis operations and sympathizers in South America. 250 highly trained spies and saboteurs. 29 short wave radio stations.

Item 838.5

Shamart, Edson J., "Personalities in Law Enforcement," True Detective Magazine, August 1939, pp. 59, 124-126.

Edson J. Shamhart, Chief of the Enforcement Unit, Bureau of Customs. Guarding Uncle Sam's borders. He commands 9,000 men.

Item 839

Shulman, David, "Ciphers and Their Solutions," Police Journal, (July-Aug 1939), pp. 7, 39-42.

A popular article by a prominent member of The American Cryptogram Association. "An amateur," WFF.

Item 840

Friedman, William F. and Herbert O. Yardley, Yardley's American Black Chamber.

1. Correspondence.
2. Correspondence with various people re: Yardley's American Black Chamber.

This file of correspondence is of great historical interest in connection with The American Black Chamber and the author of the book. The American Black Chamber and its author is the subject of some very interesting and enlightening comments by officers who were members of Yardley's organization. See manuscript collection number series **840**. Cf. David Kahn, The Reader of Gentlemen's Mail, WFF attacked J. Rives Child. Child defended himself in a letter to WFF. WFF's letters to Yardley lay out his charges against Yardley for revealing certain information:

1. Yardley presented a paper on secret ink to the American Chemical Society. McCraill was angry over the disclosure.
2. The article about Childs and the AEF. Field code got dates wrong and he downplayed the security. WFF feels he slighted MI8.

WFF was still employed by the Government. Yardley was not. 12-page Moorman's memo—Moorman's lecture. April 30, 1931, Yardley To Moorman "... I wish you would take Friedman off my back." Letter from Major Gen. Irving J. Carr, Sept 19, 1931, read Yardley's book and "I never saw so many unwarranted conclusions and exaggerated, ambiguous and misleading statements in a similar amount of text." On Childs see David Kahn, The Codebreakers, ch. 11, and David Kahn, The Reader of Gentlemen's Mail, 47-49, 96, 127-28, 187.

Item 841

(WFF backfile) Part V

Friedman, William F., "American Army Field Codes in The American Expeditionary Forces During the World War," dated June 1940.

A paper submitted to the Adjutant General of the Army for consideration for promotions from LTC to COL, in the Signal Corps. Type script—No card. Description taken from shelf list. Item missing.

Item 842

Army, U.S., Codes and Ciphers of the American Expeditionary Forces in WWI.

Miscellaneous data concerning these important items of communications security and communication intelligence. Many of them are believed to be unique and historically very valuable. One such item is a translation of the German Army's instructions for the use of grilles. Another consists of British comments upon the new American Army's frontline codes. The file should be organized and will yield a score or more separate items of interest to the student who would like to write a mimeograph on the subject. Instructions for listening stations. French loop geniometric equipment. "Potomac Code," AEF Emergency Code Lists.

Item 843, 843.1

(WFF backfile) Part III

Friedman, William F., 1924 Oil Scandal, Senate investigation.

Copies of the message, etc. which were involved in the investigation and which WFF solved for the community. In 1924 governmental circles and the public were shocked by disclosures which arose from the Senate investigation of the illegal and unethical acts of then Secretary of the Interior, Albert B. Fall, who was backed by Edward Doheny and Harry F. Sinclair to "give away" certain public lands on which oil was being reserved for the use of the Navy. There were some cryptograms involved and these were solved by WFF for the Committee. Fall and Sinclair served prison sentences for this crime, but Doheny did not even stand trial. Another of the important figures in this scandal, one named Blackmer, fled to France and became an ex-patriot. More than 40 years later a book called The Origins of Teapot Dome, by J. Leonard Bates appeared. It is a pedestrian and dull treatment of the scandal, its aim being to place the blame on the politics of the time. See **Item 1798**.

Items 843 & 843.1

(Solution to Teapot Dome Messages)

Friedman, William F., Oil scandal, Senate investigation of 1924.

Copies of the messages, etc. which were involved in the investigation and which WFF solved for the committee. See manuscript collection numb. series **843 & 843.1**. To Major General Saltzman:

Naval Oil Reserve Leases:

1. The New York World Published 4 coded messages
2. They had to have had the code book or they were furnished with the answer by someone who had the code book.
3. The code book was from the Dept. of Justice.
4. The Dept. of Justice would have decoded the messages easily.

Copies of The Washington News, Thursday, March 6, 1921. President Coolidge sent two telegrams to The Washington Post and read into the record of the Senate Oil Investigation. Teapot Dome Scandal, NY World, Tuesday, March 4, 1924. FILE NEEDS PRESERVATION.

Item 844

(WFF backfile) Part I

Friedman, William F. and Irving R. Saal, Cryptograms a case involving solution of.

Discussion of a solution for the Kryha machine cipher. The correspondence included passed between Mr. Saal a legal executor of an estate. The deceased person having been engaged in an attempt to persuade commercial firms and the U.S. Government to adopt the Kryha cipher machine. WFF demonstrated that the Kryha was fairly simple and easy of solution. See Friedman, William F. **Item 844** and **Item 853**. Dictionary code, photostatic copy of eight sheets submitted to a letter by Saal, WFF sent solutions May 14, 1937 and received a check for \$50.

Item 845

Candela, Rosario, Correspondence in regard to his book: The Military Cipher of Commandant Bazerries.

This correspondence dealt with Mr. Candela book that he wished to have published with the Columbia University Press imprint. WFF reviewed the manuscript for the press, then decided not to give the work his imprint. This aroused much ire on the part of Mr. Candela, and accounts for some of the vitriolic statements in his book about government cryptanalysts. The correspondence also has many other interesting letters which throw light upon Mr. Candela's character and activities.

Also included with **Item 845**:

Dec. 21, 1937, WFF to Dr. Charles Proffitt, Assoc. Director, Columbia University Press.
 "... in this field [cryptography] the difference between a professional and an amateur is much greater than in other fields. For cryptography and cryptanalysis institute a field of human endeavor in which the disclosure of new or advanced technical information, available only in official quarters, is not only not fostered but—to put the matter somewhat mildly—is likely to result in punishment."

Item 845.1

Candela, Rosario, The Transformation, Typescript pamphlet of 18 pages, written by Mr. Candela in 1938 and submitted to OCSigO for consideration for adoption. See also **Item 845**.

This is a cryptographic system purposed by Mr. Candela for governmental use but was rejected as being impractical. The Q Transformation.

Item 846

Slade, W.A., "References on Cipher Writing, Secret Writing on Cryptography," Bibliography prepared in Division of Bibliography, Library of Congress, March 12, 1915.

One of the early bibliographies in the U.S. directed toward the science of cryptology. It includes items from the Library of Congress, the Army War College Library, a reference list from the office of the Chief Signal Officer, and a list of articles in magazines. Any importance this item may have had originally has now become purely historical. 3 copies—1 Photostat negative, 2 positives.

Item 847

St. Elizabeth's Patient,

A folder containing photographs of drawings by a female patient at St. Elizabeth's Hospital. Some of these have cryptographic titles or explanations. WFF was asked by the then head of the hospital, Dr. William A. White, to interpret the cryptographic writing. See in this connection Reitman, Francis, **Item 706**. The drawings and writings proved to have no cipher or code in them.

Item 848

(WFF backfile) Part I

Friedman, William F. and Ramsay Spillman, Correspondence in WFF's article on Jules Verne.

In the early months of 1939, WFF had prepared a draft of an article on Jules Verne as a cryptographer. He tried to interest several French journals in the article, without success. It was finally printed in the Signal Corps Bulletin. His friend R. Ramsay Spillman of New York City called his attention to an article on Jules Verne which he found in The Engineering Society's library. This brief correspondence is included. Also a draft translation of WFF's article into French by one of WFF's associates, John Hurt. Handwritten transcript in French. Submitted to The Romantic Review, Columbia University.

Item 849

(WFF backfile) Part IV

Friedman, William F. (FBI J Edgar Hoover) Bank Robbery. Cases with Dept. of Justice, Ohio State Penitentiary, and Post Office Inspection Service.

Interesting examples of simple cryptanalytic solutions for other U.S. Government agencies. There is considerable correspondence with J. Edgar Hoover, who was aided not only with analysis of the “codes” of criminals, but with Dept. of Justice “code” itself. John Dillinger, Weyerhauser, a cipher message sent with a bomb to Senator Huey Long; a case of a Washington newspaper stealing a cipher to procure a “scoop”; request from The Post Office Department and White House Secret Service—a wide range of participants from cranks to criminals. Several clippings also enclosed.

- a. Cases with Department of Justice.
- b. Ohio State Penitentiary.
- c. Post Office Inspection Service.

Neal Bowmen plotted to blow up the walls of Ohio State Penitentiary in an attempt to free his brother Howard Bowmen and Joe Filkowski, both serving life sentences. Neal was sent to Lima hospital for the criminally insane but escaped on Christmas using a fire hose to escape. The warden found a cryptogram on a visitor to the person. It contained a plot to escape, raid The National Guard Armory to get rifles and revolvers. Theft of automobiles and the selection of a farm to hide out at seven or eight convicts were in on the plot. The plan included blasting the penitentiary walls in three places for the break. The “professional cryptographer” mentioned in the article was WFF. The plot was to begin during church services. WFF involved in code messages sent between members of John Dillinger’s gang. Post Office Case involved a man who sent a bomb to Huey Long’s office. It was in Greek, Turkish, and Yiddish. (bits of paper with hieroglyphic markings).

Item 850

McKay, Herbert C., “Notes from a Laboratory,” [Provenance and date not shown, but before April 1946], Photostat negative, pp. 38-40.

This is nothing but another name for the production of pictures bearing concealed messages in concealed form. It is critical of J. Edgar Hoover concerning his micro-dot story in Reader’s Digest of April 1946. Microphotography as a medium of secret communications—micro-dots. Twenty-six written pages behind a postage stamp. How to manual that explains the camera, microscopes, focusing, scale and the limits of reduction.

Item 851

German Foreign Office, Code 9972.

English Language Code used by the German Foreign Office during WWI. Photostat (positive) copy. An authentic document among the items of cryptology used in WWI. Unique in the U.S. During WWI the German Government was granted permission to use the radio-channel between Naven and Sayville, Long Island or Tuckerton, NJ, on condition that the U.S. government be furnished a copy of the code used, the latter being required to be in the English language. The messages also were required to be submitted to a U.S. censor. See p. 7 in **Item 1009**. The Zimmermann Telegram...by Friedman and Mendelsohn.

Item 852

Sundwall, Job, "L'enigmatica iscrizione 'Rotas' in Pompeii" Acta Academiae Aboensis Humaniora XV, 5 Abo, 1945, pp. 3-17.

Deals with an enigmatic inscription found in the excavations in Pompeii. The inscription is in the form of a 25 letter square composed of 5-letter words which can be read vertically and horizontally, forward and backwards. See following **Item 852.1** for translation. See Sheldon EAW, pp. 189ff. Sheldon, Cryptologia 27,3, (1 July 2003), pp. 233-287. Item in envelope marked **852.1**.

Item 852.1

Sundwall, Job, Article same as **852**.

Letter from R.G. Kent to George E. McCracken 12 February 1948. Translation of the article together with an abstract of a letter from R.G. Kent, the literary scholar, of Prof. Newbold to Prof. George E. McCracken, a former member of the wartime Army Security Agency.

Item 853

Kryha, Alexander Von, Kryha Cipher Machine,

Correspondence with Robert C. Birkhahn, an attorney in New York City who represented clients who had been bilked by the agents for the sale of the Kryha cipher machine of about \$100,000; this was the subject of correspondence between Birkhahn and WFF. Then in the office of the Chief Signal Officer. WFF wrote that the "cryptograms" created by this machine, can be solved without possession of the machine or a knowledge of its functioning. WFF was astonished at the amount of money invested by clients in this venture. A Chicago firm spent a considerable sum of money on the same machine in 1928. They purchased the option for the American rights. WFF disabused them of the idea that the machine was something valuable.

Item 854

Bailey, John Englington, "Cryptography," Article in The Encyclopedia Britannica, 11th edition, 1910, Vol. III, pp 565-566.

Photostat (negative) copy of an article which is, according to WFF, of no importance other than historical. It contains numerous inaccuracies and was obviously written by a person who knew little about the subject. It includes a definition of the *skytale*, on which see See Sheldon, EAW, pp. 72 ff.

Item 855

Anonymous, Ciphers in romantic tales.

One of these contains a description of and the layman's idea as to what a cryptanalyst looks like. The cipher method which was utilized in four mystery novels:

1. Wire Devils, by Frank L. Packard.
2. The Red Lamp, by Mary R. Rinehart.
3. The Black Shadow, by F.A.M. Webster.

4. The Alchemy Murder, by Peter Oldfield. Contains this description: His colleague was as unlike him as he could be- tall, very smart, and with a waxed mustache which, according to WFF, suggested to the acute observer that he consorted with policemen or army sergeants. Excerpts and reviews.

Item 856

Anonymous, Enigma Cipher Machine, Kurzebeschreibung der schreibenden, "Enigma" – Chiffriermaschine, Chiffriermaschinen Aktiengesellschaft, Berlin, n.d. 4 pages, with an insert.

The company which developed the machine, described in **Item 704** endeavored to produce a model which would print. The development was not successful. This item was probably written before the machine was actually completed. This also is a rare and valuable item in the FC. In 1926-27, a Capt. Koot, Dutch Army, conducted a 2-month test of the "Enigma" (not a printing model.) The captain's report, which came presumably via the U.S. Military Attache, gave the Enigma Cipher Machine his unqualified approval. Brochure to the Enigma Machine 1929 invented by Dr. Scherbius, an Austrian electrical expert capable of 22 billion code combinations. It could be operated by any typewriter and was capable of writing code messages as they are received by wire or radio and deciphering them automatically.

Item 856.1

Damm, Arvid Gerhard, Preliminart ullatande angaede "gluhlampen-chiffriermaschine enigma," Paris: August 1927, 7 pp.

A very important item, perhaps unique. An early analysis of the famous cipher machine, the Enigma, or German invention; prepared by Damm, the Swedish Engineer whose patents and factory were taken over by Bons Hagelin.

Item 857

Pratt, Fletcher, "Cryptography in the War," Official Detective Stories, n.d., but probably October 1940.

Pratt spins stories about cryptography, with a bow to the Vignère Cipher. Ciphers given. Answers in next issue.

Item 858

Scherbius, Arthur, "Radiotelegraphie und Geheimschrift," Zeitschrift für Fernmeld technik, Werk -und Gerateban, 7 Heft 4, Jahr (1923), pp. 70-74.

A German magazine article on cryptographic machines. Dr. Scherbius invented certain of such machines, and, in particular, was involved in the electrical design of parts of the German "Enigma" machine. WFF believes the Austrian, Dr. Scherbius, to have been the inventor of the "Enigma" although rarely, if ever, acknowledged as such by his countrymen or the Germans who took over the patent and developed it. WFF has a copy of the patent. See previous Item and picture of Scherbius with his enigma.

Item 859

Fleissner Von Wostrowitz, Eduard B., Handbuch der Kryptographie, excerpt from Wien: L.W. Seidel S. Sohn, 1881.

Photostat (negative) of pp. 102-124, containing frequency data for the German language; also a mimeographed translation of these pages. II Abschnitt – "Das dechiffriren in deutscher Sprache."

Item 860

Thurn, H. von, "Das Telegraph engeheimnis in der deutschen Funktelegraphie" Telefunken-Zeitung, April 1922, No. 26/27, pp. 29-35.

Deals with secrecy provision in the international German radio telegraph service regulations. For translation see the next item. **860.1**.

Item 860.1

Typescript of English translation of **Item 860**.

Item 861

Altick, Richard Daniel, The Scholar Adventurers, New York: The Macmillian Co., 1950, pp. 338.

Chapter 3, “Secrets in Cipher,” discusses the “Voynich Manuscript,” page 204 describes the data submitted by WFF to Prof. John M. Manley, University of Chicago, which demonstrates the very subjective nature of Newbold’s method of solving the manuscript. (See letter to WFF from Father Petersen which is enclosed). A book review from the Washington Post, 31 December 1950. Chapter one deals with the Boswell papers; Chapter two deals with the astounding Wise Forgeries; Chapter 6 the Ireland forgeries of Shakespeare; the Remy’s Willie on Byrd diaries (Ch 8). The full and up-to-date story of the Voynich manuscript (end of 1962) is told in the enclosed article by ESF published in the Washington Post, Aug 5, 1962 (Outlook Section). More items in box **Item 2112**.

Item 862

Byrnes, James F., Speaking Frankly, New York: Harper & Bros, 1947, 324 pp.

Biographical data written by the man who was Secretary of State for two years following the end of WWII. Contains some references to Pearl Harbor, and many other references very revealing and interesting, about Soviet Russia, Japan, China, and other countries involved in the war in the Pacific. No reference to cryptography or code and ciphers in the index.

Item 863

Diringer, David, The Alphabet, London: Hutchinson’s Scientific and Technical Publications, 1949, (2nd ed.), 607 pp.

A recent and most authoritative work on this subject. The author calls the alphabet, its invention, and its development “A key to the history of mankind.” A remarkably interesting and precisely illustrated account of man’s greatest invention. WFF made a considerable endeavor to get some foundation to finance a visit to the U.S. by Dr. Diringer, during the course of which he would lecture widely, and demonstrate the alphabet’s history with the wonderful charts Dr. Diringer had made. WFF was unsuccessful because everyone takes the alphabet for granted, whereas without it we would have no written records of the past, present, nor even prognostications for the future. WFF believed that the history of the alphabet should be taught to all children because the “alphabet is man’s greatest invention.”

Item 863.1

Diringer, Dr. David, The Alphabet: A Key to the History of Mankind.

Pamphlet supplied by Gallery 303 to the participants in the Graphic Arts Series. A summary of the history and importance of the alphabet. (See **Item 863**). 2 copies.

Item 864

Eisenhower, Dwight D., Crusade in Europe, New York: Doubleday & Co., Inc., 1948, pp. 559.

Very important contribution to the military history of WWII by the Supreme Commander of the Allied Forces of WWII. The book has a very complete index, but it is obvious to the cognoscente that the volume has been very carefully “sanitized” because there is utterly no reference to the role played by secret intelligence. On pp. 229, the following statement is in the opinion of WFF quite faulty: “For the commander, secrecy is a defensive weapon...; to the press it is anathema.” “Complete wartime co-ordination and perfect co-operation can never be achieved between the press and military authority.”

Item 865

Drioton, Etienne, “Le dechiffrement des Hieroglyphes egyptiens,” La Science Moderne, (August 1924), pp. 423-432.

Cf. Sheldon, EAW, pp. 36 ff. Not even a nod to Thomas Young who actually broke the code first.

Item 865.1

Drioton, Etienne, “Le dechiffrement des Hieroglyphes egyptiens,” La Science Moderne, (August 1824), pp. 423-432.

Typescript of English Translation of **Item 865**. 2 copies.

Item 866

Drioton, Etienne, “La cryptographie egyptienne,” Revue Lorraine d’ Anthropologie 6 (1933-1934), pp. 28.

Cf. Sheldon, EAW. 1 Photostat positive. 1 Photostat negative.

Item 866.1

Drioton, Etienne, “La cryptographie egyptienne,” Revue Lorraine d’ Anthropologie 6 (1933-1934) pp. 28.

Typescript of English Translation of **Item 866**. 3 copies 1 original, 2 carbons.

Item 867

Drioton, Etienne, “Essai sur la cryptographie privée de la fin de la XVIII^{ème} dynastie,” Revue d’ Egyptologie 1 (1933), fasc 1-2.

Photostat neg. – original page negative

Item 867.1

Drioton, Etienne, “Essay on the Private Cryptography of the End of the 18th Dynasty,”

Typescript of English translation of **Item no. 867**. 2 copies. Cf. Sheldon, EAW, pp. 36 ff.

Item 868

Vigenère, Blaise de,

A Vigenère table (numerical) printed in the U.S. n.d. but clearly in colonial days. A bottom right-hand corner is following: “Buskstown (ME) printed by William W. Clapp.” Carbon copy of a letter (John M. Manley enclosed) explains the possible origin of this numerical form of the “Vigenère Table.” This is another item snatched from burning when Yardley’s “Black Chamber” files were largely destroyed.

Item 869

Friedman, William F., Miscellany of simple cryptanalytic solutions.

These are examples of the type of cryptograms which were referred to the Signal Corps from time to time by other governmental agencies and were solved by WFF. The only request not complied with is one which involved cipher-tables to be used in connection with a State Dept. code and was said to be employed between President Wilson and Col. House. The writer of the letter asked not for a “solution,” but “instructions as to how this code was operated.” Prison codes from NJ State Prison. Cipher from an old French book.

Item 870

[German Foreign Ministry], German Foreign Ministry Archives 1867-1920.

Filmed by the American Historical Association. Microfilm. No item.

Item 871

(WFF back file) Part III

Friedman, William F.

Patents. Originals and Reprints. See letter of December 12, 1969 from Mrs. Friedman to Lt. General Marshall S. Carter, president of the Marshall Foundation saying that she could think of nothing which could not go from NSA to the Friedman Collection “except possibly the papers in connection with his patents.” Separate folder in **Item 2112**.

Item 871 & 871.1

Papers regarding patents. Clippings in separate file.

Item 872

Wright, Lewis B. and Marion Tinling (Eds.), The Secret Diary of William Byrd of Westover, 1709-1712, Richmond: The Dietz Press, 1941, 622 pp.

This is the first of two volumes mentioned in **Item 872.1** about The Secret Diary of William Byrd. The same shorthand system was used throughout the Byrd Diaries. Picture on front cover of shorthand journal.

Item 872.1

Woodfin, Maude H. and Marion Tinling (Eds), Another Secret Diary of William Byrd of Westover, 1739-1741, Richmond: The Dietz Press, 1942, 490 pp.

This diary was written in a little-known shorthand system, the clue to which was furnished by ESF. At apparently the same time, or a little earlier, another volume of the secret diary of Wm Byrd (See **Item 872**) was being translated by two other authors, but there was no contact between the authors of the two different volumes until after the announcement from the Huntington Library was made of the forthcoming book (**Item 872**), see introduction. Edward J. Vogel of Chicago recognized the symbols as a shorthand system published by Wm. Mason in 1707 described as La Plume Volante (The Flying Pen). Mason published two previous books in 1672 and 1682. When a shorthand diary of Wm. Byrd, dated Feb 6, 1709-Sept 29, 1712, was found in the Brock Collection at the Huntington Library. Mrs. Marion Tinling of their staff transcribed it. Story in Intro.

Item 872.2

(2 cards)

Friedman, Elizabeth S., Correspondence regarding Wm. Byrd diary, 1937-41.

Correspondence with Dr. Maude H. Woodfin, Mr. Edward J. Vogel and Mr. R.A. Lancaster regarding the Wm. Byrd diary. ESF received a request from Dr. Woodfin of Richmond University (Westhampton College) for decipherment of certain years of the Wm. Byrd diary. ESF ascertained it was shorthand and deciphered some sample entries (see worksheets in her hand writing on the back of Treasury Dept. Circulars). ESF found she would not have time to accomplish the whole in a short time, and therefore advised Dr. Woodfin to seek the help of Edward J. Vogel of Chicago, one of the country's leading court-reporters, who had been in the solution-section of GHQ-AEF in WWI. He identified the system of shorthand at just about the time that Marion Tinling of the Huntington Library in Pasadena, CA made the revelation that

Byrd's diary of 1709-1712 had been deciphered by her. Dr. Woodfin's volume covered the years 1739-1741, and was published in 1942. **(Item 872.1)**

Item 873

Bond, Raymond T. (Ed.), Famous Stories of Codes and Cipher, New York: Rinehart & Co, 1947, 342 pp. 2 copies.

This is the only book of its sort, to WFF's knowledge. The author precedes every tale with a few words about the cipher system employed in the story. Much attention is devoted to Edgar Allen Poe's Gold Bug. An invaluable item for the cryptologist interested in romantic tales and detective stories woven around cryptograms. Gift of commander Mindte. Introduction of 26 (Roman) pages, included in clipping from New York Times, Book Review Section, Aug 4, 1946. Also: O Henry, Arthur Conan Doyle, Dorothy Sayers. 2 copies, one with DJ one without. 1 paperback copy.

Item 874

Ceram, C.W. (Pseud. C.W. Marec), Gods, Graves, and Scholars; The Story of Archaeology, Translated from the German by B. Garside, New York: Alfred A. Knopf, 1951, 426 pp. with XVI pages of index.

At the end of the book is an excellent bibliography. Biographical information concerning the author on the jacket. The author's sense of drama has brought forth an extremely interesting and informative book. In ESF's opinion, this is the most interesting book that any layman, interested in archaeology, should read. Originally published in German as Götter, Gräber und Gelehrte. Copyright 1949 by Rowohit Verlag GMBH Hamburg-Stuttgart.

Item 875

Hillman, William, Mr. President, New York: Farrar, Straus & Young, 1952, 253 pp.

A laudatory word portrait of Harry S. Truman. Numerous pertinent clippings will be found inside the cover. Mr. Hillman was a student of WFF and ESF at Riverbank in 1918. A short biographical (not in book) note of the author by WFF is enclosed. No clippings in book.

Item 876

Albert, A.A., Some Mathematical Aspects of Cryptography,

Mimeographed pamphlet of 29 pages, being "an amplification" of the material contained in a lecture given at the Manhattan, Kansas meeting of the American Mathematical Society on 22 November 1941. This is an example of the manner in which a distinguished mathematician and algebraist looked at certain phases of cryptology in the latter part of 1941. Ordinary cryptanalytic

procedures, simple and direct, became obscure to the non-mathematical cryptanalyst when treated by mathematical formulation. Signed WFF, Washington- March 1942.

Item 877

Air Force, U.S., Defeat, Washington, DC: Headquarters Army Air Forces, Office of the Assistant Chief of Air Staff, 1946, 80 pp.

An assessment of the damage done by the U.S. in Germany. A controversial document. Goering should have been removed. "It resulted in false and arbitrary policies with regard to personnel so that the right man was not put in the right place, but rather a policy of divide and rule was followed in order that no contender for his position should be allowed to develop. There was favoritism and corruption of the worst sort which brought about uncertainty within the GAF and crippled all initiative."

Item 878

Korostowetz, W.K., Lenin in the House of the Fathers (Lenin in Hause der Väter), Berlin: Verlag für Kulturpolitik, 1926, 444 pp., extracts from pp. 47-52.

A Russian writer describes the Russian Black Chamber of WWI. This item also contains excerpts from an article in the ASA Review, July-Aug 1947, which was taken from the Korostowetz book, translations from the German made by Dr. Ray Pettingill. There are numerous references to a certain Russian cryptanalyst named Vaeterlein, when Korostowetz calls a "virtuoso." WFF met Vaeterlein in London when the latter came to work for the British in WWII. (Vaeterlein wore on his index finger an enormous ruby ring, which he stated was given to him by the Czar personally for his brilliant cryptanalytic work). 3 copies.

Item 879

Wright, Orville, Cipher Machine, Made by him in 1944, Photostat of cut appearing in August 1951 issue of Journal of the Franklin Institute.

Orville Wright, of airplane fame, in his latter years, devoted some attention to inventing and building a cipher machine. He came unannounced to see WFF sometime in 1944 to ask some questions, but refused to disclose, at that time, any details of what he had in mind. After his death, WFF discovered the issue of the Journal of the Franklin Institute in which appeared a photograph of Wright's machine. Regrettably, it appears that Wright had not produced anything of significant cryptographic value. Very few persons in the world today know that Orville Wright had any interest in cryptography. During the years after his brother Wilburn's untimely death from typhoid fever in 1912, much of Orville Wright's time was consumed by patent litigation. The Franklin Institute photographs were made from the personal papers of the two

Wright Brothers and no mention is made of any patent or patent application for the cipher machine. 9"x 9"x 5." For automatic selective coding of messages, 48-44-39.

Item 880

Kent, Sherman, Strategic Intelligence for American World Policy, Princeton University Press, 1953, 226 pp., 3rd printing.

This is a recent and competent work on the subject of strategic intelligence. Dr. Kent was with the CIA.

Item 881

(WFF back file) Part IV
Friedman, William F.

Diaries written on various trips abroad, 16 November 1951-1954, December 1951, and to Hollywood, CA, 7 December-12 December 1951. Mentions Talis that his father used. Diary from Germany 2 September 1945 is in vault marked RESTRICTED.

Item 882

U.S. Military Academy, Department of Mathematics, Statistics in Cryptanalysis, West Point: The USMA, 1952. Illustrative problems.

A multilith or mimeograph pamphlet of 17 pages. This course was prepared at WFF's suggestion, based upon some sections of his Military Cryptanalysis, Parts I & II. It consists of a series of preliminary definitions, after a Statement of Purpose, followed by 21 lessons.

Item 883

Arensberg, Walter C., 20th Century Art. The Arensberg Collection, Chicago: The Art Institute of Chicago, 1949, 104 pp.

This catalogue, of the very valuable Arensberg Collection of modern art, is autographed "To William F. Friedman in the hope of a good digging. Walter C. Arensberg, Nov 8, 1951. The collection was willed by Mr. & Mrs. Arensberg to the Philadelphia Museum of Art and is considered to be valued at more than 20 million dollars. Mr. Arensberg began collecting examples of modern art in the early 1900's and was therefore one of the earliest to recognize the revolution that was taking place in the arts and in literature. See WFF's comments elsewhere on modern art and literature.

Item 884

Berkeley, Edmund C., "Machine 'intelligence,'" Astounding Science Fiction, January 1952, pp. 82-95.

It is believed that this article contains the first statement in public print of the use of electronic digital computers in cryptanalysis. See pp. 93.

Item 885

Beck, Cave, The Universal Character, London: 1657.

Photostat positive copy of the entire book made from microfilm of the copy in the Fabyan Collection at Library of Congress. This book described a type of universal language as devised by Beck, who was one of the very early writers on the subject. It is in the FC for study in connection with the Voynich manuscript. See Galland, p. 20.

Item 886

Rosenbach Company, The History of America in Document, Philadelphia. 1949. 3 Volumes.

Part I: The period of discovery to the battle of Yorktown.

Part II: The Close of the Revolution to the Middle of the 19th century.

Part III: The pre-Civil War period to the 20th century.

Many incidents bearing upon cryptology are mentioned in these volumes. This compilation of "Original Autograph Letters, Manuscripts and Source Materials" was published by the book sellers, the Rosenbach Company, for the great bibliophile, Dr. Rosenbach. A beautiful work that would grace any private collection of books.

Vol. I: Benedict Arnold-Samuel & John Adams Intrigue against Washington.

Vol. II: Jefferson & Madison.

Vol. III: Lincoln, George Meade, Morse.

Item 887

Hinsley, F.H., Hitler's Strategy, extracts from, Cambridge: The University Press, 1951, photostat negative of pp. 223-239.

A British lecturer on history at Cambridge University writes a significant chapter concerning WWII. Mr. Hensley was an important staff assistant to Sir Edward Travis of GC and CS in WWII. ESF marked a paragraph on p. 230 as "not true."

Item 888

The Editors, "Preview of the War We Do Not Want," Collier's Magazine, Oct 27, 1951, pp. 17.

This item is not of a cryptologic nature but is in the collection purely because of its importance as an imaginative account of events that might bring on a World War III. This issue of the magazine was denounced by many people at the time of its publication. All articles were written by prominent persons of the day. Most of the articles are imaginative and not factual in content. WFF felt it was still pertinent in 1967.

Item 889

Morison, Samuel Eliot, "Two Minutes That Changed the Pacific War," New York Times Magazine, 1 June 1952, pp. 10, 44, 45, 47.

The great Harvard professor and official U.S. Navy's historian of operations in WWII writes about a brief instant in the war relating to the Battle of Midway. "It was a victory of brave and skillful aviators, of intelligence intelligently applied, and of wise command decisions."

Item 890

Van Doren, Carl, Photographs from: Secret History of the American Revolution, 1941.

A photograph of the Benedict Arnold cipher letter of July 15, 1780 offering to sell West Point to the British, accompanied by a decipherment of the letter. Also included is Arnold's code note of Sept 15, 1780, a cipher message informing the British when Washington would cross the Hudson and might be captured. Photostat positive.

Item 891

Nahm, Milton C., The Artist as Creator, an essay of human freedom, Baltimore: The Johns Hopkins Press, 1956, 352 pp.

This book by WFF's friend, Professor Nahm, Head of the Dept. of Philosophy at Bryn Mawr College, discusses creatively in the artist, the writer, the inventor, the technician, and the followers of other intellectual activities. The book is autographed. It represents a most scholarly approach toward an explanation of what it is that makes for creativity.

Item 892

Boudinot, J.J. (ed.), Excerpted, "The Life, Public Services, Addresses and Letters of Elias Boudinot, LLD., President of the Continental Congress. In two volumes: Vol. I, 1896, pp. 72-73, 180-181, 326-327. 2 copies. Photostat negative, 1 bound.

Pages 72-73 relate a spy-counterspy episode. Pages 180-181, in a letter from General Washington to Elias Boudinot, Esq. contains information about the use of invisible writing (secret inks). Pages 326-327 from Mr. Boudinot to Benjamin Franklin, referring to an enclosed letter "which I have wrote in cipher" naming the "cipher" as "Mr. Marrison's." See **Items 330, 390, 413** for the syllabary-type system used by Franklin, Livingston, Morrison et al.

Item 893

Boudinot, Elias, Excerpted from, Journal of Historical Recollections of American Events During the Revolutionary War, Philadelphia, 1894, pp. 38-39, 83-91. 2 copies photostat negative.

Pages 38 and 39 relate the discovery of a hidden letter “in three different ciphers” and that it was “deciphered” (solved) by “A Mr. Lovel” a member of Congress from Boston. Pages 83-91. Herein appear details recorded by a contemporary of the capture and arrest of John Andre and the revelation of the Benedict Arnold conspiracy.

Item 894

Reischaver, Edwin O. (Old Father), Japan, Past and Present, New York: Alfred A. Knopf, Inc., 2nd edition, 1953, 292 pp., index.

Foreword by Sir George Sansom. The author, born in Tokyo, Professor of Far Eastern languages at Harvard University, was a student and associate of WFF’s in WWII. Scorings and page notations in WFF’s handwriting. Pp. 195 re Pearl Harbor. Pp. 286 re Pearl Harbor. He also wrote: Beyond Vietnam, The United States and Asia, NY: Knopf 1967, 42 pp. He was our ambassador to Tokyo.

Item 895

Joyce, James, Ulysses, New York: The Modern Library, 1934, pp. 768.

One of the world’s earliest and greatest expositions of “stream of consciousness” style of writing. Semi-cryptographic in nature because the meaning is not always obvious on the surface—which has led both to serious scholars searching for the real meaning, plus would-be imitators of the mode of writing. First copyright 1914, and 1918, both by Margaret Caroline Anderson, Copyright 1934 by Modern Libraries Inc. Copyright 1942, 1946 by Nora Joseph Joyce. **Item 895** contains “The monumental decision of the U.S. District Court rendered December 6, 1933, by Judge John M. Woolsey, lifting the ban on Ulysses.” A letter from Mr. Joyce to the publisher stating “reprinted by permission of the author.” Foreword by Morris L. Ernst. Clipping enclosed from San Antonio Express, March 9, 1958.

Item 896

Zacharias, Ellis M. (Capt. USN, Secret Missions: The Story of an Intelligence Officer, New York: G.P. Putnam’s Sons, 1946, 433 pp.

An interesting account of the WWII service of an intelligence officer of the U.S. Navy. It contains many references to MAGIC and the attack on Pearl Harbor. Autographed to WFF by

Captain Zack. The author claims to have predicted the Pearl Harbor attack. Numerous clippings. Captain Zacharias (retired as Admiral) had been a language officer in Japan. With DJ. Autographed “from Captain Zach.” *Cryptography* 84-89, 97-98, 181. Cf. David Kahn, The Codebreakers, pp. 1-67.

Item 897

Morgenstern, George, Pearl Harbor: The Story of the Secret War, NY: The Devin-Adair Co., 1947, 425 pp.

An extremely right-wing writer of the post-Pearl Harbor days who tried to fasten the blame on President Roosevelt for “engineering” the attack on Pearl Harbor. For a more balanced view, see: Gordon W. Prance, At Dawn we Slept. The Untold Story of Pearl Harbor.

Item 898

Laval, Pierre, The Diary of Pierre Laval, New York: Charles Scribner’s Sons, 1948, 240 pp. with a preface by Jose Laval, Countess R. de Chambrun.

A French Premier, who had been a great leader between the two World Wars but was executed after the trials of 1945, is revealed by his daughter from his diary and other written documents. There are some revelations about French signal intelligence. Thirteen appendices. Highly interesting text on jacket. The diary is Pierre Laval’s answer to the charges of high treason brought against him by the French Govt. in 1945. It was written in Fresno prison while Laval was awaiting his trial, and was smuggled out chapter by chapter by his daughter. The last page was completed just a few days before his execution on October 15, 1945 after a hasty trial. The attorneys appointed by the government to defend him called the trial “judicial in name only.” Excerpt in this diary, which was made public only after his death, there had not been a full airing of the charges against Laval nor his replies to them.

Item 899

Rémy, Gilbert FNU (Col. G. Renault Roulier), Memoirs of a Secret Agent of Free France, New York: Whittlesey House, McGraw Hill, 1948, 406 pp. The English translation of the French book in which is told the incident concerned in Renault, Gilbert, **Item 899.1**. Enclosed in **Item 899**. Volume I: The Silent Company.

In London, soon after the fall of France in 1940, Rémy volunteered to act as a secret agent under General de Gaulle. Returning to France, he built up an intelligence network which was of vital importance in the Allied Victory of Omar Bradley who said: “The information given by you was so important that it permitted us to carry out the landing with minimum losses.” In 1942, the Nazis rounded up many of the network’s radio operators and were about to close in on Rémy. Taking his family to safety, he sailed for England, hidden under the deck of a small boat with his

wife and four children. Hidden with them was a tin biscuit box containing the plans of the German fortification behind the D-Day beaches.

Item 899.1

Renault, Gilbert (Rémy, pseud.), The Silent Company, by Lancelot C. Sheppard. Enclosed in **Item 899**.

The note of this item, autographed to WFF by Brigadier John H. Tiltman is self-explanatory. Although the letter does not appear by name, the incident relates to him. For a brief biographical item concerning the Brigadier see under his name.

Item 900

Beard, Charles A., President Roosevelt and the Coming of the War, 1941. A study in Appearances and Realities, New Haven: Yale University Press, 1948, 614 pp.

Professor Beard belongs to the so-called “revisionist” school with regard to how the attack on Pearl Harbor came about. This book contains many references to that attack and to the so-called MAGIC. Since Beard was one of the most eminent American historians this work is important in any detailed study of the attack on Pearl Harbor and the outbreak of the war in the Pacific. Cf. G.W. Prange, At Dawn We Slept, New York: McGraw Hill, 1981. **Item 901** Millis, Walter, This is Pearl! The United States and Japan, 1941, New York: William Morrow & Co., 1947, 384 pp.

Item 901

Millis, Walter, This is Pearl! The United States and Japan, 1941, New York: William Morrow & Co. 1947, 384 pp.

An analysis of the relations between the U.S. and Japan which led to the attack on Pearl Harbor. A cool and scholarly book by one who is not among the “revisionists.” A good index in which the item “Magic” has 1 ¼ inches of citations. According to WFF, the author is one of the few fair and unprejudiced writers on this subject. Many handwritten references by WFF enclosed. On Magic, see pp. 101-103, 171-2, 259, 301, 308, 321-4, 335-40.

Item 902

Sayers, Dorothy, Have his Carcass, A Lord Peter Wimsey Mystery, New York: Pocket Books, Inc., 1942, 1st ed., 1932. Paperback.

A romantic tale containing a cipher. See **Item 873** condensation. Famous Stones.

Item 903

McCloy, Helen, Panic: a mystery of fear and terror, New York: Dell Publishing Co., Inc., 1944, 236 pp. Paperback.

Use of ciphers in a romantic tale.

Item 904

Gardner, Erle Stanley, The Case of the Caretaker's Cat, A Perry Mason Mystery, New York: Pocketbooks, Inc., 1942, 1st ed., 1933, 242 pp. Paperback.

Romantic tale utilizing ciphers.

Item 905

Sayers, Dorothy, The Nine Tailors, New York: Pocketbooks, Inc., 1942, 1st ed., 1934, 361 pp. Paperback.

Probably the most widely known of all romantic tales containing ciphers.

Item 906

Davis, Frederick C., Deep Lay the Dead, New York: Doubleday, Dorant & Co., Inc., 1943. 304 pp. HB, DJ.

Cryptographic messages play a part in a murder mystery. A crime club selection. Autographed to WFF by Captain Edward J. Vogel.

Item 907

Morley, Christopher, The Haunted Bookshop, New York: Doubleday, Payne & Co., 1925, 289 pp.

A prominent American novelist uses ciphers in a romantic tale. Another edition (**Item 907.1**) NY: Crosset & Dunlap, 1918, 189 pp. HB. Autographed to ESF.

Item 907.1

Another edition, NY: Grosset & Dunlap, 1918, 289 pp.

Item 908

Cozzens, James Gould, Guard of Honor, Excerpts from, NY: Harcourt, Brace, & Co., 1949. pp. 148-150.

Photostat of pp. 148-150. A work of fiction in which cryptography and Arlington Hall are mentioned. By using names like Arlington Hall and the Signal Corps, the author weaves a mild and improbable take with a web of pseudo-authenticity. 2 copies photostat positives.

Item 909

Goebbels, Joseph, The Goebbels Diaries, 1942-43, NY: Doubleday & Co., Inc., 1948, 566 pp.

Introduction and notes by Louis P. Lochner. Many references to information which the German signal intelligence derived from solving messages of British, French and American origin. Handwritten references by WFF. Goebbels tries to make it appear that the Germans were reading most of the secret communications of the Allied Powers. We now know, of course, that in reality the Germans read very little, and that little was not by any means in the most important class of communications. Jacket statement to readers: "You will also find a complete pattern for the genius of evil."

Item 910

Government, U.S., Checklist of Archives in the Japanese Ministry of Foreign Affairs, Tokyo, Japan: 1868-1945.

Microfilmed for the Library of Congress, 1949-1951. Given to WFF by Paul Reemes, July 25, 1967.

Item 911.1 and 911.23

Baconiana [Journal of the Francis Bacon Society], July 1898-1962.

A set of 22 issues of the official publication of the Francis Bacon Society, many of which contain articles attempting to prove Baconian authorship (of Shakespeare) by means of cryptography. Enclosed in **Item 911.11**, the issue No. 137, (1950) there is a mimeographed copy of the talk delivered by Dr. Giles E. Dawson of the Folger Shakespeare Library via the British Broadcasting Company (3rd programme) on 31 July 1950. This issue also contains the Society's letters, as well as some from members, to the BBC complaining about not being given equal time to reply to Dawson.

Item 911.6

Curtis, G.B., "A Study in Elizabethan Typography," a cipher in The Spanish Masquerado," Baconiana, 24 Jan 1939, pp. 6-21.

A very important article having a direct bearing upon Mrs. Gallup's decipherment by means of Francis Bacon's biliteral cipher. **Item 911.20**. Index to XXVI Baconiana. Photostat negatives. Baconian 1893-1894, 1895-1896, April 1903, Vol. IV, Series III, pp. 183-187, July 1913.

Item 912

Dodd, Alfred, The Mystery of Shakespeare Sonnets, the riddle solved, London: George Lapworth & Co. Ltd., 1947, 22 pp.

The Baconian, Mr. Dodd, “proves” that the Shakespeare sonnets were written after Shakespeare’s death.

Item 913

Dodd, Alfred, Who was Shakespeare? London: George Lapworth & Co. Ltd., 1947, 22 pp.

Dodd “proves” the author of the Shakespeare works to be not the Earl of Oxford but Sir Francis Bacon. “First issued May 1947” is on the back cover.

Item 914

Johnson, Edward D., The Bi-literal Cipher of Francis Bacon, London: The Bacon Society, Inc., 1947, 36 pp.

A vociferous believer in Baconian authorship of the Shakespeare plays discusses the bi-literal cipher invented by Francis Bacon.

Item 915

Johnson, Edward D., Francis Bacon’s Cipher Signatures, London: The Bacon Society Inc., 1947, 35 pp.

Johnson is a prolific producer of cryptographic “signatures,” all subjective in his attempt to prove Baconian authorship. See The Shakespearean Ciphers Examined (Item 1691), pp 83-85, 91, 181.

Item 916

Johnson, Edward D., Shakespearean Acrostics, London: The Bacon Society, Inc., 1947, 139 pp.

Mr. Johnson passes on to acrostics as a cipher method to prove Baconian authorship. In an “alphabetical list of acrostic words found in the first Folio of Mr. William Shakespeare’s comedies, histories, and tragedies,” the author cites for example DATA (DATUM- Latin?) a word which was not in existence at that time, besides many doubtful existence. The brevity (4-7 letters) is a cogent argument against anyone of these acrostics being genuine. See Ch. VII, The Shakespearean Ciphers Examined (Item 1691).

Item 917

Joyce, James, Portrait of the Artist as a Young Man, New York: The Modern Library, 1916, 299 pp.

Introduction by Herbert Gorman, 1928. See **Item 1405**. With DJ.

Item 917.2

Dame, Laurence, Yucatan, NY: Random House, 1941.

No card. Describes Mayan ruins; written by a newspaper man, ex-library.

Item 918

Joyce, James, Dubliners, New York: Modern Library, 1926, 288 pp. DJ.

Another of the unintelligible writings (according to WFF) of the great James Joyce.

Item 919

Campbell, Joseph and Henry M. Robinson, A Skeleton Key to Finnegans Wake, New York: Harcourt, Brace & Co., 1944, 365 pp.

The jacket contains much interesting material from which the following is extracted: “A skeleton key to Finnegan’s Wake is offered as an indispensable guide to what is certainly the strangest and perhaps the greatest book of our time.”

Item 919.1

Campbell, Joseph and Henry M. Robinson, A Skeleton Key to Finnegans Wake, New York: Harcourt, Brace & Co., 1944, 365 pp.

Copied from shelf list card. Two Photostat copies of pages/introduction from **Item 919**. One negative, one positive.

Item 920

Duff, Cooper FNU, Sergeant Shakespeare, New York: The Viking Press, 1950, 96 pp. DJ.

The author believed that Shakespeare spent some years in the Army. The author, who later became Viscount Norwich, was an orthodox Stratfordian who entertainingly speculated that Shakespeare’s “hidden years” were spent as a soldier. Love’s Labour Lost, Cupid is: “Liege of all loiterers and malcontents. Dread prince of plackets, King of Codpieces.”

Item 921

Arnold, H.H. (General), Global Mission, NY: Harper Bros, 1949, 626 pp.

Page 209 of Gen. Arnold's book refers to the Japanese methods of secret communications, pp. 224-225 refer to British staff Intelligence; pp. 268-272 relate to the attack on Pearl Harbor and General Arnold's theory concerning that attack; pp. 446 refers to messages received through radio intercept in connection with German air attacks.

Item 922

Foner, Philip S. (Ed.), Basic Writings of Thomas Jefferson, New York: Willey Book Co., 1944, 816 pp.

Composed of two parts of major writings. Those other than letters form part one, correspondence forms part two. Not nearly as extensive, of course, as the definitive series being produced under (check: Julian Boyd) at Princeton University.

Part I – Major writings other than letters

Part II- Selected correspondence 1760-1826

Item 923

Dupuy, R. Ernest (Col. USA, retired), Men of West Point, NY: William Sloane Associates, 1951, 486 pp. DJ.

Autographed, "West Point, NY, May 29, 1952- to Col. William F. Friedman. With sincerest appreciation for the splendid and highly informative lecture to the cadets. Chas. P. Nicholas, Col. Prof. USMA." The subject of the lecture was, of course, cryptology.

Item 924

Colvin, Ian, Master Spy, New York: McGraw-Hill Co., 1951, 186 pp.

This book deals with Admiral Canaris, who was head of the German Intelligence Service in WWII while at the same time he was a secret agent of British Intelligence. References to cryptography are found on pp. 57-58, 82-83, 85, 115, 130-131, 133, 142, 148, 217, 228. Colvin was Berlin correspondent for The London News Chronicle.

Item 925

Brahams, Caryl and S.J. Simon, No Bed for Bacon, London: Penguin Books, 1948, 256 pp. PB.

The remarks about this book, printed on the inside front cover, are of particular interest. The book is in the form of a light novel and deals with the question of authorship of the Shakespeare plays. Included is a letter from a British associate, Mr. G.A. Pollard, who it is believed, was one

of the authors, writing under a pseudonym. Fundamentally, a spoof related to the famous bequest by Shakespeare of his “second best bed.” Note the statement printed on the back of the dedicatory page. “This book is fundamentally unsound.” More items in box **Item 2112**.

Item 926

Hoettl, Wilhelm, “I was Hitler’s Master Spy,” Argosy, (Nov. 1953), pp. 18-19, 72-82.

The man who claims to be the last survivor of Hitler’s agents reveals “top secrets of World War II.” The title has a parenthetical phrase: “as told to Ladislas Farago.” WFF commented that by 1967 L. Farago has managed to have his umpteenth book published. Proclaiming truth, he exhibits a rare gift for exaggeration in all he sets his pen to. Unreliable. Original magazine issue—full of hyperbole. The Nazi’s hanged Canaris with piano wire, pp. 18. His last boss was Walter Schellenberg (on whom see David Kahn, The Codebreakers, pp. 449ff.

Item 927

Sykes, Claud [sic] W., Alias William Shakespeare? By Claud W. Sykes with a preface by Arthur Bryant, London: Francis Alden, 1947, 221 pp. DJ.

In the FC because it deals with the disputed authorship of Shakespeare. Interesting information on the jacket. Unfortunately, the book has no index. A serious and thoughtful book by a mystery-story writer. Takes the form of a Sherlock Holmes-type investigation.

Item 928

Gelb, Ignace, Hittite Hieroglyphic Monuments, Chicago: The University of Chicago Press, 1939, pp. 40, 94 plates.

A publication of the Oriental Institute of Chicago. Dr. Gelb has brought together in this volume photographs of all, so he claims, of the Hittite hieroglyphic monuments, and also prints a list of all other items known at that time (1937) in the world showing Hittite hieroglyphic inscriptions. See also **Item 224**. These are hieroglyphs. Hittite hieroglyphic monuments from Anatolia c. 1932. For an updated discussion of the decipherment of hieroglyphic Hittite, see Joachim Latacz, Troy and Homer, Oxford, 2001, pp. 61-62. Galland, p. 75.

Item 929

Anonymous, A Brief Account, The Folger Shakespeare Memorial Library, Published for the Trustees of Amherst College, n.d. 20 pp.

An interesting brochure about the repository of the greatest collection of Shakespeare First Folios (79 copies) in the world, as well as thousands of other books of the Elizabethan period.

Gift of the Folger Library. Of the 238 first folios known to exist, the Folger has 79. Only 2 are in the original binding.

Item 930

Guanella, G. (D.J.), "Methods of the Automatic Scrambling of Speech," The Brown Boveri Review, Zurich, Switzerland, Dec 1941, pp. 397-408.

The early date of this paper on ciphony makes it of considerable historical interest. Many advancements and improvements in techniques have been made since 1941: "The guarding of the secrecy of a conversation is of great importance, not only for the military, but also for commercial communication. This is especially true for multiple-channel wireless transmission which holds many possibilities of expansion." Automatic coding devices for telephonic or telegraphic transmission.

Item 931

Stein, Gertrude, Brewsie and Willie, NY: Random House, 1946, 114 pp.

More of the type of writing for which Gertrude Stein is famous. It is, in the opinion of WFF, a good example of the writing belonging in the category of the cult of unintelligibility. (He probably never read the book). The plight of the American soldier preparing with anxiety for his return to civilian life. GI's flocked to her apartment in Paris and she visited their camps, talked of their problems and they listened to her sensible counsel.

Item 932

Simonetta, Sicco, The Deciphering Tract of Sicco Simonetta, Milano: July 1474.

A 15th century writer on deciphering is here translated from the Latin by Dr. Charles J. Mendelsohn. Historically important item of the original 1474 Latin text published by Loys Meister in 1906 (**Item 131**, App. pp. 61-63). This tract of Sicco Simonetta is the oldest treatise on cryptanalysis the world possesses. Dr. Mendelsohn's holographic translation is included in this **Item 932**. See also footnote 1 on pp. 26, **Item 92** by Aloys Meister "Die geheimschrift..." For brief biography of Simonetta, see pp. 51 of **Item 337**, The English translation of Meister's Die Aufänge (**Item 131**). Carbon copy on onion paper- very fragile. Also text in Mendelsohn's handwriting.

Item 933

Ottenberg, Miriam, The Federal Investigators, Introduction by Robert F. Kennedy, Englewood Cliffs, NJ: Prentice-Hall, Inc. 1962, 348 pp.

It would be expected that this collection would begin with the FBI. Not only their domestic jurisdictions are outlined, but their “pattern for espionage.” Russian State Dept, Foreign Service Officers are betrayers of their country. Army, Navy, Air Force Security, the six law-enforcement agencies of the Treasury Dept., Immigration frauds, stock market frauds—never did one book cover so much ground. A meaty book, but engrossingly written for the most part. There are several marginal notes by ESF regarding details from her personal knowledge. With DJ: FBI, State Departments Office of Security, the Army CID, ONI, Air Force office of special investigations, Civil Aeronautics Board, SEC, Coast Guard, Federal Bureau of Narcotics, FDA, ATF, IRS, INS, Civil Service Commission, Internal Revenues Intelligence Division, Secret service, Customs, Postal Inspection Service.

Item 934

Ward, Robert E., “The Inside Story of the Pearl Harbor Plan,” U.S. Naval Institute Proceedings 77, 12 (Dec., 1951), pp. 1270-1283.

This purports to be the inside story “as viewed by the Japanese who master-minded the attack on Pearl Harbor.” There is included also a number of excerpts from The Naval Institute Proceedings assembled from Fuchida’s first-person story of the attack, edited for the Proceedings by Roger Pineau; published in Parade, Dec 7, 1952. One offprint, one photostat positive, one photostat neg.

Item 934.1

Fuchida, Mitsuo (Capt.), “I Led the Attack on Pearl Harbor,” Parade, (Washington Post Sunday Edition), 7 Dec 1952, pp. 6-9.

Important article on the attack on Pearl Harbor by the leader of the air craft making the attack, Capt Mitsuo Fuchida. Fuchida toured the U.S. as a Christian Missionary. He was supposed to train 1,000 pilots for a suicide attack on the B-29 base at Guam. The bombing of Hiroshima stopped the plan and saved his life.

Item 935

Gallery, Daniel V. (Rear Admiral USN), Clear the Decks! Extracts from; NY: William Morrow & Co., 1951, pp. 209, 221, 229-30.

Admiral Gallery speculates on the thrilling possibility of capturing a German submarine and gaining possession of its code books. The boat was the Guadalcanal. Photostat negative pp. 209-etc.

Item 935.1

Gallery, Daniel V. (Rear Admiral USN), "Away Boarders," Condensed from "Clear the Decks!" Reader's Digest, May 1952, pp. 17-21. See **Item 935.1** in folder with **Item 935**.

Item 936

Hurt, John B., Rationale of the Japanese Written Language, (Subtitle: The Japanese and their Classical Languages). Mimeographed pamphlet of 75 pp., probable date 1946.

A historical approach to the study of the development of the Japanese and their speech from remote times. Autographed by the author: "To my friend who has been with me longest through unutterable circumstances." This associate, Mr. Hurt, was deceased in 1966.

Item 937

Reichsarchin, Der Weltkrieg, 1914-1918, Band II, V, VI. Excerpts from the archive of the German Empire, translated from German by G-2.

These excerpts are references to Russian messages intercepted by the German military and solved, and the information there from utilized. Each item has reference to the pages of the Reich's archive.

Item 938

Kirkpatrick, W.M., "The Secret Code of the Gypsies in India," The Asiatic Review 40 (Oct. 1944), pp. 393-399.

Photostat negative of article. Each of the named tribes had their secret methods of communications. Highly interesting. Gehara section of the Kanjars or "Gypsies of India." Camps and clans of nomads; Kanuar-Zingari. The secret code, cantor slang of the Kanjars cult Pasi Boli. Khangor-a gypsy caste of the NW provinces who hunt jackal, kill and eat snakes and make string of hemp & cotton.

Item 939

Newman, James R., "The Rhind Papyrus," Scientific American, (Aug. 1952), pp. 24-27.

Data connected with Egyptian hieroglyphics. Sub-title of article reads: "In 1700 BC an Egyptian Scribe named Ahmose set down his 'knowledge of existing things all' a document which is now the principal source of what we know of Egyptian mathematics." The gifted young American mathematician writes a feature article in which he describes the finding by the Scotch antiquary Rhind in 1858, of the "mathematical" papyrus. Done under Hyksos King between 1788-1580 BC. A Henry Rhind bought papyrus in 1858 and died five years later of tuberculosis.

Hieratic script. Willd to British Museum along with Edwin Smith Papyrus. Scroll was a practical handbook of Egyptian mathematics. On Egyptian cryptography see also David Kahn, The Codebreakers, pp. 71-73.

Item 940

Piccolhomini, Fedele, “Di una nuova inventione di cifra dell’ eccelente ms. Fedele Piccol’homini,” extract from, as contained in: Meister, Aloys: Die Geheimschrift im Dienste der Papstlichen Kurie, Paderborn, 1906, pp. 142-148.

Typescript of translation from the Italian, pp 10. This 16th century cipher invention is described, and an example of a cipher message (in Italian) is given as well as the cipher text for same. See Galland, pp. 143-144. WFF requested one of his colleagues to attempt to discover the principles of the cipher system; some IBM runs were made (show herein) but were not followed up. The reason why will be revealed by the date when the runs were made: November, 1941.

Item 941

Dee, John, A True and Faithful Relation of What Passed, For many years between Dr. John Dee...etc, London 1659.

This item contains a photostat copy of the title page of a biography of Dr. Dee, and also includes a copy of 17 paragraphs of cryptographic writing alleged to have been written by Dr. Dee. So far as is known, this writing has never been deciphered. Dr. Dee was the “magician” of the Elizabethan era. Photostat positive. Photostat negative. On Dee see also Galland, p. 54.

Item 942

Oliver, B. M., “Efficient Coding,” Bell System Technical Journal, 31, (July 1952), pp. 724-750.

Entire journal. Reviews simpler aspects of communications theory especially those parts which relate to the information rate of and channel capacity required for sampled, quantized messages. Reduced signals are encoded into binary digits. Signal coding and decoding.

Item 943

Andree, Richard V., “Cryptanalysis,” Scripta Mathematica 18, 1 (March, 1952), pp. 5-16 and one plate. 3 copies.

A brief discussion of ciphers and cipher systems, with a few words on the application of statistical methods. Pp. 7 introduces “magic” and relates how a cipher machine, which had never been seen, was reconstructed. The last page shows photographs of two Hagelin machines. This

reprint is autographed: "With Sincere respect to W.F. Friedman from Richard V. Andree." Dr Andree was a mathematics professor at the University of Oklahoma.

Item 944

Smith, David Eugene (Prof.), "John Wallis as a Cryptographer," Bulletin of the American Mathematical Society, 24, No 2, (Nov. 1917), pp. 82-96.

An article, historically important about one of the very early English cryptologists. Highly interesting. Wallis was famed in his own time for accomplishment. See Ellis, Kenneth **Item 1728**. Appendix 1: pp. 127 & 128, "The British Post Office in the Eighteenth Century." See also **Item 952** for further information. Original journal.

Item 944.1

Photostat positive of **Item 944**.

Item 945

Erickson, Milton H. and Lawrence S. Kubie, "The Translation of the Cryptic Automatic Writing of One Hypnotic Subject by Another in a Trance-like Dissociated State," The Psychoanalytic Quarterly 9, 1 (1940), pp. 51-63.

Photostatic copy of the article. The title of this article gives an indication of its contents, which are fascinating to a cryptanalyst. In their conscious states neither individual could understand the script. In trance-like states, each one quite independently reached identical interpretation of it.

Item 945.1

Photostat negative of **Item 945**.

Item 946

Kent, Allen, "Literature Research as a Tool for Creative Thinking," extracts from...for presentation before the Special Libraries Assoc. June 4, 1956, Pittsburgh, PA. 4 copies.

This item was added to the FC because it contains a very concise account of the points by which Whitehead, the great philosopher and mathematician summarizes the important factors in creative thinking. Allen Kent was Associate Director, Center for Documentation and Communication Research, School of Library Science, Western Reserve University, Cleveland, OH. One original, three carbons. Typescript.

Item 947

Andree, Richard V., "Cryptography as a Branch of Mathematics," The Mathematics Teacher 45, 7 (Nov. 1952), pp. 503-509. 2 copies of original journal.

This is a rather elementary article, perhaps intended to interest teachers of high school and college students. It has a bibliography of 36 items which might be quite useful. The text also contains a reprint of the article.

Item 948

U.S. Government, Fundamentals of Traffic Analysis, Department of the Army Technical Manual (TM-32-250), Department of the Air Force Manual (AFM 100-80), Washington: GPO 1948, 102 pp.

A basic manual setting forth the fundamental principles of the science of traffic analysis, an extremely important and basic step in cryptanalysis, which in and of itself supplies valuable information. No item. At NSA.

Item 949

Sittler, F.J., Code Télégraphique Chiffré, Paris: Boyveau & Chevillet, n.d. but marked 23^{eme} edition.

This European telegraphic code has gone through at least 30 editions; which is an indication of its popularity and importance in general European communications. WFF's recollection is that this was the code which was used heavily in the Dreyfus case given to WFF as a souvenir when on the TICOM mission. This copy was stolen from the French by the Germans and later found in Germany. TICOM Doc 3138, "Top Secret." On Dreyfus, see David Kahn, The Codebreakers, pp. 254ff.

Item 950

Signal Corps, U.S. Army, U.S. Army in World War II, Vol. I, excerpts from. Two excerpts from Vol. I, U.S. Army in WWII: The Signal Corps.

Lent for two weeks to Mr. W.F. Friedman, Armed Forces Security Agency, Washington, DC. Property of Office of Chief of Military History SSUSA Washington, DC to be returned with franked label. Restricted copy #22. Communications obscurity. Cryptography vs. cryptology Ch XII Pearl Harbor – The Magic Messages. References to WFF's role. Gen. Olmstead was not much interested in the magic intercepts-unlike his predecessor Mauborgne. "Winds" messages VERY important! "It became apparent that an army could not begin reading the enemy's codes on the day a war began. One must learn before that, even though doing so meant violating the privacy of powers still officially friendly. This was the inescapable result of the general use of codes by nations, part of a universal trespass recognized quite apart from conventional standards

of international morality.” M-134-T2 cipher machine. Friedman suffered a nervous breakdown in 1941 and was ill five months during the purple code period. He returned in April 1941. David Kahn, The Codebreakers, pp. 1-67.

Item 951

Friedman, William F., Analysis of a Problem in Enciphered Code. Technical paper written by WFF in September 1924. Also contains correspondence with Charles J. Mendelsohn who posed the problem. Typescript of 19 pages.

This represented a challenge which was successfully met. A real contribution in this country for that period. The problem was issued to WFF as a challenge is too complicated to relate briefly. Mendelsohn complimented WFF on his solution which he called “complete and satisfactory.” It was a German code from WWI. Mendelsohn introduces himself as having met WFF at “Yardley’s in New York.”

Item 952

Ellis, Kenneth L., The Secret Office in the Post Office and the Office of Decipherer.

Photostatic copy of a typescript of 160 pages of text and 52 pages of references. A fascinating and thoroughly documented work by a man who delivered a lecture on this subject at [British] Government Communications Headquarters about 1948-1950. Very important for the history of very early British cryptologic operations and the only work of its kind. Fully and carefully documented and excellent piece of exposition. See **Item 1729** and **1728.1**. It is believed on good authority that Professor Ellis was an employee of the British Post Office in WWII. This copy was a photostat from a copy sent to WFF by the then Director of GCHQ, Sir Edward Travis. Bound into three volumes, the third volume containing voluminous references to WFF by his friend Brig. Tiltman.

Item 953

Gunther, John, “Inside CIA: The Story of our Spy Network,” Look 16, 17 (August 12, 1952), pp. 25-29.

Original magazine pages appeared during the administration of General Bedell Smith. Since the date of this article, the operations of the CIA have been brought into question and evoked considerable controversy. Article also mentions second “hush hush” organization, the Psychological Strategy Board. (David K.E. Bruce, William C. Foster, and General Walter Bedell Smith).

Item 954

Hubler, Edward, The Sense of Shakespeare's Sonnets, Appendix to Princeton, New Jersey: The Princeton University Press, 1952.

Another of the many presentations of the Shakespeare Sonnets in which he emphatically states "two Shakespearean fallacies." A brief summary of the history of the controversy concerning the authorship of the Shakespearean plays and of the unnamed person to whom the sonnets were dedicated. He rejects the idea that the sonnets were written to another man. Authorship question. First suggestion that Bacon was the author was made in 1769 in The Life and Adventures of Common Sense, pp. 139.

Item 954.1

No card. Photostat negative copy of an Appendix entitled, "Evidence and the Two Shakespearean Fallacies."

Item 955

British Government, Documents Illustrating the Hostile Activities of the Soviet Government and Third International against Great Britain, London: HM's stationery office, 1927, 31 pp. Original, not a photostat.

A "white paper" dealing with communist conspiracy and USSR espionage against Great Britain. Part I is entitled, "Documents Found by the Police in the course of the Search through Soviet House and referred to by the Prime Minister in his statement on the May 24, 1927." Part II is entitled, "Documents published by the Foreign Office," and contains the translation of the plain text of certain telegrams from and to Soviet agents in Great Britain. A great furor was raised in 1927 over revelations made as above and the Russian Trade Delegation was requested to leave Great Britain. "There were no ciphers or very secret material at the Trade Delegation. Certain cipher messages were communicated to the Trade Delegate."

Item 956

Unbegavn, Boris, "Russian Secret Writing of the XVII Century: The Undeciphered Inscription of Pamba Berinda," BPEMEHHNKB, Volume VI, Paris: 1938, pp. 81-86. Photostat negative and positive.

A rough translation from the Russian (Cyrillic) the inscription treated dated from 1628; the cryptographic content is the only two words. Russian Secret Writing; translation into English (by Boris Unbegavn), but with footnotes missing. In the xylographic calendar printed in the Kiev-Percherskaya Press in 1928 which is described in an article of Barmkata, there is a cryptographic inscription consisting of two words written in special symbols. The inscription reads: PAMVA Berinda, Proto-hagiographer of Jerusalem.

Item 957

Skinner, B. F., "Has Gertrude Stein a Secret," The Atlantic Monthly, (January 1943), pp. 50-57. This pertains to the cult of unintelligibility.

Gertrude Stein, when at Ratcliffe worked with a psychology student, worked out an experiment in automatic writing under the direction of Münsterberg. The result of her own experiments, which Gertrude Stein wrote down and which was printed in the Harvard Psychological Review, was the first writing of hers ever to be printed (September 1896). "Normal Motor Automatism" by G. Stein and Leon M. Solomons. It is very interesting to read because the method of writing was afterwards developed in Three Lives and The Making of Americans shows itself. If she used this method, then maybe there is no meaning to her work. He offers the theory because: "it gives one the freedom to dismiss one part of Gertrude Stein's writing as a probably ill-advised experiment and to enjoy the other and very great part without puzzlement." Pp. 57.

Item 957.1

Photostat positive of same article. Typescript extracts from the Atlantic Monthly Contributor's Column, (January-June 1934), 153 pp. (pp. 26), on "The Gertrude Stein of Tender Buttons."

Examples of random strings of words used by Gertrude Stein, where she tried correlating sight, sound, sense, and eliminating rhythm, then tried grammar and eliminating sight and sound.

Item 958

Klein, A.M., "The Black Panther – A Study of Joyce," Accent (Spring, 1950), pp. 139-155.

Another item relative to what WFF called the cult of intelligibility in modern literature. The technique of studying James Joyce. The art in the first chapter of Ulysses is theology.

Item 959

Taplin, Walter, "James Joyce Wrote English," The Critic, (Spring 1947), pp. 11-16.

An attempt to demonstrate that Joyce's writings are quite intelligible. The first paragraph ends with a diatribe: "Patience [in the reading of Joyce] is nearly always rewarded and sometimes bountifully." Finnegan's Wake must be appreciated and elucidated as a whole. He accuses the Americans, judging by the amount of work they put out on Joyce, as having "an obsession with research for its own sake," pp. 12.

Item 960

Smith, Paul Jordan, A Key to the Ulysses of James Joyce, New York: Convici Friede, 1927, 89 pp. DJ.

As intimated before in this bibliography, the writings of James Joyce are believed, by WFF, to be somewhat cryptographic in nature. Here is a book which was written as a “key” to the great work Ulysses. The author says Ulysses is a “challenge but a delight.” Folder does not contain this item-Separate book. Just a pamphlet by Rolf Luehrich, The Secret of Ulysses, an analysis of James Joyce’s Ulysses, The Compass Press, Inc., McHenry, IL. Table of contents and 3 articles: Gilbert Millstein, A Valentine for Joyce, “2/14/54,” New York Times Magazine.

Item 961

Joyce, James, Finnegan’s Wake, New York: The Viking Press, 1947, 643 pp. DJ.

The great literary “cryptogram” produced by James Joyce, still being interpreted by scholars. On the fly leaf is a brief note from February 1958 issue of The Griffin, “The last work of the author of Ulysses.” Edmund Wilson wrote of it: “Today when we are getting so many books in which the style is perfectly clear that the meaning is non-existent or equivocal it affords a certain satisfaction to read something that looks like nonsense on the surface, but underneath makes perfect sense...” This summarizes WFF’s opinion of Joyce’s writing as cryptographic.

Item 962

Tansill, Charles Callan, Back Door to War, Chicago: Henry Regnery Company, 1952, 690 pp.

One of the more vociferous and biased of the “revisionists” deals with the attack on Pearl Harbor and the entry of the U.S. into WWII. In WFF’s desire to be fair, many items have been included in the collection in order that both sides of a controversy may be represented. Notations by WFF inside cover. Several clippings included (see clippings file).

Item 963

Harris, L. H. (Brigadier), Signal Venture, Aldershot: Gale and Polden Ltd., 1951, 278 pp.

A British Royal Signals officer relates his experience in two world wars. This work was purchased by WFF in the mistaken notion that the author was the Brigadier Leslie Harris who was a British colleague during World War II years. Author relates his experience as a linesman with the Australian Signals during the 1914-1918 War, then between the wars as a Telecommunications Engineer of the Post Office and at the same time a Territorial Army Officer of the Royal Signals. Finally as a signal officer during WWII, he served in the BEF during the withdrawal from Dunkirk, later at GHQ Home Forces and finally as Chief Telecommunications Section SHAEF. The original intention of the author was to tell the story of the planning and execution of the long distance communications for the invasion of NW Europe in 1944, “but it

soon became apparent to the author that the only way to avoid formal research” was to make this a personal memoir.

Item 964

Strong, L. A. G., The Sacred River, an approach to James Joyce, New York: Pellegrini & Cudahy, 1951, 161 pp.

An attempt to make the unintelligibility of James Joyce intelligible.

Item 965

Montross, Lynn, Rag, Tag, and Bobtail: The Story of the Continental Army, 1775-1783, New York: Harper & Bros, 1952, 519 pp. DJ.

The official historian of the U.S. Marine Corps writes of the American Revolutionary period and the cryptography thereof. A job well done as far as it goes. Washington’s spy system. Written from diary material.

Item 966

Gelb, Ignace, A Study of Writing: The Foundation of Grammatology, Chicago: The University of Chicago Press, 1952, 295 pp. DJ.

Dr. Gelb turns his attention to the foundations of grammar and writing. An important and very interesting contribution to this branch of knowledge. Gelb is dubious about the possibility of ever reaching a solution to the Maya hieroglyphic writing because, according to him, that writing never reached the high level of syllabic or alphabetic writing. He was, of course, wrong. See comments in **Item 1195**. “The most powerful instrument ever placed in the hands of man in his struggle for emancipation was literacy—a mastery of reading and writing,” Lotus D. Coffman. See **Item 836**, “The Alphabet,” by David Diringer, who as of 1966 was the world’s leading authority on the alphabet.

Item 967

White, E. B., “The Hour of Letdown,” The New Yorker, December 22, 1951, pp. 20-21

A perfectly delightful satiric article having a bearing upon the fantastic capabilities of modern digital computer mechanisms. In same container as **Item 967** is **Item 968**, The Scientific American of September 1952, with an introduction by Ernest Nagel. The whole magazine comprising a series of articles, lack of which, is a serious and solemn endorsement of automation and the replacement of men by machines.

Item 968

Nagel, Ernest, et. al., "Automatic Control," Scientific American 187, 3 (September 1952), pp. 44-47

Deals with digital computers and feedback mechanisms. For the humorous or satiric view of this subject, see **Item 967**, by E. B. White, "The Hour of Letdown."

Item 969

Joyce, James, James Joyce's Scribbleddehobble and The URE Workbook for Finnegans Wake, ed. by Thomas E. Connally with notes and introduction, North Western University Press, 1961, 187 pp.

Finnegans Wake was started in 1922 with unorganized entries in a hard-backed notebook, Scribbleddehobble. The notebook of 1016 unlined pages, he divided into 47 sections, each titled as one of his published works. From the beginning, Joyce considered FW to be a projection of all previous publications. In the notebook he wrote words or phrases and ideas, crossed out and rewrote in different colors and handwriting styles. Connally explains Joyce's complex entries and indicates the location of the notebook entries in the final version.

Item 970

Smith, H. Allen, Smith's London Journal, New York: Doubleday & Company, 1952, 288 pp. DJ.

It is difficult to tell whether the author has his tongue in his cheek in his many references to the question of the authorship of the plays published under the name of Shakespeare. See card listing page numbers in this connection (pasted in cover). Author believes Earl of Oxford wrote the plays. pp. 30, 106, 131-133, 155, 161, 185, 198-200, 239.

Item 971

Craigie, Sir Robert G.C.M.G.C.B., Behind the Japanese Mask, London, New York, Melbourne & Sydney: Hutchinson & Company, Ltd., 1945, 172 pp. with 28 illustrations.

This book is of interest because the author was the British ambassador to Japan from 1937-July 1942. It is a personal record written, the author states, three years after leaving from Japan. The whole British Embassy Staff and families were interned on December 8, 1941 and held until July 1942. Chapter XXI, "Eve of War," reveals that for a very long time, persons in the diplomatic service in Toyko were aware of Japan's intentions to strike at Malaya, Hong Kong, and U.S. Island territories. See Chapter XXI, October-December 1941.

Item 972

Evans, Joan, Time and Chance: The Story of Arthur Evans and his Forebearers, London: Longmans, Green, & Company 1943, 410 pp.

Sir Arthur John Evans (July 8, 1851 – July 11, 1941) was a British archaeologist most famous for unearthing the palace of Knossos on the Greek island of Crete at Kephala Hill and for creating the concept of Minoan civilization from the structures and artifacts there and elsewhere in Crete and the eastern Mediterranean. He was the first to define the Cretan scripts, Linear A and Linear B as well as an earlier pictographic writing. He and Heinrich Schliemann are considered the two major pioneers in the study of Aegean civilization in the Bronze Age. Son of John Evans who excavated Paleolithic man.

Item 973

Callimahos, Lambros D., Aggressor Combat Code No. 1, Aggressor Forces Security Agency Division 14, 1 July, 1951.

A small field code used in U.S. Army maneuvers in the summer of 1951. An exercise in cryptography and cryptanalysis in connection with those maneuvers. Restricted copy number 11.

Item 974

Huie, William Bradford, The Fight for Air Power, New York: L.B. Fischer, 1942, 310 pp. No DJ.

Mr. Huie, an avid advocate of air defense, writes at length upon the pre-Pearl Harbor events and those of the early years of World War II. It is unfortunate that this book contains no index, however, there are annotated photographs which may be useful to historians.

Item 975

Millis, Walter (ed.), The Forrestal Diaries, Edited by Walter Millis, with the collaboration of E.G. Duffield, New York: The Viking Press, 1951, 581 pp.

A famous and distinguished military historian publishes the diaries of James Forrestal, then Secretary of Defense. Important in the study of the attack on Pearl Harbor and the war in the Pacific. Jacket contains a great deal of important information. A clipping of considerable interest is pasted inside (if entirely true), by U. E. Baughman, Secret Service Chief. [Separate folder: pp. 74-87, photostat negative of The Forrestal Diaries]. Forrestal got paranoid and had lapses in memory and was planning to kill himself. He later did kill himself. Hallucinations and delusions.

Item 976

Van Doren, Carl, Secret History of the American Revolution, NY: The Viking Press, 1951, 534 pp.

Contains much information dealing with Benedict Arnold's treason and some of the cryptograms involved in the case. Thoroughly scholarly treatment by the Pulitzer Prize winning Van Doren. Includes among many, the cipher message (or letter) Arnold sent to the British which he hoped would result in the capture of George Washington. More fascinating than any detective novel. DJ.

Item 977

Baldwin, Hanson W., "Our Greatest Battle: The Full Drama," NY Times Magazine, Dec 15, 1946, pp. 7-9, 63-70.

One of the earliest articles dealing with the failure of intelligence in the Battle of the Bulge. Photostat Positive.

Item 978

Porter, McKenzie, "The Biggest Private Eye of All," Machean's, Dec 1, 1952, pp. 7, 67-75.

How a private person, William Stephenson, became the private eye of a Canadian cloak and dagger work during WWII. In 1962 a book was published about Stephenson much to the surprise of everyone cognizant of his operations on behalf of not only the Canadians, but the Americans and British during WWII. **Item 1799**, Room 3603; author Montgomery Hyde. Highly readable. See his book or book on him. Original.

Item 979

Merriam, Robert E., Dark December, extracts from Chicago: Ziff-Davis Publishing Co., 1947, 236 pp.

References dealing with the Battle of the Bulge, and intelligence reports during, especially from captured Germans. Bound in cardboard, Photostat positives.

Item 980

Collins, Joseph, The Doctor Looks at Literature, Extracts from H. Doran Co, 1923, 317 pp. Photostat negative.

A diatribe against James Joyce and his kind of writing by a literary medical man. Bound in cardboard.

Item 981

Derolex, R., "Dubthach's Cryptogram," L'Antiquite classique, 21, 2 (1952), pp. 359-375.

A new version of a famous cryptogram. The author states that it looks as if Dubthach produced a cryptogram as a revenge for what he had suffered from actions of his "Irish brethren." Photostat positive bound in cardboard. See Sheldon, EAW, pp. 600-608 and David Kahn, The Codebreakers, pp. 108

Item 982

Post, Melville Davisson, "The Great Cipher," Extract from: Monsieur Jonquelle, Prefect of Police of Paris, NY: D. Appleton & Co., 1923, pp. 1-27.

This romantic tale of a cipher appeared originally as part of the larger book. Photostat positive. Bound in cardboard.

Item 983

Clodd, Edward, The Story of the Alphabet, NY: D. Appleton & Co, 1904, 209 pp.

An old text, now quite rare, for the average reader on the history and development of the alphabet. The FC contains numerous items on this subject. See especially Diringer, **Item 863**. This volume was rebound and pages trimmed for WFF by Commander Mindte. Good illustrations. Mentions of ancient intelligence: Ptolemy and Cleopatra, p. 119, Moabite stone, p. 134, Hittite, p. 164, Cretan Scripts, pp. 142-178, Greek papyri, pp.198-200, Runes & Ograms, pp. 201-204. Cf. David Kahn, The Codebreakers, pp. 86ff and compare *Pater Noster* rebus from Mexico, pp. 74 to Sheldon, EAW.

Item 984

Riess, Curt, Total Espionage, NY: G.P. Putman & Sons, 1941, 318 pp. No DJ.

Pages 186-187 relate incidents concerning the Hagelin cryptograph and the Deuxième Bureau of the French Army's General Staff. The author's statement that the Aktiebolaget Cryptograph Co. had been acquired by a German bank is, it is believed, not true. WFF believed probably other statements or conclusions also might be untrue. The book tells of the enormous espionage organization of the Third Reich, how it functioned, and what successes it had before the War.

Item 985

Koop, Theodore F., Weapon of Silence, Secrets, Censors, and Spies, Chicago: The University of Chicago Press, 1946, 304 pp.

This is a story of censorship of civilian communications in the U.S. during WWII. Autographed by the author to WFF and ESF, "For two distinguished cryptanalysts." Koop was

Asst. Director of the Offices of Censorship. He censored international mail, cables, radio transmissions.

Item 986

Goodwill, Anna, Trismegetus Revealed, A royal romance and play upon words assembled by the ghost writers and transcribed by A. Goodwill, NY: Privately Published by the Author, 1943, 954 pp.

See **Item 987**. Purchased by WFF from the “excess” books of the Cosmos Club. The Club received both books by this author as gifts from the author. Worthless as literature, but are certainly a curiosity. Automatic script as evidence of split personality.

Item 987

Goodwill, Anna, Ecco homo: Behold the Man! – Day by Day Cosmic Wireless with an addenda of prescience. Transcribed by Anna Goodwill, New York: Margent Press, 1947, 484 pp.

The author of this and the next item “heard” messages. Her books have nothing to do with cryptography. In places the contents resemble the writings of authors within the cult of unintelligibility. See **Item 986**

Item 988

Cherry, E. Colin, “The Communication of Information,” (an historical review), American Scientist, 40, 4 (Oct 1952), pp. 640-644.

A reader in London University discusses language and codes, communications theory, brains real and artificial, and the like. The historical section, though brief and terse, is quite important.

Item 989

Roberts, James Hall, The Q Document, Greenwich, CT: Fawcett Publications, Inc., 1964, 224 pp. Soft bound.

In the opinion of ESF, this is the most intriguing novel ever written based on a cipher. The cipher fits no known category. It resembles “concealment” cipher or “open” code, as for example, the notorious message agreed upon by the Japanese that “East Wind Rain” meant that the U.S. was to be attacked. In this novel, the secret method, due to peculiar circumstances, cannot be revealed to the recipient, therefore a method had to be devised that stood the greatest chance of being recognized as carrying a message without the person receiving it having any knowledge that a secret existed therein. It is a masterful conception, carried out with a suspense that holds one breathless.

Item 990

Gouzenko, Igor, "Stalin Sent Me to Spy School," Coronet 33, 5, No. 197 (March 1953), pp. 85-92.

Further revelations by the author of **Item 1424**. He was a cipher clerk for the Soviet Embassy to Canada in Ottawa, Ontario. He defected on September 5, 1945 with 109 documents on Soviet espionage activities in the West. Gouzenko's defection exposed Joseph Stalin's efforts to steal nuclear secrets, and the then-unknown technique of planting sleeper agents. The "Gouzenko Affair" is often credited as a triggering event of the Cold War.

Item 991

Couturat, L. and L. Leau, Histoire de la langue universelle, extract from, Paris: Librairie Hachette et Cie, 1930, 576 pp.

Another item of interest in connection with the Voynich manuscript. Cardboard bound, Photostat positive. If one believes it is an artificial language. See articles in Cryptologia: Michael Barlow, "The Voynich Manuscript - by Voynich?" Cryptologia 10, 4 (October, 1986), pp. 210-216. Jim Reeds, "William F. Friedman's Transcription of the Voynich Manuscript." Cryptologia 19 (1995).

Item 991.1

Photostat negative of **Item 991**.

Item 992

Gleason, Andrew M., "Groups Without Small Subgroups," Annals of Mathematics 56, 2 (Sept, 1952), pp. 193-212.

Autographed to WFF by the author, now Professor of Mathematics at Harvard. This brochure together with other publications of this young mathematician brought him recognition in 1952 in the favor of \$1,000 prize (letter in front cover) of the American Association for the Advancement of Science, for his demonstration of the solution to "Hilbert's Fifth Problem."

Item 993

Jordan, William George and Richardson Wright (pseudo), Feodor Vladimir Larrovitch: an appreciation of his life and works, New York: The Authors Club, 1918, pp. 126.

One of the most hilarious literary hoaxes ever perpetrated, showing the gullibility of literary critics, especially devoted to "modern literature." It is illustrated with photographs of this fictitious character and the facsimiles of his handwriting.

Item 994

Cunningham, Wallace M., The Tragedy of Francis Bacon, Prince of England, Los Angeles: The Philosopher's Press, 1940, 96 pp.

Dr. Cunningham's work, having been rejected by Doubleday-Doran Co., found a publisher in the Philosopher's Press. This item deals with the question of the authorship of the Shakespeare plays. The "cipher" involved is, as noted above, purely subjective. The title page is a curiosity, revealing as it does the ultimate degree of the subjective obsession of this otherwise sane man.

Item 995 and 995.1

U.S. Army Signal Corps, Military Cryptography, Instructor's lesson plans, CSD-13, FT Monmouth, NJ: Signal Corps Replacement Training Center, December 1942, 68 pp.

This item concerns a war-time course in this subject, conducted at the principal school of the Signal Corps. Restricted – Declassified NSA 1981.

Item 995.1

1943 copy of **Item 995**

Item 995.2

U.S. Army Signal Corps, Cryptographic Division, Spanish Word List, Declassified NSA 1981.

Item 995.3

U.S. Army Signal Corps, Cryptographic Division, French Word List, FT Monmouth, NJ: August 1942, 208 pp. Declassified NSA 1981.

Item 995.4

U.S. Army Signal Corps, Cryptographic Division, German Word List, FT Monmouth, NJ: August 1942, 194 pp. Declassified NSA 1981.

Item 995.5

U.S. Army Signal Corps, Cryptographic Division, Italian Word List, FT Monmouth, NJ: August 1942, 211 pp. Declassified NSA 10/28/81.

Item 995.6

U.S. Army Signal Corps, Cryptographic Division, Portuguese Word List, FT Monmouth, NJ: August 1942, 194 pp. Declassified NSA 10/28/81.

Item 996

Groves, Rev. Edward, Pasilogia: An Essay towards the formation of a system of universal language, Dublin: James McGlashan, 1846.

Photostat negative. Notes on back by WFF.

Item 997

Charma, M.A., Essai sur le langue, Paris: Librairie Classique et Elémentaire de L. Hachette, 1846.

Photostat of pp. 228-301, with interesting notes of history of attempt at fostering universal language inventions. Photostat negative.

Item 998

Pankhurst, Estelle Sylvia, Delphos: The Future of International Language, London: Keyan Paul Trench Trubner & Co., 1927. Photostat of pp. 10-25. (Photostat negative, cardboard bound).

Item 999

Charma, M.A., Sur le'stablissement d'une langue universelle, Paris: Librairie Classique et Elémentaire de L. Hachette, 1855.

Deals with same subject as **Item 997**. Re: Voynich. pp. 4-5, 18, 19

Item 1000

Funke, Otto, Zum Weltsprachen problem in England in 17 Jahrhundert, Heidelberg: Carl Winter's Universitas Buchhandlung, 1929, pp. 1-19, 144-155. *Lingua universalis* and George Delgarno (1626-1687)

Two typescript pages in English. Photostat negative of pages of Funke. English.

Item 1001

Lancaster, Bruce, The Secret Road, Boston: Little, Brown & Company, 1952, 259 pp. DJ.

A very interesting novel on the history of the American Revolutionary period, with many incidents involving cryptology, both American and British. Contains two book reviews (separate folders) of interest. George Washington's spies and Benedict Arnold are characters in the book. Ninth novel of Bruce Lancaster. How George Washington's G-2 failed the enemy bid for victory. The "secret road" of the title is the wagon track, along Long Island's north shore from Brooklyn to the bays around Setauket, down which Townsend (NY merchant journalist who

posed as an ardent Tory) sent Washington information that decisively altered the course of the war.

Item 1002

Bark, Conrad Voss, The Shepherd File, New York: Berkeley Publishing Corp. 1966, 174 pp., soft bound.

The body of a British intelligence agent is found in the Thames. International smuggling, LSD, Russian woman agent-The works! Villains are African nationalists inspired by Chinese gold and political empathy. Also deals with LSD. Exceedingly racist. Africans (all) are “children...excited...emotional, devout, idealistic. They have no discipline.”

Item 1003

Wynd, Oswald, Death, The Red Flower, New York: New American Library, Inc., 1965, 192 pp., softbound.

The scene is China, world conquest the goal of Chinese conspirators.

Item 1004

Wilkins, John,

An essay towards a real character and a philosophical language, London: 1668. Description, Photostat of title page 23, 26, 376, 385-396, and 414-434. Photostat negative, note by WFF.

Item 1005

Childs, J. Rives, Before The Curtain Falls, Indianapolis: The Bobbs-Merrill Company 1932, 333 pp. No DJ.

This novel contains the first description in public print of the German High Command Cipher of World War I: The ADFGVX. Although masked as a novel, the book is autobiographical in detail with regard to the author's service in the German cipher solving section GHQ, A.E.F. in 1918. The author, who was trained for his work at GHQ by WFF and ESF at Riverbank in the autumn of 1917, later rose to the rank of Ambassador in the U.S. Foreign Service. A holographic letter from the author is enclosed. See note of WFF on title page 100 for factual material. On Childs, see David Kahn, The Codebreakers, ch. 11.

Item 1006

Field, Rachel, All This and Heaven Too, New York: The MacMillan Company 1938, 576 pp. No DJ.

One might wonder why this book is in the FC since it seems to be merely a novel. However, besides being a fascinating historical novel, the first edition was used as a source of cipher keys by German secret agents in their clandestine overseas communications before WWII. This copy is not from the actual edition used by the agents, although it served as a workable substitute until a copy of the first edition was finally located. This cipher system was solved by the Treasury Unit under Elizabeth Smith Friedman before the U.S.'s entry into the war. The file concerning this and other espionage systems solved by the Treasury Unit are now in the Government Archives*. This book was named openly in newspapers during the espionage trial brought by the FBI* in New York in 1941. There are several newspaper clippings in the folder and the names of other books used as sources for keys. In this case, as in the case of "The Doll Woman," the FBI exposed the secret messages and methods without as much as asking a by-your-leave from the Treasury Department where the solutions and systems were achieved. On the famous FBI case, see Wikipedia entry under: The Doll Woman.

Item 1006.1

Field, Rachael, "All This and Heaven Too,"

New story (untrue) re the spy key novel. Also book jacket and news clippings re German spy keys. The novel itself (**Item 1006**) was the actual workbook in cryptanalytic unit under ESF, in Treasury Department, where the system (transposition) was broken and read daily in the late 1930's. Typical usage of another agency than FBI to get information and then attribution of success is given to the strong arm of the FBI. An interesting case of a novel with no cipher in the text itself, but of its use for keys, placing it in this collection. Folder contains dust jacket blurbs. Clippings from the Times Herald, November 28, 1941, is marked "Not True" by ESF. Envelope with clipping about spies using other novels. Sebald used "All This and Heaven Too."

Item 1007

Friedman, William F., American Army Field Codes in the AEF during the First World War, Washington, DC: War Department, June 1942, Restricted, Declassified by NSA 10/28/81.

History of the codes and their use pp. 1-27. Picture of U.S. Army cipher disk Appendix I, Appendix 3- Playfair System, and Appendix 4- early French codes. Printed edition **Item 841**.

Item 1008

Kullback, Solomon, Statistical Methods in Cryptanalysis, Washington, DC: GPO, 1938, 194 pp. War Department: Office of the Chief Signal Officer.

More WWI Army field codes. Reclassified by NSA and removed from FC. Declassified 11/02/05 and returned to FC. In black binder.

Item 1009

Friedman, William F. and Charles J. Mendelsohn, The Zimmermann Telegram of January 16, 1917 and its cryptographic background, Washington, DC: GPO 1938, 33 pp., 2 copies. Restricted, No. 19, Declassified NSA and sent to LC 7/24/75.

An interesting, important and historic document, giving a thorough analysis of the cryptography involved. See additions for fuller story. In black binder returned from NSA.

The work on the Zimmermann telegram written by America's two greatest cryptographers. Separate folder, softbound edition, Register No. 104, heavily annotated by WFF.

Item 1010

Kullback, Solomon, Frank B. Rowlett, and Abraham Sinkov, General Solution for the ADFGVX Cipher System, Washington: GPO 1934, 18 pp.

This general solution marked a milestone in the cryptanalysis of a complex substitution transposition system and was achieved without the knowledge that a similar feat had been accomplished by the French, as appears in the book by General Givièrge, pp. 209 ff. This famous German cipher of WWI could be solved only by "special solutions" which depended upon finding two or more messages with similar beginnings or similar endings. On Childs see David Kahn, The Codebreakers, ch. 11. Reclassified by NSA and removed from FC. Declassified 9/16/05 and recovered for FC through FOIA by VMI Department of History. Black binder copy.

Item 1011

Burton, Robert, The Anatomy of Melancholy, for the first time with the Latin completely given in translation and embodied in all English text. Ed. by Floyd Dell and Paul Jordan Smith, New York: Tudor Publishing Company 1927, pp. 1036.

This is one of the most amazing books in the world. The great classic, still so rated, but read by very few people, which is a great pity for everyone. This item is in the FC for two reasons, the more important reason (see pp. 463) is that the author mentions a series of "pastimes" to aid the melancholic person; namely palindromes, anagrams, chronograms, acrostics, and others that will "divert their idle thoughts." The second reason it came into the FC is that it is the most outstanding of the contemporary works other than Shakespeare ascribed to Bacon by Mrs. Elizabeth Wells Gallup. There are also many references to the great Italian cryptographer, Cardan.

Item 1011

Rowlett, Frank B., Further Applications of the Principles of Indirect Symmetry of Position in Secondary Alphabets, War Department, Office of the Chief Signal Officer, Washington: GPO 1935, 29 pp.

Black binder. Returned from NSA.

Item 1012

Sinkov, Abraham, Permutation Tables involving a Feature of Non-Transposability, Washington, D.C.: GPO, 1934.

The feature of a non-transposability of code groups constructed from permutation tables is of importance in connection with commercial and governmental code books. Reclassified by NSA and removed from FC. Black binder returned from NSA.

Item 1012.1

Permutation Tables involving a Feature of Non-transposability, Washington: GPO 1934, 8 pp., 3 tables. Fort Monmouth: Signal School, 1942, 12 pp.

A mimeographed “pirated” edition prepared and distributed at the Signal School, Ft. Monmouth, 1942. See **Item 1012**.

Item 1013

Moorman, Frank, Final Report of the Radio Intelligence Section, General Staff, General Headquarters, American Expeditionary Forces, 1918, Washington, DC: GPO 1935, 52 pp.

Black binder. Returned from NSA.

Item 1014

Part III, Friedman, William F., Field Codes Used by the German Army during the World War, Washington, DC: GPO 1935, 98 pp.

World War I documents of extremely interesting historical significance. The only publication of its kind, certainly in English. Reclassified by NSA. In black binder returned from NSA.

Item 1015

Conrad, Joseph, The Secret Agent, Garden City, New York: Doubleday, Anchor Books, 1921, 253 pp., softbound. PB.

One of the two unquestionable classics of the first order that Conrad added to the English novel. The Secret Agent: A Simple Tale is a novel by Joseph Conrad published in 1907. The

story is set in London in 1886 and deals largely with the life of Mr. Verloc and his job as a spy. The Secret Agent is also notable as it is one of Conrad's later political novels, which move away from his typical tales of seafaring. The novel deals broadly with the notions of anarchism, espionage, and terrorism. It portrays anarchist or revolutionary groups before many of the social uprisings of the twentieth century. Because of its terrorist theme, The Secret Agent has been noted as "one of the three works of literature most cited in the American media" since September 11, 2001.

Item 1016

Childs, J. Rives (1st Lt.), German Military Ciphers from February to November 1918, Washington, DC: GPO 1935, 55 pp.

An excellent technical treatise dealing with the principal ciphers used by the German Army in WWI. See also Anonymous **Item 1954** and Kullback, Solomon **Item 1919**. [Missing in 1966]. Classified, Declassified, then when found on the shelves of the Library of Congress by the Security officers of NSA, was reclassified up to a higher classification than at first or ever, then removed from the Library of Congress and from the FC by Security Officers. Reclassified by NSA. On Childs see David Kahn, The Codebreakers, ch. 11. In black binder returned from NSA.

Item 1016.1

Part III, Friedman, William F,

A mechanical method for determining the key for the transposition in ADFGVX ciphers, given two messages with similar endings. This is in the form of a memorandum appended to a brochure by 1st Lt. J. Rives Childs, **Item 1016**, pp. 50-55. An important advance in the theory and simplification of the methods for deriving the transposition keys, given two messages with similar endings. On Childs see David Kahn, The Codebreakers, ch. 11.

Item 1016.2

Skinner, H.C. (1st Lt.), Note on Reconstruction of an Incomplete ADFGVX cipher. [In German Military Ciphers, **Item 1016**, pp. 42-44].

Item 1017

Hitchings, FNV, Principles of Solution of Military Field Codes Used by the German Army in 1917, Washington, DC: GPO 1935, 28 pp.

Reclassified by NSA and removed from FC. Declassified by NSA 9/15/05 and returned to FC. In black binder.

Item 1018

Shulman, David, Idiomorphic solution of plain text auto key ciphers, Vint Hill Cryptographic School, 1944.

The manuscript for a paper prepared at the Vint Hill Cryptographic School when this member of the American Cryptogram Association was in the Army. In WFF's text, *Military Cryptanalysis-Part III*, he covers solution (simultaneously) of plain and cipher text in auto key ciphers. WFF states therein that discussion of the entire range of auto key cipher methods would require a large volume. In this paper, Shulman presents a method of solution for only one auto key cipher, namely ideomorphs. See Friedman-Shulman correspondence.

Item 1019

Versall, John, On retrieving plain and cipher key words in Repeating Key Systems by chaining the known cipher equivalents.

The author was either a student or an instructor, or possibly both, at the Signal Corps School, Fort Monmouth, NJ, where courses for the training of cryptographers in WWII were conducted. This and the following two items: **1019.1** and **1019.2**, were given to WFF by the author. Typescript 5 pages.

Item 1019.1

Versall, John, Recovery of the Key in the Case of Thirteen Letter sequences produced by Decimating a Transposition Mixed Sequence, Typescript 2 pages.

Item 1019.2

Versall, John PVT., The Theory of Chaining Cipher Alphabets in Repeating Key Systems using Different plain and Cipher Alphabets to Convert the problem into one direct symmetry. Given to WFF by Versall. Typescript 4 pages.

Item 1020

Martin, James Stewart, All Honorable Men, Extract from Boston: Little, Brown & Company, 1950, 326 pp.

A factual account of how valuable information concerning the sailings and operations of American merchantmen and warships was given away by simple work in traffic analysis and the mechanics of obtaining insurance on war cargoes—at the very time when the U.S. Military Services were taking extreme precautions to prevent the leakage of information of this type. There was complete failure on the part of Intelligence in the Services to detect the above named methods of revelation and therefore a total lack of protection to American shipping.

Item 1021

Eyraud, Charles, Précis de cryptographie modern, Paris: Editions Raoul Tari, 1953, 308 pp., plus about a dozen unnumbered pages at end, including index. Three copies. Valuable.

At the time this bibliography is under compilation [1956], this item appears to be the most extensive treatise on the subject of cryptanalytics in unclassified and public literature with the possible exception of the 3rd edition of General Sacco's work. It was written by a member of the French cryptanalytic service and it is believed that he had difficulty with the French authorities in regard to publication of his book. At any rate, it is understood that a certain portion had to be deleted from the final publication, to comply with the demands of the French authorities. This book was a gift from Boris Hagelin who bought it in Paris in 1953, when newly published. Three dedications of significance and considerable interest will be found on the reverse side of the title page. To Jean Hutter, the cryptologist. Jean Saillard-deported to Germany, 1944. Helené Pernod-died of starvation at Ravensbruck, 1945.

Item 1021.1

Eyraud, Charles, Précis de cryptographie modern, Paris: Editions Raous Taris, 1953, 25 pages, Annex No. 1, (Photostat positive) to the latest and best book on cryptography in the public domain to date. This annex is devoted to Formulae for the calculation of probabilities. Valuable information.

Most because it was done by many hands and did not use idiomatic (NSA cryptologic) English. The terminology employed should have been put in conformity with NSA terminology. "The simplest methods are not always the best, but the best methods are always simple," Charles Eyraud. Eyraud's definitions: "Cryptography is the science of devising the most suitable method of assuring secrecy in communications by means of enciphered or prearranged language..." "Decryption (cryptanalysis) is the art of translating, into plain language, a secret language without possessing the key."

Item 1021.2

Copy of same. Photostat negative.

Item 1022

Trithemii, Johannis, Steganographia, Norinbergae: John, Fridericum, 1721. 397 pp. (not the first edition).

This is a photostat positive copy of the Trithemius work. A very interesting note and letter. The first page of the copy will explain how it came into the possession of WFF. Dr. Huttenain, who was the head of one of the several cryptologic agencies of the German Government during WWII and continued this work under the Bonn government and is there still (1966), sent this by an American officer to WFF in 1953. See Galland for editions of this celebrated Thritemius

book, pp. 181-183. Second folder has English translation and original Latin of Trithemian Oath, not to teach steganography without permission.

Item 1023

Western Union Telegraph Company, Specifications 6039-B for installation and operation of Tele Krypton 2-A, New York: June 9, 1942.

During WWII the Western Union Telegraph Company developed a cipher printing telegraph machine controlled by a one-time tape. Not many were built and none is available at this writing. These are the specifications and describe the machine. The item is important in the history of cipher printing telegraph machines. An interesting note dated 14 May, 1953; Brigadier Tiltman told me today that Patrick Bailey, of Ottawa, Canada, designed TeleKryoton for New York office of British Secret Service under Mr. Stephenson [signed F] Bailey called his machine by the same name. Articles from Washington Times gives inventions to Vernam. Original newspaper article from 1921 needs to be preserved.

See, more recently, Steven M. Bellovin's article, "Vernam, Mauborgne, and Friedman: The One-Time Pad and the Index of Coincidence."

Item 1024

Davidson, Lionel, The Menorah Men, New York: Bell Publishing Company, 1966, 271 pp.

A race between Arabs and Jews for a treasure. Hidden in the unmarked desert between Israel and Jordan. The 2,000 year old gold lamp of Solomon's temple-the true Menorah.

Item 1025

McAuley, James (Lt.) and Cpl. Harold Stewart, "To Commemorate the Australian poet ERN MALLEY," Angry Penguins, Autumn, No. 1944, Photostat positive.

An extraordinary literary hoax. Falls into the category of the cult of unintelligibility when the perpetrators of the hoax told their story the critics who had "fallen" hard for the "poetry" of "Ern Malley" maintained that its writers were indeed excellent poets though they themselves were unaware of their genius as poets. Includes photostats of the self defense outcries of the literary critics. Max Harris, "Elegaic for Ern Malley," Photostat positive. Several newspaper articles including debunking. The two perpetrators were Army Officers who "observed with distaste the gradual decay of meaning and craftsmanship in poetry.

Item 1026

Kolodin, Irving, "What is the Enigma?" Saturday Review Feb. 28, 1953, pp 53-55, 71.

The music critic of the Saturday Review poses a musical mystery that resembles a cryptanalytic problem. The mystery surrounds Sir Edward Elgar his composition of “Enigma Variations.” Winner’s are announced in the Saturday Review of May 30, 1953 (also in the folder). See also in this connection, another Elgar Cryptogram – **Item 1026.1** See cipher on p. 24. Irving Kolodin – Winners of the Enigma contest p 48.

Item 1026.1

Powell, Mrs. Richard, Edward Elgar: Memories of a Variation, extracts from. London: Oxford University Press, 1937, 98 pp.

Light on the very well-known Elgar musical composition entitled Enigma Variations. Mrs. Powell includes a cryptogram composed entirely of symbols resembling the letter “e”; if this is indeed a cryptogram it has not been solved. See also **Item 1026**, Kolodin, Irving. Notes by WFF on cryptogram. 1 Photostat positive and 1 Photostat negative.

Item 1027

U.S. Navy, Elementary Courses in Cryptanalysis, Navy Department, Office of the Chief of Naval Operations, circa 1930. Binder, mimeograph copy, Restricted.

Item 1028

U.S. Navy, Elementary Course in Cryptanalysis. A later edition of **Item 1027**, issued July 1941. Office of the Chief of Naval Operations, Washington, DC.

Used in the Navy’s training of specially selected women students in a few colleges in WWII. On p.3 under the heading of “Definitions” appears the statement: “The definitions in this course have been taken from the Army Extension Course in ‘Elementary Military Cryptography’ through the courtesy of Major WFF. Signal Reserve, U.S. Army.” Restricted. Op-20-G, #1148.

Item 1029

James, Admiral Sir William, The Eyes of the Navy, A biographical study of Admiral Sir William Reginald Hall. London: Methuen & Co. Ltd. 1955, 212 pp.

A British admiral writes of important events and cryptanalytic operations under Admiral Hall (Room 40 O.B.) during WWI. Copy #1 purchased by WFF. Copy #2 a gift of Ben Shute, a WWII colleague. This book was published by St. Martin’s Press of NYC in 1956 with the title The Code Breakers of Room 40 with the subtitle: The Story of Admiral Sir William Reginald Hall, Genius of British Counterintelligence. Correspondence (Folder with correspondence separate. Re: warning to censor the book.) This item throws interesting side lights on this volume. Many Marginal notes by WFF in copy. 3 copies all with DJ. Copy one heavily annotated with marginalia by WFF.

Item 1029.1

Admiral Sir William Milburne James, The Code Breakers of Room 40, The story of Admiral Sir William Reginald Hall, genius of British counter-intelligence. New York: St. Martin's Press, 1956. 2 Xerox copies of cover page, dedication page, table of contents.

Item 1029.2

"The Zimmermann Telegram," The Story of the Most Successful Intelligence Corp of World War I."

Mimeographed copy of a script. Edited and produced by David Woodward. Based on the account given by Admiral Sir William James in The Eyes of the Navy (See **Item 1029**). Wilfred Babbage, Leigh Crutchley, Murray Kash, Peter Madden, Stuart Nichol, Christopher Rhodes and Ivan Samson. Recording: Thursday 22 May 1958. The Langham Transmission: Monday 26 May 1958. 8:00-8:30pm (Home Service). R.P. Ref. No. TLO 56608.

Item 1030

Russell, Franklin F., Word Frequencies in Xenophons, *Anabasis*,

Concerns the frequency of words in the Greek Language, compiled by WWII Major Russell (Army Signal Corps), a friend of WFF and at this writing (1956) Legal Counselor to the Emperor of Ethiopia. On War Dept stationary. Army Service Forces, Office of the Chief Signal Officer. Based on edition of Harper & Wallace. The writer describes himself as a "member of that fast-vanishing generation which was able to have a pre-college curriculum which included three years of classical Greek, in a public high school" (1944) Brooklyn Bays High, 2 copies.

Item 1031

Deighton, Len, Horse Under Water, New York: G.P. Putnam's Sons, 1968. 255 pp.

International Intrigue—Portugal, Marrakech, Spain – Ingenious device used in the novel is in NOTE on flap of paper jacket. With DJ.

Possible revolution in Portugal, a sunken submarine containing millions, and a machine that could give the owner mastery of the vital Arctic seas.

Item 1032

Forrest, Jerome and Clarke H. Kawakami, "General MacArthur and His Vanishing War History," The Reporter, October 14, 1942, 20-25 pp.

An account of the mysterious actions relating to the history which was prepared for Gen. MacArthur but which had not been published when ESF wrote up her card summaries. The Reporter article discloses the real facts about the ordering, by Gen. MacArthur, of a voluminous history of the war in the Pacific—through MacArthur’s eyes, of course, and those of his adoring aide, Gen. Willoughby. Four years, millions of words, and the full time of many persons, including both American and Japanese whose services were paid for by the U.S. Govt, went into the massive output of the paeans of praise for Douglas MacArthur. When he was recalled, Gen. Willoughby ordered everything connected with the project destroyed, except five copies, which WFF believed were still sequestered in the 1960s. (see below)

“Heidelberg to Madrid- The Story of Gen. Willoughby” The Reporter Aug 19, 1953. An Account of the Career of Maj. Gen. Charles A. Willoughby, Gen. Douglas MacArthur’s Chief of Intelligence from 1941-1951. The story included a brief account of the extraordinary mysterious undertaking known in Tokyo as “The Great MacArthur Historian Project” which involved the compilation of an exhaustive record of the activities of MacArthur’s command between 1941 and 1949. Willoughby denied any such project even though it consumed a great deal of his staff time for 4 years and resulted in some million words of printed text. The editors interviewed two historians who had worked on the project.

Only five sets of the volumes had been run off. The plates were then broken up and all previous galley and manuscript copies destroyed. All five sets as well as source materials “were taken back to the U.S. by Gen. Willoughby after the dismissal of Gen. MacArthur.” The MacArthur history was not distributed to the Dept. of the Army. The history had no security classification in the regular military sense; it was subject to exaggerated security precaution. Any illusions to its existence that leaked back to the U.S. via American correspondents in Tokyo threw Gen. Willoughby into a rage and made their authors extremely unpopular with G-2. During the final years of the project, security measures were reinforced to the point of absurdity. All possible devices were employed to conceal even from visiting official war historians (like the Navy’s Samuel E. Morison) the very fact that the volumes were still in preparation (although Morison already knew). Volume II is unique in that Willoughby let the Japanese tell their own side of the story. Gen. Willoughby took the position that these volumes were personal memoirs and therefore not subject to Army jurisdiction. The Army made an official request to MacArthur that it be turned over. He never answered.

Update:

The four volumes of the Reports of General MacArthur were published in January 1966 (after MacArthur's death) by the U.S. Department of the Army:

vol. I: The Campaigns of MacArthur in the Pacific.

vol. I supplement: MacArthur in Japan: The Occupation: Military Phase [this was 1945-Dec. 1948]

vol. II, part 1: Japanese Operations in the Southwest Pacific Area [1941-1944]

vol. II, part 2: Japanese Operations in the Southwest Pacific Area [1944-1945]

Item 1033

Fairfield, William S. and Charles Clift, "The Wiretappers," The Reporter. Dec 23, 1952 and Jan 6, 1953, 8 pp.

Important two-part article in 7 sections on the subject of listening-in, or intercepting telephone messages. This subject, in 1967, had been expanded to include "bugging"—hidden microphones, recorders, transmitters in domestic and public matters. Original Magazine.

First Article:

- I. Who's Listening and to What? p.8
- II. Some Law-Evading Enforcement Agencies p.10
- III. How to Tap a Telephone p.14
- IV. Little Politicians have big ears p.19
- V. Listening in with Uncle Sam p.9
- VI. Cops and Robbers, Doxies and Dicers p.13
- VII. Lone Wolves and Private Ears p.17

Item 1034

Anonymous, A Brief History of Cryptology, A typescript of a lecture prepared in AFSA for use in the training school, 20 pp. Date unknown but before 1962. RESTRICTED.

Mentions Herodotus, Polybius, Plutarch, Suetonius.

Item 1035

Amphlett, H., Who Was Shakespeare? A New Enquiry Melbourne, London & Toronto: William Heinerman Ltd. 1955, 218 pp. (With an introduction by Christmas Humphreys)

The author of this book believes that Edward de Vere, 17th Earl of Oxford, was the author of the Shakespeare works. It contains nothing of a cryptographic nature. DJ.

Item 1036

Greenwood, Robert E. and Warren Lotz, The Chi-Square Test with data and calculations for some examples furnished by Beverly Barrett. Washington: National Security Agency, March 1952. Multiple pamphlet of 49 pages.

Detailed treatment of this test for cryptanalytic purposes, with hints as to how to use the test and some available tables of the Chi-Square distribution. The classification RESTRICTED was eliminated by President Eisenhower's Executive Order issued late in 1952.

Item 1037

Decamp, L. Sprague, "The Care and Feeding of Mad Scientists," Astounding Science Fiction. July, 1951, pp. 128-140. Photostat Positive.

An essay on what constitutes favorable working conditions for men, who are expected to produce good results in scientific investigations. The title of the article parodies one used by Dr. Logan Clendening in a strictly medical book which was very popular in the 1920s. The Care and Feeding of Adults. Both amusing and instructive-adjectives which apply to both the De Camp articles and Clendening book.

Item 1038

Anonymous, "The Government of the U.S.A.," Fortune, (Feb, 1952), entire special issue.

This item has nothing to do with cryptology but is in the FC as an item of great historical interest in the story of the development and growth of what, in 1956, had become the most powerful nation in the world. As of 1967, all aspects related to the Fortune article of 1952 have increased many times and in manifold ways. Entire magazine. U.S. Military Mind pp. 91. The Look of Imperial Washington pp. 94

Item 1039

Marshall, George C. and Thomas E. Dewey, Time December 17, 1945 with article on Pearl Harbor. Extracts from the Marshall Dewey Letter, and details regarding "MAGIC." See **Item 718.7** Marshall, George C. Cf. David Kahn, The Codebreakers, pp. 1-67.

A most interesting and unusually accurate account of the facts. See the comments on **Item 718.7**. Folder- picture of George C. Marshall. Top Secret Document 27 September 1944. For Mr. Dewey's eyes only from General Marshall. Negative. WFF felt the letter misrepresented who deserved credit for getting MIDWAY info – the credit should go to NAVY. Marshall retorted that some stuff came from the ARMY too. 19/Nov/1958. Photostat Positive of Time article.

Item 1040

Winterhalter, Franz Xavier,

Photographic copy of a painting by the German painter Winterhalter, on which is a series of cipher texts never deciphered. WFF has spent a few hours in an attempt to solve the cipher texts on this photographic copy of the painting, but without success. The copy was given to him by

Brig. Tiltman of the British cryptologic organization during WWII. WFFs worksheets. Photos of painting. Extract (pp. 70-75) of *Court Life of the Second French Empire 1852-1887* by LePetit Homme Raue (Vizetelly, Ernst Alfred). NY: Scribner's 1908.

Item 1041

Andree, R.V., "Computation of the Inverse of a Matrix," *American Mathematical Monthly* 58, 2 (Feb 1957).

Interestingly for comparison with short article by A.A. Albert (**Item 1061**) on a subject having a bearing on cryptology and call-sign systems. Off print, inscribed to WFF from author.

Item 1042

Friedman, William F., "Table of Basic Allowances for a Pioneer Cryptanalytic Detachment," 3 tables:

1. "Pioneer" equipment.
2. Aids for traveling abroad.
3. Basic supplies for a "streamline cryptanalytic detachment."

A spoof which furnished considerable amusement to students and workers alike. When WFF was at GC and CS in England in 1943, he saw a similar document prepared by the British, which he thought much more amusing. A copy is enclosed in **Item 1042**, which is entitled "Spiritual Aid Equipment." WFF authored (with his then associates) 3 tables of basic allowances.

2 carbon copies – Notified in Heavenly Command Orders dated Jan 1, 1943. Table of basic allowances for a streamlined cryptanalytic division June 15, 1942. Table of basic allowances for Pioneer Cryptanalytic Division. This is a parody. Items requested:

- 1 gross Agents, gum shoe
- 1 gross Agents, hypnotic
- 1 gross Agents, somnoritic
- 1 gross Agents, telepathic
- 1 gross Assumptions, correct assorted
- 1 ea Ball, crystal gazers
- 1 doz. Bars, crow
- 1 doz. Bees, in-bonnet type
- 1 doz. Bolsters for weak hypotheses
- 1 each board, Ouija
- 1 set books, enemy code
- 1 thousand breaks, lucky
- 1 ea. Cap, thinking
- 1 ea cell, padded, collapsible, portable, type.

1 ea chamber, black

Item 1043

(WFF Backfile) Part III, Friedman, William F., German “VN” forms (souvenirs) stationary, unused, Ober Kommando der Kriegsmarine; Berlin: German “VN” forms etc. “VN” = Verlasslich Nachrichten, reliable information. Souvenirs of WFF’s expedition with a TICOM team in 1945.

Fernschreibstelle, Fernschreiben, Posttelegramm, Fernspruch, Marineenachrichtendienst, Geheime Kommandosache; The “VN” forms were used for transmitting translations of enemy messages to the authorized recipients of this type of intelligence. The abbreviations OKW/CHI is an abbreviation which stood for the Cryptanalytic Organization of the Supreme Command of the German Armed Forces. There are other forms of less interest which were used by the Army, Navy, Air Force and Foreign Office.

Item 1044

Goldschmidt, Richard B., “Evolution as Viewed by One Geneticist” American Scientist 40, 1 (Jan 1952), pp 84-98.

Before WWI, WFF was a geneticist; he still retained some interest on the subject. The structure of genes, leading to what is now known as “The Genetic Code”, is a misnomer; the genetic code is a cipher which determines the arrangement of molecules within the genes. The cipher system has not yet been solved- it amounts to figuring out the arrangement and nature of the constituents of four, and only four molecules. UPDATE.

Item 1045

Carpozi, George Jr., Red Spies in Washington, NY: Simon and Shuster, 1968. 212 pp. Indexed. Softbound. Non-fiction.

Scoring and enclosed notes by WFF. Index for related material. Separate folder contains 3 notes.

Item 1046

Cummins, Edmund Lt. and R.A. Brock, (eds.), “The Signal Corps in the Confederate States Armies, Extracts from: Southern Historical Society Papers, Volume 16, 1888, pp. 93-107.

These extracts cover The Signal Corps of the Confederacy. Pages 101-103 describe the secret cipher used by the Confederate States Armies.

Item 1047

Pratt, Fletcher, "The Art of Solving Secret Ciphers and the Digital Computer," Computers and Automation, Volume 2, No. 3, April 1953, pp. 1-6.

The irrepressible free-lance journalist has managed to pick up some slight information on automation and the use of digital computers in solving cryptanalytic problems. WFF believed this is the first time the words computer and secret ciphers were associated in public print.

2 typescript copies, bound in blue cardboard

1 Photostat negative

Item 1048

Stumpers, F.L., A Bibliography of Information Theory, Communications Theory-Cybernetics, Cambridge: MIT, 2 Feb 1953, 46 pp.

A very early bibliography in a new field at that time – a field which, by 1967, had reached astronomical proportions. The research for **Item 1048** was supported jointly by funds from the Army Signal Corps, the Office of the Naval Research and the Army Air Force.

Item 1049

Hoffman, Calvin, The Man Who Was Shakespeare, London: Max Parrish, 1955, 256 pp. DJ.

In 1955, several magazine articles and press notices, all most extravagantly eulogistic, appeared concerning Calvin Hoffman's contention that Christopher Marlowe was the real author of the Shakespeare works; also the story of Hoffman's efforts to have opened the tomb of Sir Francis Walsingham, who according to this deviationist, was the patron of Marlowe and who had the so-called Shakespeare works published after Marlowe's supposed death. At this writing (1955) the public awaits the opening of the tomb. Update: The Tomb was opened in 1956, but nothing was found except sand.

Item 1049.1

Roe, Frank Gilbert, "The Marlowe Fiasco, Shakespeare is as Shakespeare Does,"

Reprinted from Queen's Quarterly, Kingston, Ontario: (Spring, 1957) 64, 1, pp. 89-100.

This article sums up neatly the convincing facts supporting Shakespeare as author of the plays and in addition shows up the absurdity of the Calvin Hoffman claim for Marlowe. Page 90: Mr. Roe derides the non-Stratfordian's "emphasis" on textual "trifles as light as air" as proofs of authorship as in "Frastopher Bakelowe" citation from Othello (stated correctly by WFF at bottom of page.) The Canadian Professor Roe is wittily and relentless by scornful of what he calls the American's tendency to question the Shakespeare authorship. Autographed to WFF by author.

Item 1049.2

Friedman, William F. and Elizabeth S. Friedman, Review of The Meditations of Shakespeare by David Stevenson, 1965, Reprinted from Shakespeare Quarterly, 19, 2 (Spring, 1968), pp. 185.

Another case of anagrams. This author (David Stevenson) has a new twist. Instead of finding – in reality, manufacturing – anagrams to prove that someone other than Shakespeare wrote Shakespeare, he stays within the fold of the master himself. The messages he derives from the works of Shakespeare make no sense. Furthermore, he has left-over letters in his so-called anagrams, thus violating the three cardinal rules for legitimate anagrams. One can only ask “How could such nonsense ever find a publisher?” It didn’t! Vantage Press foisted this book on the public.

Item 1049.3

Bentley, Richard, “Elizabethan Whodunit: Who Was William Shakespeare?” American Bar Association Journal, February 1959, 45, 2, pp. 143-146 and 204-208.

Here yet another lawyer comes forth to pronounce upon the validity of other than – Shakespeare’s authorship of the works of Shakespeare. This topic is beloved by attorneys-at-law, for they are always, first and foremost, advocates. Their very profession requires them to be advocates (for a side) not analysts who deal and do battle with all sides of a question. It is therefore something of a pleasure to read Mr. Bentley’s analysis of the claims of several “authors” of the Shakespeare works without a leaning to anyone of the proposed-although he gives the appearance of leaning slightly to the Earl of Oxford as a real contender. For a brief narrative concerning the principal nominee for authorship, this is a selective, well-analyzed summation. The author offers no “authority,” however, for any of his narrated facts.

Item 1050

Wright, Ernest Vincent, Gadsby LA, California: Wetzel Publishing Co, 1939.

This is one of the literary curiosities in the FC. The book consists of a romance of 50,000 words in good English, not one of which contains the letter “E”. This represents the greatest lipographical feat known to WFF considering that the letter “E” has the highest frequency in the English language. The author begins with an introduction, pp. 5-21 inclusive, which does contain the letter “E” and explains why and how he did this “stunt.” He tells that he tied down the E-key on his typewriter, thus preventing the accidental usage of that letter. WFF’s attempt to find a copy of the book for purchase were unsuccessful. Prof. Howard P. Robertson, and another friend visiting Los Angeles were asked and their aid was solicited to find a copy in LA or vicinity. They were unsuccessful. Prof. Robertson stated in 1956 to WFF that there were reasons to suspect that only a very few copies of the book were ever printed, and that none was available in

the usual book-sellers markets. However, through diligent effort and the cooperation of the Pacific Telegraph and Telephone Co, 3 copies were obtained.

Item 1050.1

Wright, Ernest Vincent, Miscellaneous Notes, etc. bearing upon Gadsby.

This is an envelope which contains information having a bearing upon the bizarre tour de force by Wright.

1.) An essay by James Thurber, New Yorker, 17 Dec. 1955. "The Tyranny of Trivia." The article as a whole deals with the peculiarities of the letters of the alphabet.

2.) Included also is a brief paper by WFF (but never sent to The New Yorker) on the phenomenon technically designated "lipogrammatism" or the practice of letter-dropping.

3.) Also included are some correspondence and notes relating to the search for Gadsby.

4.) WFF even had a statistical report made to ascertain what happens to the frequency of other letters when the letter E, the most frequent in the language, is not used.

5.) Notation concerning the 5-vol Spanish novel, omitting in order A in Vol 1, E in Volume 2, I in Vol 3, O in Vol 4, U in Vol 5.

Included in the envelope is a report of a similar bizarre feat in Bob Ribley's "Believe It or Not" Column – Washington Post 19 Sept, 1955 and a copy of this column follows here with:

"The Man Who was Allergic to R's"

"Gottlob Burmann (1737-1805) noted German poet wrote 130 poems including 20,000 words without once using the letter 'R'"

"For the last 17 years of his life, Burmann even omitted the letter from his daily conversation"

Item 1051

Kaempffert, Waldemar, Explorations in Science, extract from New York: The Viking Press, 1953, pp 178-185.

This item is a reproduction of Chapter 13 of the Kaempffert book, the chapter being entitled "Ciphers, Codes and the Way they are Broken." A popular and brief elementary essay on the subject. There is no code that cannot be broken given time and material enough. Absolute secrecy is unobtainable. The inventors of secret codes and ciphers try to make the work of the decipherer as difficult and time-consuming as possible. Francis Bacon, one of the greatest cryptographers, said in his Advancement of Learning, "The only true secret system of writing conceals the existence of a secret." (p.179)

Item 1052

Freeman, R. Austin, "The Moabite Cipher," Story extracted from: The Dr. Thorndyke Omnibus NY: Dodd & Mead & Co, 1932, pp. 157-193. Fiction – solved by Scotland Yard.

WFF wrote: Contains nonsense like: a cipher. . . written in the primitive Semitic alphabet which, as you know, is practically identical with primitive Greek.” It is written from right to left like the Phoenician, Hebrew and Moabite, as well as the earliest Greek inscriptions.

Item 1053

Freeman, R. Austin, “The Blue Scarab,” Story extracted from: The Dr. Thorndyke Omnibus NY: Dodd, Mead & Co. 1932, 1-38.

A romantic tale involving ciphers. Involves Egyptian hieroglyphics on a scarab which is the key to the location of a grave containing treasure.

Item 1054 –Anonymous, – marked “secret” 1918-1919

Cryptanalytic items of work done in G-2, A-6. Folder contains several very important items on GHQ-AEF in WWI, on the ADFGVX code, double transposition and Wilhelm ciphers.

This file is extremely important in cryptologic history. It contains some actual work sheets used in the solution of German codes and ciphers as well as copies of papers transmitting important and valuable information obtained through the solution of German messages. Unique and valuable. These are duplicate worksheets and reports, items which were completely declassified in the 1920s. One of these, at least, was removed from the open shelves of the Library of Congress, and upgraded—although the public had access to it for many years; and the cipher methods of the German military had appeared in books, in foreign languages and the ADFGVX cipher system had disappeared widely also in America. WFF, 1st Lt in G-2, was ordered by Maj. Moorman to remain at GHQ AEF and write the history of the code-solving section and of closing the section. WFF returned to the U.S. in April, 1919.

Item 1055

Hay, Major M.V., Report on AEF “Potomac” Code,

The intelligence section of the General Staff, British GHQ, WWI, were requested to test the American Army’s “Potomac Code.” This item contains some correspondence and worksheets relative to that test. A very valuable and historically interesting item. The British reported that the security of the “Potomac Code” appeared to be of high order. See correspondence to and from Maj. Moorman.

Item 1056

Part VI, Friedman, William F., The Mechanics of Differential Primary Keys,

Manuscript (and copy) of a paper which was never published. Deals with mechanics and mathematics of the interaction of Baudot tapes of different lengths, used as key tapes in printing

telegraph ciphers of the nature of those employed in the AT&T Co.'s system as adopted by the Signal Corps in 1918-19. This paper was written in 1920 by WFF while still at Riverbank Laboratories; he came to Washington to work for the U.S. Army Signal Corps in 1921. For the background and history, the analysis and solution of the printing telegraph cipher using double key tapes, see large folder containing **Items 669** and **669.1-669.??** Very technical and extremely important data and information concerning the solution.

The folder contains an original and one carbon copy. The original working manuscript with the mathematical computations is the third document in the folder. It is a much longer manuscript and appears under the title: "The Mechanics of Differential Primary Keys."

Steven Bellovin, who has analyzed both, writes:

The older draft ("The Mechanics of Differential Primary Keys") was prepared while at Riverbank. It's primarily an analysis of how to use a two-tape Morehouse machine securely, and in particular how to select the lengths of the tapes. It turns out that the choice of lengths is important and not obvious, especially in a multistation network. He concluded that the only way to make certain determinations is to pick trial lengths, do some calculations, and see if you get a suitable answer. For a network with many stations, that might take a lot of calculation. In any event, it was an academic exercise, since his successful attack on bad ways to use the two-tape system killed the project. However -- at the outbreak of World War II, he brought back those machines until newer machines could be produced. He wrote during the war that they had better keying techniques that solved the problems he'd exploited in 1919-1920, but that the solution probably wasn't feasible in 1920. Was he was using automation to generate the tape lengths?

The newer draft ("Differential Primary Keys in Cryptography") was apparently intended to replace the first two pages of the older one -- it ends with the same set of possibilities for tape lengths that is at the bottom of page 2 of the older draft. It's a vastly important document, since it's probably the oldest clear statement of why one-time pads are perfectly secure. Unfortunately, the dating is very uncertain -- the typed headnote says the work was done at Riverbank, but on p. 11 WFF refers to a course he taught in 1924. One of the main thrusts of the draft is to explain almost philosophically how to tell if a cryptanalysis gets the right answer.

It's not clear why he never finished it. It may be because he felt it was a dead end, that since no one was using the two-tape machines there was no point to a paper explaining how to use them properly. He may have intended a third part, on the general solution as opposed to what he wrote up on how he solved the original AT&T/Signal Corps version.

See, Steven M. Bellovin's article, "Vernam, Mauborgne, and Friedman: The One-Time Pad and the Index of Coincidence."

Item 1057

Part I, Friedman, William F. and Charles J. Mendelsohn,

Dr. Mendelsohn was a member of the Cipher Bureau of the Military Intelligence Division of the General Staff, U.S. Army during WWI. This correspondence covers March, 1935 to Nov 2, 1938. The first letter speaks of "The Davy Book" of 1769, a copy of this was given to WFF in 1960 by Father Peterson. Correspondence. Letter of October 13, 1938 – About a refugee cousin from Germany – a spinster of 48 – an archaeologist, who left Hitler's Germany, could not go to Italy. Dr. Elizabeth Jastrow. Mendelsohn's mother's brother's daughter. See letter of September 29, 1938 with M's reaction to Munich/Chamberlain/Daladrin's and "The Shame for Those who have let it Happen." "The world has fallen on evil days."

3 folders in one large envelope. 1936-38.

Item 1058

Mendelsohn, Charles Jastrow, Miscellaneous Letters and Papers,

Highly interesting correspondence in Dr. Mendelsohn's papers at the time of his death and letters between Dr. Mendelsohn and WFF. Mendelsohn died after an illness of only two days of spinal meningitis in Sept 27, 1939. He had been requested to return to work again for the U.S. Govt. and was expected to report to Washington within a few weeks. WFF read proof for some of the Mendelsohn's articles ("Blaise Vigenère and the Chiffre Carré") which at the time of his death were under preparation for publication by the American Philosophical Society.

Epitaph: Charles Mendelsohn was born in Wilmington, NC in 1880. He graduated A.B (1900) Ph.D (1904) from the University of Pennsylvania. He was tutor (1905) Instructor (1907) in Greek at the College of the City of New York and a member of the faculty in the history department since 1920. During the war he was engaged in foreign language work in postal and newspaper censorships and was made Captain in the Military Intelligence Division of the General Staff of the Army in 1916 in charge of decipherment of German codes. After the war he continued research in codes and prepared studies in diplomatic code for the U.S. Government. He and Yardley headed up the Black Chamber. On Mendelsohn, see David Kahn, The Reader of Gentlemen's Mail, *passim*.

Item 1059

Friedman, William F., German "Albert" Field Code, WWI, papers on solution of,

The "Albert" field code was the first one "attacked" by WFF on his arrival at GHQ, AEF in 1918. Probably the only copy in existence. Rare historic item. After WFF solved this code, it was used in training personnel in the code-solution section of the GHQ, AEF. WFF was the Chief of the Code Section; Lt. J. Rives Childs was the Chief of the Cipher Section. On Childs, see David Kahn, The Codebreakers, ch. 11.

Item 1059

WWI – Field Codes: Fritz Code #50 K – work sheets, Completed text of Marcel Code #2 – Started Sept 23, 1918, Fritz Code #50 – U, German Field Code – Albert (“secret”) declassified 7/24/75.

Item 1060

Friedman, William F. and A.A. Albert,

Professor Albert was the leading American algebraist and a member of the mathematics department of the University of Chicago. He was born in Chicago and was known for his algebraic work. He was elected to the National Academy of Sciences in 1943. He did work for WFF on cryptanalysis possibility of being recruited into WFF’s unit. Correspondence – 1942-43.

Item 1061

Albert, A.A., Some Mathematical Aspects of Cryptography,

Typescript of an earlier paper with the same title as that of the preceding item, and correspondence relative to same. The folder also contains a two-page reprint from American Mathematical Monthly, March 1941, entitled “A Rule for Computing the Inverse of a Matrix.”

Item 1062 (In Item 840)

Yardley, Herbert O., Miscellany of letters and items relating to him.

Item 1063

(Part IV), Friedman, William F., Solution of the Chesterfield Cipher,

A problem in matching plain text to cipher text and in proving the accuracy of the resulting plaintext which had survived from the 18th century. An interesting problem for students. It was code problem 2-A, used by WFF in training new members in the Signal Intelligence Service. This was really not a problem in code but a problem in solving a syllabary of a type employed by the British in 1747/8.

Item 1063

War Department, Signal Corps, U.S. Army Signal Intelligence Service, Cryptanalysis 3 – Code Problem 2A, Whitehall 5th Feb, 1747/B. Worksheet.

Letter from Lord Chesterfield with an example of a Foreign Office Cipher. There is an article about it in the London Times, April 12, 1922.

Item 1064

Friedman, William F., Hindu Ciphers, solutions of,

In 1916 representatives of Scotland Yard brought to Washington D.C. a ciphered correspondence which had been passing between Hindu and German agents who were conspiring to launch a revolution in India while Great Britain was engaged at war in Europe. The Scotland Yard men were sent to WFF and ESF at Geneva, IL. (Riverbank Laboratories). The cipher letters were separated by the latter into two categories: one set of correspondence was based on a dictionary (one of the 3 numbers used to represent a given word was always 1 or 2, designating a column); the other wherein each 3 digits represented a single letter, was seemingly a general book on political science. The correspondence was deciphered without the “code” books, and WFF appeared as a government witness in two trials. The first of these wherein about 30 Indus and Germans were tried, was held in Chicago; the second with about 130 agents on trial, was held in San Francisco. It was in the second case where a Hindu who had turned state’s witness, was shot to death in the courtroom by another Hindu, a defendant who had managed to smuggle into the courtroom with him a gun. A dramatic appendix to these cases is the story of the finding of the books used by the agents; the dictionary was Volume 2 of a German-English dictionary published in 1880; the other “code book” was Price Collier’s “Germany and the Germans” published in 1912.

Item 1064

Riverbank Laboratories, Hindu cipher, Gupta material. Worksheet. Indian Revolutionaries.

Item 1065

Zimmermann, Zimmermann Telegram, notes concerning,

This file contains many interesting and important items having direct bearing upon the historically famous Zimmermann telegram and its solution, probably one of the most important cryptanalytic solutions in history. This was an achievement of the so-called “Room 40 O.V.” the cover name given the space in London occupied by the British Cryptanalytic Staff in WWI. The text of this message, when revealed to the U.S. Govt. by the British, was effective in bringing America into the War on the side of the Allies. See also **Item 1009**, The Zimmermann Telegram of January 16, 1917 and its Cryptographic Background. This tells the only time history of this famous telegram. There are many other books in the FC which refer to this episode in the history of WWI. See also Barbara Tuchman, The Zimmermann Telegram, NY: Viking Press, 1958, pp. 244, and British edition London: Constable 1955. **Items 1710 and 1709**. Winfried Ludecke, The Secrets of Espionage (excerpts). Liddell Hart, The War in Outline (1914-1918).

Item 1065.1

Prints of microfilm obtained from the U.S. National Archive, 3 folders.

They deal with the German Foreign Office documents of 1916-17 connected with the Zimmermann Telegram. WFF also has the microfilms from which the prints were made. Folder 3 contains: American Committee Project for the study of War Documents List of Archival References and Data parts, 1, 2, 3. Marked IMPORTANT by WFF.

Item 1066

Part I, Friedman, William F., Miscellaneous correspondence 1925-1942,

In separate correspondence file.

Item 1067

Anonymous Patents, cryptologic,

This file contains what is believed to be the most significant of the hundreds of patents which have been obtained in the U.S. and elsewhere on cryptologic devices and cryptographic machines. This copy of a list of patents was a gift to WFF from Boris Hagelin from his own collection. This file would make an interesting data for a detailed study of cryptographic devices and machines. The file was given to WFF by Mr. Hagelin.

Items 1068, 1068.1, 1068.2

No card, no item

Item 1068.3 (1)

Bohr, Niels and I.I. Rabi, "Albert Einstein: 1879-1955," Scientific American, June 1955, pp. 31-33.

A brief but excellent biographic sketch of Einstein.

Replacement copy provided by VMI Department of History.

Item 1068.4

No card, no item

Items 1068.5 (1), 1068.5 (2),

No card, no item

1068.3 No card

Bohr, Niels and I.I. Rabi, "Albert Einstein: 1879-1955," Scientific American, June 1955, pp. 31-33.

Item 1068.5 (4)

Johnson, Jotham, "The Changing American Language," Scientific American, August 1955, pp. 78-83.

Of general interest to the cryptographer because of the nature of the changes which the author describes has taken place over the years. Missing. Replacement copy provided by VMI History Department.

Item 1068.6

No card, no item

Item 1068.7

Gamow, George, "Information transfer in the Living Cell," Scientific American, October, 1955, pp. 70-78.

A famous George Washington University scientist discusses the chemical codes of living cells. Autographed by the author. Replacement copy provided by the VMI Department of History.

Item 1068.8

Ash, Solomon E., "Opinions and Social Pressure," Scientific American, November 1955, pp. 31-35.

The article on pp. 28-35 has nothing to do with cryptography per se. It is in the FC collection because it is one of the many commentaries on the "psychological climate" in the U.S. pursuant to the wide range and national impact of security investigations in the period 1950-55. Replacement copy provided by the VMI Department of History.

Item 1069

McCarthy, Senator Joseph R., America's Retreat from Victory – The Story of George Catlett Marshall, NY: TC Devin-Adair Company 1952, 187 pp. DJ.

This and the two following items are of historic importance in connection with a phase through which the U.S. passed and the height of the publicity attained by the investigations which Sen. McCarthy was conducting in his "so-called" fight for America. A terrible and untruthful diatribe. Within a year after the furor caused by Senator McCarthy's many unfounded charges, he was himself investigated by Congress and censured. He died shortly thereafter of acute alcoholism. What was the Devin-Adair Publishing Co. up to? Cf. Safford. Safford testified that he had been told by WFF that the "winds" message had been destroyed prior to the Pearl Harbor investigations "on direct orders from Chief of Staff Marshall." However, for some

mysterious reason WFF was never called either to support or repudiate this testimony of Safford's. Pp. 15-16.

Item 1069.1

McCarthy, Senator Joseph R., Speech on 14 June 1951, in the Senate on General Marshall, Congressional Record, Volume 97, 82nd Congress, 1st Session, pp. 6708-6755.

This is an amazing diatribe against a very great man, made without provocation and in defiance of the esteem in which the American people regarded Gen. Marshall for his achievements in WWII. See **Item 1069**. Photostat negative.

Item 1069.2

McCarthy, Senator Joseph R.,

Speech on Drew Pearson regarding giving out text of top secret dispatches. Congressional Record, Volume 97, Part I, 82nd Congress, 1st session, 5 January 1951. See **Item 1069**.

Item 1070

McCarthy, Senator Joseph R., McCarthyism: The Fight for America, New York: The Devin-Adair Co. 1952, 104 pp.

With reference to the remarks of the Senator regarding Gen. George C. Marshall, these constitute the most amazing defamation of character that this country has ever seen. A brochure which served as a "preview" of what came later (**Item 1069**). A speech in the Senate made by Sen. MacCarthy which was published in advance of the book. Accompanying folder has two newspaper clippings:

- 1) The Washington Post and Times Herald, Thursday, November 11, 1954 with text of McCarthy's speech regarding his own censure, and Senator Arthur V. Watkins address on censure.
- 2) Washington Post editorial, Friday, November 12, 1954 on the John Paton Davies case. Security Issue.

Item 1071

Anonymous, "Investigations," Details of Senator McCarthy's hearings on security, Time 22, (March 1954).

Further data on the hysteria which was generated by Senator McCarthy's activities in the field of security. Photographs of Cohn and Schein, the assistants to the Senator who disgraced the U.S. both here and abroad, and of Senator McCarthy. Cohn and Schein fortunately disappeared

from the Washington scene after McCarthy's death, and "the cancer created by them fell into oblivion." Cohn & Schein on the front cover.

Update: While it is true Cohn left the Washington scene, after leaving McCarthy Cohn had a 30-year career as an attorney in New York City. Federal investigations during the 1970s and 1980s charged Cohn three times with professional misconduct, including perjury and witness tampering. He was accused in New York of financial improprieties related to city contracts and private investments. He was never convicted of any charge. In 1986, a five-judge panel of the Appellate Division of the New York State Supreme Court disbarred Cohn for unethical and unprofessional conduct, including misappropriation of clients' funds, lying on a bar application, and pressuring a client to amend his will. He lost his law license during the last month of his life.

Item 1072

West, Rebecca, "McCarthyism," U.S. News & World Report, 22 May 1953, pp. 60-81.

Further data in regard to the furor over security matters in the U.S. during the years 1951-1955. In this article the famous British writer endeavors (unsuccessfully) to defend Senator McCarthy. West writes that everyone in London, Paris and Rome knows America is having a witch hunt. Mentions the Hiss case.

Item 1073

Anonymous, "The Spy Story as Told by: Truman, Brownell, FBI's Hoover," U.S. News & World Report, 27 November 1953, pp. 104-123.

Further material bearing upon the hysteria in the U.S. over questions of personal security in the years 1952-1955. This deals with the Harry Dexter White case.

Item 1074

Atomic Energy Commission, In the Matter of J. Robert Oppenheimer. Texts of principal documents and letters of personnel security board, General Manager and Commissioners, Washington, DC: GPO 1054, 67 pp.

This item is included in the collection as one of great historical importance in the years to come, as the leading example of hysteria of "The McCarthy Era" when the whole country was as inflamed with "spy phobia" as was true of France at the time of the famous Dreyfus case. F. David Kahn, The Codebreakers, pp. 254ff.

Item 1074.1

Atomic Energy Commission, In the Matter of J. Robert Oppenheimer, Transcript of hearings before Personnel Security Board, Washington, DC: GPO 1954, 993 pp.

See comment on **Item 1074**. Item also includes some reviews and newspaper clippings.

Item 1075

Alsop, Joseph and Stewart, "We accuse! The Case of J. Robert Oppenheimer, "Harpers's Magazine, October, 1954, pp. 25-45.

See comment on preceding item, of which this is a condensation. An article in The Washington Post, July 25, 1954, by Alfred Friendly is also enclosed, "Internal Security."

Item 1076

MacCormack, Alfred, Review of The Oppenheimer Case by Charles P. Curtis, 1955, in The Scientific American, November 1955, pp. 112-115.

Further material on this very interesting episode in American Security problems, in this case condemnatory of government in the matter. The reviewer (Colonel MacCormack) was first deputy chief of Special Branch, War Department, G-2, and later was director of intelligence Military Intelligence Services. Autographed "To Bill Friedman with admiration, Al MacCormack." Oppenheimer chose not to make his defense a "cause." The world of science rose up to affirm their confidence in him. He has received a number of awards since. He was unanimously reelected Director of the Institute for Advanced Study in Princeton.

Item 1077

Schlesinger, Arthur M., Jr., "The Oppenheimer Case," The Atlantic Monthly, October 1954, pp. 29-36.

The distinguished Harvard professor speaks up on security investigations. The author states: "Without our realizing it, or their fully desiring it, this new community of weapons scientists has become, in many ways, the orbiter of our destiny. The final struggle of our time will be between the scientists and the security officers (page 30). All scientists chafe under security restrictions." Oppenheimer was charged with "persistent and willful disregard for the obligations of security."

Item 1078

Knight, Charlotte, "What Price Security?" Collier's, (July 9, 1954), pp. 58-69.

The effects of security investigations. The rampant hysteria brought on in the general public is here shown to be too great a price to be paid for such processes as shown in the McCarthy Era and the Oppenheimer investigation.

Item 1079

Blank, Joseph P., "Security Risk," Look, (May 17, 1955), pp. 25-29.

Further material on the question of internal security. The case of Abraham Chasanow, "This man was nearly destroyed by lies. He was saved by his neighbors." A true case in which a U.S. Navy employee was discharged as a security risk, but later vindicated. Anthony Lewis of the Washington Daily News brought the case to the press.

Item 1080

Süsz, W., "Über antike Geheimschreibe methoden und ihr Nachleben," Philologus 78 (1923), pp. 142-175. Cryptography in ancient times. See Sheldon EAW.

Item 1081

Boullé, Pierre, Not The Glory, translated by Xan Fielding; New York: The Vanguard Press 1955, 235 pp.

A spy story which glorified British Intelligence. A large portion of the book deals with the solution of what the author calls "a code." WWF believed this book was sillier than any other spy cipher story and badly written besides. Only the author's fame (as creator of The Bridge on the River Kwai) could have made a publisher take this.

Item 1082

Gode, Alexander, "The Case for Interlingua," Reprint from Scientific Monthly 77, 2, August 1953, 10 pp.

Interlingua is one of the latest (64) attempts to produce an acceptable language which could be used for international communication by written or spoken word. This was intended to replace Esperanto. Dr. Gode, at the time of writing this small paper, was the Chief of the Interlingua Division in Science Service. The wide spread of the spirit of nationalism has prevented an international language, which as of this date (1967), is farther away than ever. Gode was born in Bremen, Germany and did graduate at Vienna, The Sorbonne and Columbia. He came to the U.S. in 1927 and in 1939 got a degree in Germanics at Columbia. He taught at Columbia and Chicago.

Item 1083

Puleston, William Dilworth (Captain, USN, Ret.), The Influence of Force in Foreign Relations, New York, Toronto, and London: D. Van Nostrand and Company 1955, Extracts from pp. 88-97, 140-141, and 152-153.

This item is an extract from the book and gives Captain Puleston's views on the attack on Pearl Harbor. It also contains brief discussions of Admiral Theobald's book about Pearl Harbor.

Perhaps it would be useful to add that the position occupied by Captain Puleston before retirement was Director of Naval Intelligence. Beginning with final paragraph on page 95 and ending on page 96 is a very succinct account of how and why most of the American planes in the Phillipines were lost in enemy action while on the ground. They were refueling for another attack. See in this connection **Item 1089**, which is the official War Department account of this episode. It deals with the matter in detail.

Item 1084

Cope, Harley (Captain USN), "Climing Mount Niitaka!" US Naval Institute Proceedings, 72, 12 (December 1946), extract of pp. 1515-1519.

"Climb Mount Niitaka!" was the signal which had been agreed upon by the Japanese high command for launching the attack on Pearl Harbor after the Japanese striking force had already set out on its mission, but could have been called back before it was too late; that is, if the attacking force had been sighted by an American vessel. Unfortunately for the U.S., no American vessel of any kind was in the area. On pp. 1518 of the Cope essay will be found what the Japanese claim were their most useful sources leading to their success in the sneak attack.

Item 1085

Willoughby, Charles A. (Major General) and John Chamberlain, Mac Arthur 1941-1951, New York: McGraw Hill, 1954, extracts of pp. 20-27.

This is a laudatory book about General MacArthur, who in General Willoughby's eyes, was perfect. The item contains a review of the book by Lewis Morton, whose estimate is revealed by the title of the review: "Willoughby on Mac Arthur: Myth and Reality." Morton was one of the official historians of the War Department. Dismissed in 1951. "The general is an austere and forbidding figure, imperious, extremely ambitious, extraordinarily sensitive to criticism, with an unshakeable conviction in the rightness of his views. Quick to take credit when things go well, he is unwilling to share the blame when they do not." "... he challenged and evaded the decisions and orders of his civilian and military superiors while advancing his own views..." "...General M has scrupulously adhered to the letter of his instructions while violating their spirit..." No one has shown greater skill than he has in interpreting orders to justify a cause of action never intended by those who had issued the orders. Morton found the book highly inaccurate.

Item 1085.1

Morton, Louis, "Willoughby on Mac Arthur," Myth and Reality," The Reporter, November 4, 1954, pp. 42-46.

Item 1086

Armed Forces Communications and Electronics Association, Signal, 10th Anniversary issue, September- October 1956.

This issue of the Journal of the AFCEA is in the collection because of its historic interest.
Item Missing.

Item 1087

Kuhnmuensch, Otto J., S.S., Early Christian Latin Poets from the Fourth to the Sixth Century, Chicago, Loyola University Press 1929, extracts of pp. 76-81.

WFF's attention to this interesting item was drawn by Dr. George MacCracken, a war time associate at the Army Security Agency. This particular example of acrostics is described by Kuhnmuensch as a "masterpiece of ingenious dexterity....his elaborations of acrostic, mesostic, and telestic, and many other wizard combinations, all in one and the same poem. "It is curious to note that these complicated and indeed ingenious acrostics are not mentioned in any of the articles or books devoted to the subject. One photostat negative and two photostat positives.

Item 1088

Morton, Louis, U.S. Army in World War II: The War in The Pacific; The Fall of the Philippines, Washington, DC: U.S. Department of the Army, Office of the Chief Military History, 1953, extract of pp. 77-97.

There has been dispute between certain of the US Commanders in the Philippines as to who was responsible for the catastrophe in losing all of the planes at Clark Field by the attack of the Japanese—more than 12 hours after it was known that the Japanese had attacked Pearl Harbor. This extract gives a calm and impartial view of the events involved. Morton's account endeavors to evaluate the conflicting accounts.

Item 1089

Watson, Mark Skinner, U.S. Army in World War II: The War Department, Chief of Staff, Pre-war Plans and Preparations, Washington: U.S. Department of the Army, Historical Division 1950, extract of pp. 494-520.

This extract from the official history of the U.S. Army in World War II throws light upon the manner in which the authorities in Washington and at Pearl Harbor were taken by surprise by the Japanese attack. Fully documented and highly interesting. One page of notes by WFF.

Item 1090

Ballantine, Joseph W., "Mukden to Pearl Harbor," The Foreign Policies of Japan, Foreign Affairs 27 (October 1948), Council on Foreign Relations, pp. 651-664.

Further data on the U.S. and Japanese diplomatic fencing immediately before the attack on Pearl Harbor or written by a man, who was at the time, in a position of authority in The Department of State.

Item 1091

Morison, Samuel Eliot, By Land and by Sea: Essays and Addresses, New York: Alfred A Knopf, 1953 extract consisting of Chapter XV, "History Through a Beard," pp. 328-245. Photostat.

This extract is a devastating review of the book one of the earliest and most influential of the revisionists, Charles E. Beard, whose book entitled President Roosevelt and The Convoy of the War 1941, raised a storm of writings by revisionists. This review was originally printed in The Atlantic Monthly of August 1948, and was entitled "History through a Beard." Morison points out numerous errors, misstatements, and innuendo in Beard's book. It is one of the most important of the brochures combating the thesis of the revisionists. In a Foreward to this chapter, Professor Morison says "this review was the most controversial thing that I ever published." Incidentally, Beard died on September 1, 1948. See the 2nd and 3rd paragraphs of the foreword. Morison attacks Beard's historical method as well he should. See one page of notes by WFF.

Item 1092

Hoehling, A.A., The Week Before Pearl Harbor, New York: W.W. Norton & Company, Inc. 1963, 238 pp. Indexed. DJ.

Hoeling is a Johnny come lately to the revisionist school. (See review enclosed by Walter, Lord). This book is, however, not wholly without merit. It, in the end, confirms that no single person or office was to blame for Pearl Harbor. The thoughtful reader must conclude in the end that the culprit was the failure to make use of intelligence. For related material, see also File Cabinet **1092**. Review by Walter Lord in a separate folder. Charges of Washington apathy.

Item 1093

Layton, W., "Pearl Harbor; des souvenirs, un film, des maquettes, des bandes dessinée...et bientôt 30ans," Historama, No. 217, November 1969, Revue Mensuelle, pp. 80-89.

"Pearl Harbor 30 Years After," nine pages, many photographs. Gift of daughter, Barbara in Cannes, France, on her way back to the U.S. following her father's sudden death. [ESF]. Dark cards=ESF and light cards=WFF.

Item 1094

Burtneess, Paul S. and Warren V. Ober [Ed.], The Puzzle of Pearl Harbor, Illinois, New York: Row, Peterson and Company 1962, 244 pp. No comment. No item.

Item 1095

Kimmel, Rear Admiral Husband, Letter to Long-Cannon, Chairman Congressional Committee to Investigate Pearl Harbor, **1095.1** photographs-Kimmel and Richardson.

Several bristling letters wherein Admiral Kimmel demands his letters be placed in the Congressional Record. His detailed citation of messages which were known in Washington but never sent to the Commanding Officers of the Fleet or Army in the Pacific, make impressive reading. Letter to Clarence Cannon, House of Representative from Admiral Kimmel. Information was from FBI. 2 photos of Kimmel and 2 of Richardson. Kimmel was particularly incensed at the rumor that he and General Short were not on speaking terms at the time of Pearl Harbor.

Item 1096

Yoshikawa, Takeo with Norman Stanford, "Top Secret Assignment," reprinted from U.S. Naval Institute Proceedings, December 1960, pp. 26-39.

The fact that the Imperial Japanese Navy assigned an intelligence officer to the Japanese Consulate at Honolulu prior to the Pearl Harbor attack on 7 December, 1941, has received mention in various books and articles published since the war. However, the identity of this officer was not revealed until December 1953 when the Ehime Shimbyun-a provincial Japanese newspaper- published an interview with an ex-officer of the Imperial Japanese navy who stated that Ensign Takeo Yoshikawa had carried out the mission. Yoshikawa was approached by many journalists who wanted the story, but he felt too many others were involved and he did not feel free to expose them or systems by which they worked. Nineteen years late, when most of his colleagues were dead and the Imperial Japanese Navy had ceased to exist, Y decided to reveal his story. Replacement copy provided by VMI Department of History.

Item 1097

Anonymous, "True Pearl Harbor Story; Bare Secrets of a day of Infamy," Chicago Tribune, Wednesday, December 7, 1966. Also a special supplement. "New Pearl Harbor Facts," How the U.S. got Jap Secrets," 2 copies. 25th anniversary of Pearl Harbor.

Oversized folder with newspaper. Forwarded to WFF by Robert P. Patterson, Secretary of War: "It is an horror for me to forward this decoration?" Page 20 has editorial that refers to Roberta Wohlsetter as an "apologist for the Washington group." Mentions codes but not WFF. Special supplement has picture of WFF right on front cover. "The final break through or solution [to purple] was due to an intuitive flash of genius by Harry Larry Clark, one of WFF's assistants, not Mrs. Wohlsetter. New Facts: First authoritative figures on "Purple" Machines. 3 copies. Chief of ONI in 1941 was Admiral Theodore Wilkinson. A traitor in the Japanese consulate (whose identity is protected by the Navy until this day) sold the code books that provided a key

to a lesser code. Chart shows distribution of cipher machines and who had them. Spells out wind messages.

Item 1098

Anonymous, Clippings and correspondence in re Pearl Harbor; New Yorker Mystery 1941. Envelope marked Vault.

- 1) An unidentified reviewer of "Stimson: a study in state craft.
- 2) A long letter signed Percy L Creaves, Jr., Assistant to Senator Brewster in the Pearl Harbor investigation by Congress.
- 3) Copies of some correspondence between Robert Butow and Roberta Wohlstetter.
- 4) A news clipping re telling a feature story printed in a Honolulu paper in the summer of 1941, which was a preview of December 7, 1941.
- 5) The startling and unbelievable story of the advertisement in the November 22, 1941, issue of The New Yorker.
- 6) Letters from Roger Pineau and Roberta Wohlstetter, re: New York Magazine ad. The former sent Photostats to WFF who had learned of the existence of this extraordinary incident from his daughter Barbara. The identical advertisement for the crime "The Deadly Double," occupied the entire left hand column of 14 different pages in the New Yorker. When questioned about this the New Yorker staff stated they had no idea who placed the ad; a man came into the office, made arrangements for its appearance. He did not leave his name. He paid in cash. Two die show 12-7 (December 7th). XX-Double cross.

Item 1099

Barker, A. J., Pearl Harbor, Ballantine's Illustrated History of World War II, Battle Book No. 10, New York: Ballantine Books, 1969, 160 pp.

Pages 58 and 59 present a series of statements shocking in their presumptions and should be read with a whole shaker of salt. This series of 44 small volumes, if one is to judge by this sample, is anything but authoritative history. Gift of journalist friend. How magic was broken: "Based as it was on the cipher used by the Imperial Navy, the cracking of the naval cipher may have led to the breaking of the diplomatic code." In this case it may well be that the British Admiralty supplied the know-how. He also suggests the body of a dead Japanese soldier had a code book on him. He was guessing.

Item 1099.1

Anonymous, Miscellaneous clippings, articles, and papers re Pearl Harbor, 1959-1970.

One of the news clippings, unknown as to source (except that it was from a New York paper) or even date, was sent to WFF. Piece written by (Jim) Bishop. According to Bishop, WFF was in the office of Naval Intelligence and it was the Navy who deciphered the first message of "Purple." Bishop says history comes from Farago's The Broken Seal. PS: on a television

program, Bob Considine also stated that the Navy broke the Purple Code. (October 1970). Article on Billy Mitchell.

Item 1100

Reuschel, Arnulf Dr., "Geheimschriften; die Verfahren und ihre Entzifferun," Universum, 3 Jahrgans, Heft 5, 1954, Part I, pp. 83-85, Part II, Heft 6, pp. 106-109. Photostat negative and positive.

Item 1101

Wenger, Joseph N,

Memorandum dated 1 April 1938 proposing a method of mechanizing the processes of decoding and entering values in messages. The author was, in 1960, a Rear Admiral in the U.S. Navy. He proposes an epoch-making method for speeding up cryptologic processes. This item is of great historical significance.

Item 1102

Army Security Agency, Army Security Agency Review, 1947, 1950, 1951, 1952.

An envelope containing many articles dealing with various aspects of cryptology, including articles such as a reprint of two by WFF with many footnotes added, on Edgar Allan Poe; crypto puzzles; extracts from a book referring to Russia's Imperial Black Chamber; reviews of books having items related to cryptanalysis etc. These short articles are too numerous to list separately, either by subject or author. The absurdities of the classification system are manifest in numerous instances. For example, one number of the reviews shows an article "unclassified" which deals with the American Civil War cryptography and in the same issue an article appears going back to Biblical and Greek and Roman times which is labeled Restricted. Another case is a page occupied solely by a cartoon. It is classified "Confidential." There is a 4-page article devoted to John M. Manly (Nov-Dec 1950, pp. 15-18). A review of Professor Galland's Historical and Analytical Bibliography of Cryptography the review labeled "restricted" (May-June 1950 p. 46). A contribution from WFF called "A Wily Beguily" setting forth an amusing quotation from Nicholas Breton's Court and Country published in 1618, on the subject "Mice-eyed deciphers." The issues from which extracts have been willed run from July 1947 through September 1952.

Item 1103

Signal Security Service, U.S. Army, A Checklist of Codes in the Library of The Signal Security Service, October 1942, typescript of 33 pages.

Item 1104

Miller, George A., "Information Theory and the Study of Speech," Extract from: Current Trends in Information Theory, Pittsburgh: University of Pittsburgh Press, 1953, pp. 119-139.

The author attempts to show how ideas resulting from information theory could enrich our understanding of human behavior. Photostat negative.

Item 1105

Weiner, J., The Piltdown Forgery, London: Oxford University Press, 1955, 214 pp.

WFF has a deep interest in archaeological and literary hoaxes and frauds. His book deals with one of the most famous of all archaeological hoaxes; it was launched in 1912. The significance of the specimen remained the subject of controversy until it was exposed in 1953 as a forgery, consisting of the lower jawbone of an orangutan that had been deliberately combined with the skull of a fully developed modern human. A scientific whodunit of extreme interest. DJ.

Item 1106

Wilson, Edmund, "The Scrolls from the Dead Sea," The New Yorker, 14 May 1955, pp. 45-121.

This item has nothing to do with cryptography but because of its undoubted archaeological, biblical and historical importance, it is of interest and is therefore in the FC. The article describes their discovery in 1947.

Update: Publication of the scrolls has taken many decades, and the delay has been a source of academic controversy. As of 2007 two volumes remain to be completed, with the whole series, *Discoveries in the Judean Desert*, running to thirty-nine volumes in total. Many of the scrolls are now housed in the Shrine of the Book in Jerusalem.

Item 1106.1

Wilson, Edmund, The Scrolls from the Dead Sea, New York: Oxford University Press, 1955, 121 pp.

This is the book version of his original article published in The New Yorker magazine. See **Item 1106**. This book is a more detailed account of these scrolls. Separate folder with extract of letter from George E. McCracken to WFF, 14 November 1956, DJ. It comments on the importance of the scroll text, their relation to the Massoretic text. It reviews the Burrow's book.

Item 1106.2

Filson, Floyd V., "What About the Dead Sea Scrolls?" The Presbyterian Life, October 29, 1955, pp. 8-9, 36-37.

Sent to WFF by a WWII colleague, Major George McCracken, who returned to teaching at the University of Iowa. Extracts from a letter from Prof. McCracken is enclosed. Also misc. clippings. Carbon copy of McCracken letter. Invitation to lecture on the Dead Sea Scrolls by W. F. Albright Tuesday, 29 November, 1955 at National Academy of Science. Attended by WFF and ESF. Clippings from Washington Post on the Genesis stories in the 7th Dead Sea Scroll. People argued over whether the Dead Sea Scrolls would "drastically alter" peoples' understanding of early Christianity (and perhaps Judaism). Article is subtitled: "Do the recently discovered ancient manuscripts support or undermine faith in Jesus Christ as Lord and Saviour?"

Item 1106.3

Allegro, John M., The Dead Sea Scrolls, The story of the recent manuscript discoveries and their momentous significance for students of the Bible, Baltimore: Pelican Books, Inc. 1956, 208 pp.

This work on the Dead Sea Scrolls is of particular interest to the cryptologist because it deals with "an intriguing problem which has been the deciphering of a number of different secret codes in which several of the works were written..." (pp 47-49). It appears that in one case, most but not all of the words were written backwards and most astonishing was the "use of a mixture of 4 or 5 alphabets including one of two of their own invention." The dating of the scrolls will therefore have an important bearing upon the early use of multiple alphabets for cryptographic purposes. So far as WFF is aware, this is the first book of the Dead Sea Scrolls which contains references to the use of cryptography. WFF edited the quote. Allegro wrote about the "secret codes" – "Happily they are nothing more complicated than new alphabets which were composed by sectarian's to keep certain works especially secret, and in one case they contrive to unite most but not all of the words backwards, and use a mixture of four or five alphabets, including one or two of their own invention." The "coder" wasn't very good because he would write the same passage in plain text later in the same document (p.47). Cracking some of the code was difficult only because the texts were fragmentary, there were very few complete words so that determining the relative frequency of occurrence of letters would not work so easily. Allegro, Milik and Cross had a contest. Milik did it.

Item 1106.4

Allegro, John Marco, "The Untold Story of the Dead Sea Scrolls," Harpers, August 1966, v. 233, No. 1394, pp. 46-54.

The article asks: Why does the main message of the scrolls still remain hidden nearly twenty years after all their discovery? Who is afraid of what they reveal? The question that obsessed

them was about “the origin of Christianity the very authenticity of the New Testament.” Who were the Essenes?

Item 1106.5

Tasman, P. (IBM),

- 1). “Indexing the Dead Sea Scrolls by Electronic Literary Data Processing Methods” IBM: New York, 1958, 12 pp.
- 2.) Also “Hindu-Arabic Numerals: The Language of Mathematics,” NY Times 30 April, 1961.
- 3.) IBM Advertisement in the NY Times April 30, 1961, pp 10 & 11.
- 4.) Advertisement of Thames and Hudson Publishers of David Diringer’s book writing.

Producing Concordances by computer has been continued.

Item 1107.1 – Series on Alphabets, Writing, etc.

Anonymous, “Neophonography,” Scribner’s, 1878.

An article in an unrelated series having to do with writing. This one deals with a new shorthand system. The system (short hand system for sounds) never became of any importance.

Item 1107.2

Eckford, Henry, “Wonders of the Alphabet,” St. Nicolas Magazine, May 1886.

An interesting article for young people on the history, invention, and development of the alphabet.

Item 1107.3

Anonymous, “Writing,” Chapter VIII of a book on anthropology. Provenance and date unknown, 12 pp.

It covers picture-writing, sound-pictures, Chinese writing, and cuneiform, Egyptian writing alphabetic writing, spelling, and printing.

Item 1107.4

Thompson, Edward Maunde, Article: “Palaeography” in: Brittanica 1902, pp. 143-165.

WFF has forgotten how this article was acquired by him. It has something to say about the history of the alphabet. Greek, Latin, Medieval.

Item 1107.5

Ward, William H., Hieroglyphics, Encyclopedia article.

The date of publication in an encyclopedia in which this article appeared is unknown to WFF nor does he know how he acquired this item. It is, however, many years old but not of much significance.

Item 1107.6

No card, no item

Item 1107.7

Ross, Alan S.C., “The Easter Island Tablet Atva-Mata-riri,” Journal of the Polynesian Society, No. 196, Extract Volume 49, 4 December, 1940, pp. 556-563.

Treatise on the hieroglyphics of the Easter Island inhabitants by a member of the British WWII cryptanalytic organization. The tablet is in The United States National Museum, Washington, DC. With photos.

Update: The Easter Island Tablets have never been deciphered.
See <http://www.rongorongo.org/> for further information.

Item 1107.8

Ross, Alan S.C., “Undeciphered languages,” Typescript of 11 pages, dated 16 September 1945.

Something about Mayan, Etruscan, Khattic, Subariac, Ordek-Burner, Eteocyprite, Guance, Indes Valley Script, and Easter Island scripts. Written at the special request of WFF. Easter Island, Libyan, Khattic texts are preserved in the Hittite archive at Boghazkoï. We have Khattic-Hittite bilinguals, Land of Subartu – NW Mesopotamia (Mitanni?), Horite, Lycian, Carian, Lydian, Eteo-Cretan, Hieroglyphic Hittite may not be Hittite, but Luwian.

Item 1108

Diringer, David, Staples Alphabet Exhibition, London: Staple Press Ltd., 1953, 82 pp.

The catalogue of an absorbingly interesting exhibition sponsored by the Staples Press in London in 1953, depicting “the alphabet throughout the ages and in all lands.” The exhibition was arranged and directed by Dr. Diringer. The item contains some correspondence relative to the exhibition.

Item 1108.1

Diringer, David and W.F. Friedman, "Staples Alphabet Exhibition," Correspondence and misc., 1953-1960.

Diringer built a small museum behind his house in Cambridge, England, where there is the Permanent Exhibition (1963). Folder contains correspondence on Ryder family code. The code was broken by a man who worked on ciphers in the last war but whose name cannot be given for security reasons. The family Trust paid £1,466 for the deciphering and binding to make the papers readily available to scholars.

Item 1109

Ventris, Michael and John Chadwick, "Evidence for Greek Dialect in the Mycenaen Archives," Reprinted from the JHS 73 (1953), pp. 84-103.

The publication of the Ventris-Chadwick book aroused many commentaries by scholars, both pro and con. The latter were not prepared to believe in a solution by two young men untrained in cryptology. See **Item 1207**. They were wrong.

Item 1109.1

Barnett, R.D., "The Minoan Script: A Triumph of Decipherment," Manchester Guardian, Wednesday, 30 September 1953.

A review relating to the decipherment of Cretan writing. Interesting to the professional cryptanalyst because the solution of a long-standing mystery was achieved by a pair of "amateurs." The year of the climbing of Mount Everest also the year of the Ventris-Chadwick intellectual achievement, both British successes. See also **Item 1207**. Photostat negative-contains picture of Linear B tablet. "Tale of Two Palaces," Time, April 19, 1954. On the decipherment of Linear B see David Kahn, The Codebreakers, pp. 917ff.

Item 1110

Foote, Alexander, "Lucy Contra OKH," – Ausdem Kriegstagebuch eines Sowjet-Spions. Translation into German of portions of *Handbook for Spies*, Der Spiegel, (March 1954), pp. 24-31.

The cryptographic portion mentioned in connection with the first edition appears very prominently in this extract, which is a condensation of the book. (Part I is missing from the collection). Der Spiegel, one of the leading magazines in Germany, has a flair for printing subject matter which involves the magazine itself in publicity, as did the above.

Item 1111

Klien, Alexander (ed.), Swindles, Hoaxes, & Frauds, Selection from: Grand Deception, New York: Ballantine Books, 1955, 158 pp. PB.

There is no death of this historical human follies. **See Item 1713**. See William C. White, "Master of the Double Cross" on the Tsar's intelligence service.

Item 1112

Gundry, W.G.C., The Multiple Cipher, Pamphlet of 4 pages, June 1952.

A variation of the Vigenère cipher. The explanation is fanciful, and difficult to comprehend. The author is suspect (in the field of ciphers) because he was a rabid Baconian.

Item 1113

Kahn, David, "SIHT DNIK FO IP SEKAM ESNES!" (This kind of Pi Makes Sense!) The American Printer, September 1954, pp. 24-25, 58.

WFF: The amateur cryptographer publishes an article on cryptology. Kahn's youth and enthusiasm for his hobby leads him to use a bit of material from others, for which he gives no credit. Sent to WFF by the author, who is so obsessed with the subject of cryptography, amateur though he is, that he "grinds it out." WFF never forgave Kahn for writing the book he should have written. Kahn has a Ph.D from Cambridge and The Code Breakers was his dissertation.

Item 1114

National Security Agency "Proceedings of the Fourth R&D Symposium," Multilith Pamphlet of 66 pages, dated 30th September 1954, devoted to information theory.

For separate articles see **Items 1114.1 through 1114.5**. Liebler, Richard A., An Introduction to Information Theory. Laine, Rotand O., Coding for Efficiency and Determining the Informational Content of Speech. Summers, Charles R., Redundancy and Simple Substitution. Campaigne, Howard H., Spelling for Machines, Kullback, S., Statistics and Information Theory.

Item 1115

Hutchinson, Eliot Doyle, "Varieties of Insight in Humans," An extract from: A Study of Interpersonal Relations, New York: Hermitage Press, 1949, pp. 386-403.

This extract from a larger work discusses the psychology of solutions to problems of various sorts. This short paper is concerned with the phenomenon that has recently been termed insight. "We may even go so far as to call the phenomenon creative insight, since it is usually in connection with constructive work that its most brilliant illustrations are to be found." A cryptologist without creative insight is only half a cryptologist." WFF.

Item 1116

Bancroft, Edward (Alias Edward Edwards), “Estimable Spy,” Reprinted from NSA Technical Journal, intelligence articles, Volume 1, pp. 53-67.

Bancroft, born in America, but who spent his adult life in Europe, was very successful as a spy for the British—in Paris, in England, and as secretary to Benjamin Franklin and Silas Deane, who defended Bancroft when the latter was arrested—purely a faked scheme to integrate himself further into the good graces of the American’s. His cleverness was of such a high degree that the full scale of espionage activities did not come to full light until he had been dead for more than 50 years.

Item 1116.1

Fishel, Edward,

Reviews of: “Death To Traitors,” Jacob Mogelenes, “She Rode With the Generals,” Sylvia G.L. Danett, “Spy for the Confederacy.” Jeanette Covert Nolan, Reprinted from NSA Technical Journal, Volume 3, pp. 38-43. Three stories of gullibility, all dealing with secret services in the American Civil War.

Item 1117

Weaver, Warren, Machine Translation of Languages, Extract from, Chapter 1, “Translation,” New York: John Wiley & Sons, Inc. 1955.

Translation machines and mechanisms are of deep interest to the cryptologist who is confronted with the problem of vast accumulations of material in a language other than his own. One of the most eminent scientists in the U.S. with varied interests here writes of a future in which machines meet and conquer foreign tongues. On p. 22 appears a brief summary concerning translation and cryptography. In 1949, with the collaboration of Dr. Claude E. Shannon, Weaver formulated “The Mathematical Theory of Communication.” For full biographical details, see Who’s Who in America, 1962-1963.

Item 1118

Fano, Robert M., The Transmission of Information, Technical Report No. 65, Research Laboratory of Electronics Mass. Institute of Technology, 17 March 1949, 34 pp.

A theoretical study of the transmission of information in the case of discrete messages and noiseless systems.

Item 1119

Buck, Dudley A., The Cryotron – a superconductive computer component Report of 16 pages, Diversion 6, Lincoln Laboratory, MIT, 22 August 1955.

A purely technical report of a new type of computer component. Sent to WFF by a former member of the NSA, Mr. Dudley A. Buck. A cryotron is a device based on the destruction of superconductivity by a magnetic field.

Item 1120

Kirk, Donald Jr., Encoding Television Signals, Engineering Report of Jerrold Electronics Corp., Philadelphia: n.d. but circa June, 1955.

The Director of Research for the Jerrold Electronics Corp. discusses the difficulties of proposed encoding of television signals. Mimeograph Copy.

Item 1121

Bowers, W. Maxwell, Correspondence, 1959-1969.

This thick file is not only interesting but a prolific source of information on persons, systems, and comment. Maxwell Bowers worked for years to find out some biographical data regarding Delastelle, the French cryptologist. The papers he wrote regarding Delastelle are in this correspondence. Bowers articles on two cipher systems, the Bifid and Trifid of Delastelle, were printed in the ACA Journal. According to WFF, Bowers was an excellent amateur cryptologist and is an entertaining writer. Correspondence on The Codebreakers slams Kahn's book and Kahn for attacking WFF.

Item 1121.1

Bowers, W. Maxwell, The German Consular Agency Transposition Cipher of World War I, Type script of 12 pages, dated 18 Dec. 1955.

This is an important piece of work by a gifted amateur. He has never been associated with cryptanalysis in any official capacity. He described in detail the method used in the cipher system known as the Waberski cipher, only partially and somewhat erroneously described in Yardley's American Black Chamber. Mr. Bowers completed a brilliant analysis of a solution that Yardley and Manley both claimed to have done, apparently neither of them quite understood fully how or why he succeeded. See notes inside folder between WFF and L.D. Callimahos.

No Item. Reclassified by NSA. On Waberski, see also David Kahn, The Codebreakers, ch. 12.

Item 1121.2

Bowers, W. Maxwell, The Bifid Cipher, Typescript of ten pages, Written about April 1955.

Bowers has specialized in some of the work of the French cryptographer Delastelle. In this item he deals with the first two types of transposition-substitution systems described by Delastelle.

No Item. Reclassified by NSA. On Delastelle, see also David Kahn, The Codebreakers, pp. 242ff

Item 1121.3

Bowers, William Maxwell, The Trifid Cipher,

Typescript of 2 pages written about April 1955. See comment on preceding **Item 1121.2**.
No item. Reclassified by NSA.

Item 1121.4

Bowers, W. Maxwell, Typescript of a letter dated 20 September 1954, addressed to the "Editor, Department of Further Enlightenment, The New Yorker," In regard to the Ib Melchior piece in Life, 9 August 1954, (See **Item 1123.2**, "My solution of the cipher").

This letter, which was not printed in the New Yorker, has to be read in connection with the piece in Life referred to in the title of this Item. No Item. Reclassified by NSA.

Item 1122

U.S. Army Signal Corps, Cryptanalysis: Army Amateur Radio System, Eighth Corps Area, Fort Sam Houston, Texas: 1936, 1937.

This is a mimeographed pamphlet of 44 pages intended for the self instruction of members of the Army Amateur Radio System in the elements of cryptanalysis. Probably a rare item. Gift of W.M. Bowers, one-time president of The American Cryptogram Association.

Item 1123.1

Vandivert, William W., "A Hamlet Enigma at Elsinore," Life 9 August 1954, pp. 81-87. See **Item 1123.2**.

The general article from which the absurd Melchior "solution" stemmed.

Item 1123.2

Melchior, Ib., "My Solution of the Cipher," Life 9 August 1954, pp. 88, 90, 92.

The inscription on Shakespeare's gravestone produces a message, according to this author, stating that the manuscript of Hamlet is buried in Elsinore Castle. The son of the great opera

singer [Lauritz Melchior] has stepped outside the bounds of reasoning intelligence here, and let his subjective consciousness hold sway.

Item 1123.3

Clark, Miles, "Hamlet Enigma," Letter to editor of Life 30 Aug 1954,

Comment concerning one of the most absurd cryptographic "solutions" ever published. See **Item 1123.2** (Melchior in Life, 9 August 1954).

Item 1123.4

Kahn, David, "Hamlet Enigma," Letter to the Editor of Life, 30 August 1954,

After Life magazine published an alleged solution of the Shakespeare gravestone inscription, David Kahn, the President of the New York Cipher Society, wrote a letter to the editor, raising objections to the "solution." See in this connection the article in the New Yorker magazine by John Sack, "My Solution of the Grant's Tomb cipher," **Item 1123.5**. A hilarious satire.

Item 1123.5

Sack, John, "My Solution of the Grant's Tomb Cipher," The New Yorker, 18 September 1954, pp. 35-36.

A satire article directed against IB Melchior's article Life Magazine 9 Aug 1954 claiming a decipherment of Shakespeare's Tomb inscription proved that the manuscript of Hamlet was buried at Elsinore. See Melchior **Item 1123.2**.

Item 1124

Anonymous, The Case of the Doll Woman-Velvalee Dickinson. Japanese Spy; only woman to spy for the Japanese and arrested in WWII. Correspondence and article in Liberty Magazine, December 16, 1944.

Velvalee Dickinson was sent to prison under a double sentence. \$10,000 Cash fine and ten years in prison. First identified in 1942 from a series of letters written by Velvalee Dickinson (each signed by a different name) to a Señora Lopez de Molinari in Buenos Aires, a "drop" of course. Velvalee Dickinson was arrested in NYC in 1942 after censorship had identified her letters through a "tip off." She was tried and sentenced in NYC in 1944. Although ESF spent a considerable amount of time interpreting the "code" letters in this case, she refused to testify in the case because the Japanese-Dickinson arrangement had been arranged in what is known as OPENCODE – something which will get by the censor, but which is impossible to "prove" because the "code-language" used is an individual thing which differs (or may differ) in each case used. A Liberty Magazine of December 1944 is enclosed; an article on census and

ensorship mentions Velvalee Dickinson briefly on Page 76; a photograph of her is on page 28. Copies of actual letters sent to ESF plus photostat negative copies of letters & envelopes. Typescript copies forwarded by Dept. of Justice.

Item 1124.1 & 2

Harkness, Richard and Gladys, "The Mysterious Doings of the CIA," The Saturday Evening Post, 30 October 1954, pp. 19-21, 161, 165; 6 November 1954, pp. 34-35, 64-66, 68.

The super secret CIA is studied and reported on by leading journalists.

Item 1124.3

Central Intelligence Agency, "The Man with the Innocent Air," Time, 3 August 1953, pp. 12-15.

An article attempting to glorify the agency and in particular its then Director, Allen W. Dulles.

Item 1124.4

Deindorfer, Bob, "Our Spies. . .Are They Letting Us Down?" Parade, 30 October 1955.

Or is it the fault of higher-ups that we're losing the war for secret information? Here is a behind-the-scenes report.

Item 1125

United States Naval Institute, Proceedings

Volume 80	No. 12	December 1954
Volume 81	No. 4	April 1955
Volume 81	No. 7	July 1955
Volume 81	No. 8	August 1955
Volume 81	No. 9	September 1955
Volume 81	No. 10	October 1955
Volume 81	No. 11	November 1955
Volume 81	No. 12	December 1955

Numerous items of interest in connection with the attack on Pearl Harbor. The Battle of Midway and the like.

Item 1125.1

No card, no item

Item 1125.2

Louis Morton, "Pearl Harbor in Perspective," A bibliographical survey, U.S. Naval Institute Proceedings, Volume 81, No. 4, April 1955, pp. 461-468.

Item 1125.1 (1)

Louis Morlan, "The Japanese Decision for War," U.S. Naval Institute Proceedings 80, 12 (December 1954), pp. 1325-1335.

Item 1125.1 (2)

Theobald, Rear Admiral Robert, The Final Secret of Pearl Harbor, NY: Devin-Adair, 1954.

Item 1125.3 (1)

Kittridge, Captain Tracy Barrett, "A Military Danger: The Revelation of Secret Strategic Plans," Proceedings of the U.S. Naval Institute, 81, 7 (July 1955), pp. 731-743.

A retired Naval Reserve captain believes that the revelations of strategic plans before Congress in war trials creates a military danger to this government.

Item 1125.3(2)

Newmann, William L., "Allied diplomacy in World War II: a bibliographical survey," Proc. of the US Naval Institute 81,7 (July 1955), pp. 829-835.

Item 1125.4

Butow, Robert J.C., "The Surrender to Japan," Proceedings of the U.S. Naval Institute, 81, 8, (August 1955), pp. 853-865.

The details connected with the surrender of Japan as seen by the author.

Item 1125.4(2)

Kalisch, Colonel Bertram, "Photographing the Surrender aboard the USS Missouri," Proceedings of the US Naval Institute 81, 8 (August 1955), pp. 866-873.

Item 1125.4(3)

Jeffrey, R. E., Review of The Influence of Force in Foreign Relations by Captain W. D. Puleston in Proceedings of the U.S. Naval Institute 81, 8 (August 1955), pp. 941-942.

Item 1125.5

Morton, Lewis, Letter to the Editor on Japanese Naval Air Operations in the Philippines invasion, Proceedings of the US Naval Institute 81, 9 (September 1955), pp. 1048.

Item 1125.6

Higgins, Trumbell, “East Wind Rain,” U.S. Naval Institute Proceedings 81, 11 (November 1955), pp. 1198-1203.

Tokyo informed its Washington Embassy that the code signal “East Wind Rain” would be sent out in the event of an “unnamed emergency” i.e. war with the U.S. For the highly improbable contingency of war with Russia – the code “North Wind Rain” was reserved. Deals with Japanese codes before Pearl Harbor.

Item 1125.7 (1)

Fukudome, Vice-Admiral Shigeru, “Hawaii Operation,” Proceedings of the U.S. Naval Institute, 81, 12, (December 1955), pp. 1315-1331.

This is the name used by the Japanese for the Pearl Harbor attack.

Item 1125.7(2)

Langdon, Robert M., “Notable Naval Books of 1955,” Proceedings of the U.S. Naval Institute, 81, 12 (December 1955), pp. 1385-1391.

Item 1125.8

Coox, Dr. Alvin D., “The Wind & Code, 1941,” U.S. Naval Institute Proceedings 82, 7 (July 1956), pp. 769.

Regarding the Winds device established on Nov. 18, 1941. The “winds code” message formed the basis for a long and somewhat acrimonious argument between Captain Lawrence F. Safford and the Joint Congressional Committee on the investigation of the attack on Pearl Harbor. See his article “Kita no Kaze Kumori; The United States and Japan Northern Problem 1941” in the Hikone Ronso, December 1954, pp. 1-20. See also **Item 1198** Nov 1955 Proceedings. Author corrects Items in Dr. Higgins article.

Item 1125.9 (1)

Hartman, (Rear Admiral, USN), Book Review of The Atlantic Battle War, May 1943 – May 1945, pp. 1231-1234. Volume X of History of the U.S. Naval Operations in World War II, by Samuel Eliot Morison, U.S. Naval Institute Proceedings, 82, 11, (November 1956), pp. 1231-1233.

Item 1125.9 (2)

Gretton, Peter (Commodore, RN), Book Review of The Atlantic Battle War, May 1943-May 1945, Volume X of History of the U.S. Naval Operations in WWII, by Samuel Eliot Morison, U.S. Naval Institute Proceedings, 82, 11, (November 1956), pp. 1233-1234.

Also numbered **1125.9**

We Accuse! The story of the Miscarriage of American Justice in the Case of Robert J. Oppenheimer New York: Simon and Shuster 1954, 89 pp.

This is an item having nothing to do with cryptology. It is in the FC because it deals with a trying period in U.S. history, a period troubled with the problem of “internal security.” The post script to this case is that nine years later the AEC gave Dr. Oppenheimer the Fermi Award – its first recipient. Separate folder with clippings. Walter Lippman, “The Bloodless.” Revolution against McCarthy, Washington Post, 25 August 1955, Washington Post, Times Herald, Sunday, July 25, 1954.

Item 1125.10

Higgins, Trumbull, “East Wind Pain,” letter to the editor re Louis Morton’s criticism in November 1955, Proceedings of the U.S. Naval Institute 82, 12 (December 1956), pp. 1330-1331.

Item 1126

Petrov, Vladimir, “Mystery of Missing Diplomats Solved,” U.S. News and World Report, 23 (September 1955), pp. 21-27.

A Soviet diplomat in Australia reveals what he knows concerning the Burgess MacLean affair. See also **Item 1126.1** [anon] which includes a mass of clippings regarding the Petrov affair. Pages 98-106 of the same magazine cover the (Australian) Royal Commission and tells how Soviet spy system works. It adds that “Petrov destroyed the Soviet spy apparatus.” The People, Sunday, October 9, 1955, British Newspapers, tabloid.

See the entry on Vladimir Petrov in Wikipedia.

Item 1126.1

Anonymous, Clippings from British Tabloids: The Burgess and MacLean Case, envelope containing newspaper accounts and clippings of.

At this writing (1955) the ramifications of the disclosures concerning these two defectors from the British Foreign Office cannot be foreseen. It is possible that these two proved Russian agents managed to get to the Russians many items of vital importance; some of these items may have been of a cryptanalytic nature. WFF was horrified at the defection of these two scoundrels, for he had been a member of a special inter-allied board and several times had sat around a conference table where top-secret discussions were held regarding the poor cryptographic practices of one of the countries allied with Britain and the U.S. in WWII. (P.S. 1967). Burgess

has since died; the wife of MacLean has left him and married Philby, the notorious double-agent-British and Soviet.

See entry on "The Cambridge Five" in Wikipedia.

Item 1127

No card, no item

Item 1127.1

Bialoguski, Michael, "How I Weaned Petrov from Communism," Saturday Evening Post, (August 6, 1955), pp. 17-19, 43-45.

Vladimir Petrov defected from the Soviet Embassy in Canberra on April 3, 1954. The Russians tried dragging his wife back to Russia. Bialoguski worked for Australian counter-intelligence. Petrov ran a spy network in Australia for three years. He was the MVD's top man in Australia. Bialoguski was a trusted member of Petrov's spy ring. Historically important in view of later developments in connection with the Burgess-MacLean affairs. See also **1126.1** (anon.)

Item 1127.2

Bialoguski, Dr. Michael, "How I was Weaned from Communism," Saturday Evening Post, (August 13, 1955), pp. 34-35, 87-88. Ibid pt. 3, August 27, 1955, pp. 30, 92-93.

Item 1127.3

No card, no item

Item 1128

Cookridge, E.H., "How Soviet Spy Net Covers the World," U.S. News and World Report, 19 August 1955, pp .114-155.

Story of a world-wide system of espionage, with data concerning Gouzenko, Petrov and others WFF asked: "Did the Soviets ever get anything except by stealing?- Yes, defectors.

Item 1129

Spindel, Bernard B. with Bill Davidson, "Who Else is Listening?" Colliers, 10 June 1955, pp. 25-29.

An article of general interest in connection with wire tapping and intercept of personal communications. The "art" is now generally referred to as "bugging" and is much in the news (1967).

Item 1130

Whitney, Major General Courtney, "MacArthur's Rendezvous with History," Life, 15 August 1955, pp. 48-76; 2nd installment, 22 August 1955, pp. 90-106,

4 part story by a close friend and aide:

Part 2 Volume 39, 8, August 22, 1955

Part 3 Volume 39,9, August 29, 1944

Part 4 Volume 39,10, September 5, 1955

Item 1131

Seaman, Donald, The Great Spy Scandal, London: Purnell & Sons, Ltd., December 1955, pp. 192.

“Inside Story” of the Burgess MacLean case. Considerable information on jacket. DJ

Item 1132

Davis, Forrest and Ernest K. Lindley, “How War Came,” Ladies Home Journal, July 1942, pp. 16-17; 104-107; 109-110.

This is an extract from a book of the same title published in 1942. It purports to give some firsthand comments made by people in high position in the Government at the time of the Surprise attack on Pearl Harbor. One of the interesting points about this extract and book is that the authors refer in a very indirect manner to a certain type of intelligence which told U.S. authorities in January 1941 that Hitler was going to attack Russia in June 1941. When WFF first read this extract he thought that this was a reference to a certain Japanese Foreign office message which disclosed Hitler’s intention and which was read by the Signal Intelligence Service. However, it turned out later that the source of the intelligence was not from cryptanalysis but from a highly dramatic piece of work by a U.S. secret agent.

Item 1133

Truman, Harry S., “The Recall of General MacArthur,” Life Magazine, February 13, 1956, pp. 66-93, Volume 40, No. 7.

Items 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149.

No card, no item

Item 1150

Cleator, P.E., Lost Languages, Robert Hale Ltd., London: 1959, 192 pp.

A fascinating and highly readable account even for the layman, of the discovery of records and later decipherment of many “lost languages.” Also a section devoted to undeciphered (as of 1959) languages.

Etruscan

Linear A

Phaistos Disc

Mayan glyphs (Have since been deciphered)

Indus Valley Writing

Easter Island

Item 1151

Duncan, George S., An Introduction to Biblical Archaeology, A Textbook for School and Home, New York, Chicago: Fleming H. Revell Company, n.d., 174 pp.

Autographed by ESF’s professor in Graduate School of American University, February 1931. A few lecture notes enclosed.

Item 1152

Duncan, George S. (Ph.D.), Prehistoric Man, an Introduction to Anthropology, Boston: The Stratford Company, 1931, 143 pp.

Dr. Duncan (Prof. of Egyptology and Assyriology) of The American University Graduate School faculty, taught only graduate students. ESF took courses toward the completion of a Master’s degree under Dr. Duncan. Autographed to ESF by the author. It was the only course in archaeology in the whole of Washington at that time – 1929. Book on Paleolithic Man.

Item 1153

Van Loon, Hendrick William, Ancient Man; the Beginning of Civilizations, New York: Boni & Liveright Inc., 1922, 208 pp.

Probably the earliest of a spate of popular books on archaeology. Ancient Mesopotamia, Egypt, Babylonia, Phoenicians.

Item 1154

Von Hagen, Victor W., The Aztec; Man and Tribe, New York: New American Library, Mentor Books, 1958, 222 pp.

This work is another of Von Hagen’s popular treatments of prehistoric and contact-period civilizations of the New World. As a source it should be approached warily for its basis in archaeology and anthropology has sometimes been trusted and the work is not the best available.

An adequate substitute on the same subject is the recently-revised Aztecs of Mexico by George C. Valliant, updated by his widow, Susanna Van Mart. It is available in PB in the Penguin series. One of the better popular writers in the fields of anthropology and archaeology herein treats the Aztecs. "The Overlords of Mexico" whose life pattern seems to have been the most luxurious of all ancient peoples in this hemisphere. Cheap PB.

Item 1155

IBM, Foreign Developments in Machine Translation and Information Processing, No. 40, 16 October 1961.

Investigation of ancient Mayan Manuscripts with the Aid of an electronic computer.

I – Methods

II- Algorithms

III- Preliminary Results

U.S. Joint Publications Research Service, Washington, DC, 1961, 32 pp.

Second copy: U.S. Department of Commerce, Office of Technical Services, Joint Publications Research Service, Scientific and Technical Series, Foreign Developments in Machine Translation and Information Processing, No. 102, Washington, D.C., 2 July 1962. On shelf with black binders.

Item 1155.1

Distributed by Office of Technical Services, Folder also contains 16 page computer print out. Tape No. 1869, R-37. Applied and Mathematical Linguistics by H.V. Knorozov.

Item 1155.1

Friedman, William F., Correspondence with J.B. Green of IBM regarding computer translation of Mayan writing, 1962.

Item 1156

Elliott, Ralph W.F., M.A., Runes; An Introduction, Manchester, England: Manchester University Press, 1959, 124 pp., with numerous plates.

This 1959 publication is the most recent and most authoritative treatise on runes, with excellent plates and index. See Sheldon, EAW, 366, 403, 584, 618-622. No item. Cf. David Kahn, The Codebreakers, pp.86ff.

Picture of WFF standing by the Runes stone at Gripsholm Castle, Sweden, 1957. Duplicate picture in grey folder with separate correspondence. **Item 2112.**

Item 1157

Mange, Alf and O.G. Landsverk, Norse Medieval Cryptography in Runic Carvings, Glendale, CA: Norseman Press, 1967, 225 pp. DJ.

A controversial book. It does not read like a psychological myth, but the “cryptograms” are indefensible. A “subjective solution” and not even a plausible one.

Item 1157.1

Friedman, William F., Correspondence with Dr. Richard Leibler and O.G. Landsverk regarding the book Norse Medieval Cryptography in Runic Carvings, 1968-69.

Correspondence from the Landsverk Foundation which was organized in 1968 to study the discovery, exploration, and habitation of the North American continent by medieval Norsemen. They sponsored the Mange and Landsverk book. The book was attacked by Aslak Liestøl, Curator of the National Museum in Oslo. Liestøl was a collaborator in the collection, translation of rune inscriptions for a five-volume work Norges Innskrifter Med de Yngre Runer (Norwegian Inscriptions that use Medieval Runes). The last volume appeared in 1960. WFF called Mange, “A little bit nutty.” See Minnesota Kensington Stone. Also in envelope, Editor’s Note: Curt A. Zimansky, “William F. Friedman and the Voynich Manuscript,” Philological Quarterly 49, 4 (October 1970), pp. 433-442. Friedman believed the Voynich was an attempt to create one artificial language not a cryptogram. On runes see David Kahn, The Codebreakers, pp.86ff.

Item 1158

Alsop, Joseph, “A Pylos Before a Pylos,” The New Yorker, (November 28, 1962), pp. 59-117.

Gift of daughter Barbara. A famed correspondent delves into the mystery (and history) of Greek and the Linear B writing. Joseph Alsop goes to the source. April 4, 1939 – First Linear B Tablets found on the mainland. Publication was delayed by WWII. 600 tablets lay in the vaults of the Bank of Greece. Emmett Bennett published For Pylos Tables in 1951. They took 12 years to publish with a war in between. Evans took 50 years to publish in 1952. Ventris was only fourteen when he heard Evans speak. According to this article Ventris was a Bomber/Navigator during WWII. In 1956 Ventris & Chadwick published together. Ventris was killed at the age of 34 in a motor accident.

Item 1159

Kramer, Samuel Noah, “The Sumerians,” The Scientific American, (October 1957), pp. 71-83.

Dr. Kramer, a lifelong student of cuneiform writing, credits the Sumerians with having laid the foundation for practically all “technological and social inventions” of modern civilization.

Item 1160

Franken, Dr. H.J., “Bronze Age Shrine and Unknown Script,” The Illustrated London News, (April 17, 1962), pp. 34-35.

Dr. Franken, a lecturer in Palestinian archaeology at London University in the Netherlands, writes here, with photographs shown, of the discovery of an unknown script on Jordan. Here again the script uses clay tablets. The writer claims these tablets are the “oldest Holy Land examples.”

Item 1161

Atkinson, R.J.C., Stonehenge and Avebury and Neighboring Monuments: an Illustrated Guide, Her Majesty’s Stationery Office, London: 1959, 63 pp.

Britain is the home of what is probably the most widely known archaeological mystery. Stonehenge has been known for hundreds of years but its secrets are still matters of theory and speculation. Nothing has changed – clippings inside.

Item 1161.1

Anonymous, Stonehenge Wiltshire, Ministry of Works, Official Guidebook, 1955, 23 pp.

Item 1162

Childe, Professor V.G., A Short Introduction to Archaeology, New York: The MacMillan Company, 1958, pp. 1-142.

This book is exactly what it says: A short introduction to archaeology. A well-done guide for the amateur who is attracted but totally untrained in the field.

Item 1163

Galvez, G. Maria Albertina, Con los indios Cunas de Panamá, Editorial del Ministerio de Educación Pública Guatemala, 1952, 154 pp.

An official publication of the Guatemalan government. Acquired on WFF’s visit to Guatemala City in 1959.

Item 1164

Anonymous, The Bernal Diaz Chronicles, The True Story of the Conquest of Mexico, Translated and Edited by Albert Idell, NY: Doubleday 1956, 436 pp.

In the 15th century, the capital of all Central America was Guatemala. There Bernal Diaz del Castillo, a participant in the conquest of Mexico and Central America by the Spanish, set down his recollections of his experiences and of the whole conquest. Prescott's The Conquest of Mexico is said to have been taken largely from these chronicles. This translator who does not hesitate to make his text readable...? This is the first translation made since 1905.

Item 1165

Anonymous, Encyclopedia, Yucotanense Edicion Oficial del Gobierno de Yucatan, Nine volumes, including small paperbound index, Ciudad de Mexico, 1944-47. Volumes I-VIII minus II.

The FC set of this work is missing Volume II, as are most of the sets obtained after the early 1950s. Fortunately, that particular volume – devoted to the Ancient Maya – contains what might be classified as the most “perishable” information in the entire set, for the archaeology of the area has made great strides since Morley wrote the text. Morley himself published his The Ancient Maya (Stanford, 1946) at about the same time as Vol II of the Encyclopedia was issued, and that book has been updated in the 1956 edition. The remaining volumes are devoted to the history and culture of the state of Yucatan and subjects are distributed among them as follows:

- I – Introduction, Geography, Physiography, Fauna Flora.
 - III – Political history, History of the Henequen Industry.
 - IV – History of Welfare, Education, Medicine, Music, Architecture.
 - V – History of Printing, Journalism, Theater, Drama.
 - VI – Modern Mayan culture, Mestizos, the Mayan Language.
 - VII – Biographies.
 - VIII – Bibliography.
- With DJ.

Item 1166

George E. Stuart & Gene S. Stuart, National Geographic Society Discovering Man's Past in the Americas, Washington, D.C.: National Geographic Society, 1969, pp. 1-21. DJ.

One of the very latest volumes on the subject of Man's past in the Americans. Gift of the author's George E. and Gene S. Stuart. George Stuart has written the bibliographical annotations for many of the archaeology items in the Friedman collection, and has stated of this segment in the collection “It is a small collection, but a choice one.” WFF and ESF met the Stuarts first in Yucatan in 1958. Mr. Stuart is now on leave from the National Geographic Magazine to finish his doctorate at the University of North Carolina.

Item 1167

Anonymous, Official Guides of the Institute National de Antropologia e Historia (sp):

Yucatan: Chichèn Itzà

Uxmal

Chiapas: Palenque

Oaxaca: Monte Alban

Mitla

Quirigua

Mexico City: The Mayan Hall of the Museo Nacional de Antropologia. Travel Guides and brochures.

Item 1167.1

Anonymous, Miscellaneous Mayan Items:

1) Aztec Calendar Stone

2) Correspondence

3) News stories

4) Magazine articles

Item 1168

Zimmermann, Guntar, Die hieroglyphen der Maya-Hand-Schriften, Cram de Gruyter & Co., Hamburg: 1956, 174 pp.

This German scholar presents here a kind of catalogue of Mayan hieroglyphs, separated into, and illustrated by, individual classification into groupings of characters of similar intent. Whereof he finds his character, he is careful to name – the Dresden Codex, the Madrid Codex, etc. There are eight tables appended. Table 2 for example, this scholar devotes to cardinal numbers and shows some to be represented by heads and parts of bodies of men. It is interesting to note that this industrious German scholar, although publishing his “dictionary” in 1956, does not ever mention the Russian claim to have deciphered the Mayan hieroglyphs (1952).

Item 1169

Thomas, Cyrus, Notes on Certain Maya and Mexican Manuscripts, Smithsonian Institution: Bureau of Ethnology 1882, 65 pp.

This copy of a publication of the Bureau of Ethnology was beautifully bound and presented to WFF by Commander Mindte on the occasion of the ceremony paying honor to WFF on his retirement from the U.S. Government, November 5, 1957. Thomas, an American pioneer in the study of Maya hieroglyphic writing, published this 120-odd page account as part of an extensive series that appeared in the Bureau of American Ethnology publication program from the 1880s to

the 1910s. It contains discussions of the symbols, numerator, and possible phonetic value of the text of the Maya Dresden Codex.

Item 1170

Alcocer, Fulgencio, Lakin Cartilla Bilingue Maya y Español, Revised by: Maria Lavalle Urbina, Fernando Trijo Carrillo and Romeo Valencia, Compañía Nacional Contra el analfabetismo, Gobierno del Estado de Campeche, 1945.

This short text represents part of the program instituted by the Mexican government against illiteracy. Designed for elementary schools, particularly those in rural areas, it provides a bridge from the native household Maya to Spanish for the child of Mexico's south eastern states.

Item 1171

Cruz, Santiago Pacheco, Compendio del Idioma Maya Metodo "Pachecho Cruz," quinta edicion, Imprente oriente, Merida, 1955.

This small volume is one of the more widely used manuals for the learning of Yucatec Maya. Its author is fluent in Maya, and has long been a student of the groups among which he has lived in Quintana Roo. The book, in Spanish, is divided into three principal sections: the largest is composed of 20 lessons of basic vocabulary and sentences of increasing complexity; the other two are devoted respectively, to extra exercises and translation projects, and a short-Maya Spanish vocabulary. Linguistically, the approach used in the compilation of the manual is one demanding memorization of the matter contained in the lessons, rather than one of detailed grammatical exposition. For the latter, Tozzer's A Maya Grammar, Cambridge, MA, 1921 is more adequate and this will soon be the long-range program of publication in Maya linguistics currently in process at the University of Chicago under the direction of Dr. Norman McQuown.

Item 1172

Alcala, Ermilo Solis, Diccionario Espanol-Maya, Merida: Editorial Yikal Maya Than, 1949, 589 pp.

This, one of the most recently published Maya dictionaries, has drawn on material contained in earlier dictionaries and vocabularies and combined it into one useful volume. Sources used include the manuscript of the Motul dictionary, and the great Pio Perez dictionary of 1877, along with the word list of Beltran and the recently discovered Vienna vocabulary. Entries are all Spanish-to-Maya, and usually consist of one word or a series of synonyms, without sentence examples.

Item 1172.1 & 1172.2

Vega, Abelardo Fuente, Curious Similarity Between English and Maya Words, Merida: Yucatan, Mexico, 16 pp.

A “curious” item dealing with the similarities between modern Mayan and English, with the Spanish translation of the meanings of the English equivalents. 2 copies.

Item 1173

Gates, William E., Translation and Commentary, The de la Cruz – Badieno Aztec Herbal of 1552, Maya Society Publication 23, Baltimore, 1939, 144 pp.

The original manuscript of this work, the Codex Barbarini, Latin 241, is in the Vatican Library. It was prepared by two pupils of the college of Tlatilulco (Tlatelolco) in 1552 as a tribute to the son of the Viceroy of Mexico. The present work, in English translation with illustrations of the individual plants, is a family complete catalogue of Aztec ethonobotany, supplemented by an index of plants. Much comparative material is to be found in the recent edition—the definitive edition—of Fray Bernadino de Sahagun’s History of the Things of New Spain, translated by Arthur J.O. Anderson and Charles E. Dibble, specifically in Book II, part XII The Natural History (published by the School of American Research, Santa Fe, New Mexico).

Item 1174

Anonymous, Codice de Calkini, (Translation by Alfredo Barrera Vasquez), Biblioteca Campechana, Campeche, Mexico: 1957.

The ancient Maya province of Calkini embraced much of what is now the west coast of the northern Yucatan Peninsula, and the present document is a modern translation of a post-Conquest Chronicle of its traditional history of Chilam Balam of which the most famous is that of Chirmayel (See the Roys edition of the latter in the FC). The present edition of this important work is to the writer’s knowledge, the only edition available. More important, its translator, Barrera Vasquez, is the foremost scholar of the Maya Chronicles and the language in which the original was set down. The translation is accompanied, in the present work, by a photographic facsimile of the manuscript itself. Unfortunately, many of these small plates did not print well for clarity.

Item 1175

Vazquez, Professor Alfredo Barrera, Sobre la Significancion de Algunos Nombres de Signos del Calendario Maya, n.d., El Colegio de Mexico: pp. 81-85.

A short paper by the distinguished Director of the Archaeological Museum of Yucatan, with whom WFF and ESF studied modern Mayan in Merida one winter season. Autographed by the

author to WFF and ESF “Merida, March 1959,” a halting hand-written translation to English by ESF enclosed.

Item 1176

Vasquez, Alfredo Barrera and Silvia Rendon, (trans), El Libro de los Libros de Chilam Balam, Mexico: 1948, 268 pp.

In this single volume are summarized all the Maya chronicles that relate to the history of Yucatan. Particularly useful are the synoptic tables that parallel the history and prophecy for each of the Katuns, or 20-year periods, as they occur in the separate documents. Extensive footnotes deal with problems of translation, and separate tables contain such useful lists as place names, deities, and characters mentioned. The book is indispensable for study of the post-Conquest chronicles, the content of which bear directly not only on the history of the area from the tenth century onward, but also on such problems as the correlation of the Maya and Christian calendars. The senior author is considered as the greatest living scholar of the Maya language and Maya ethnology.

Item 1177

Thompson, J. Eric S., Corandezca y Decadencia, de los Mayas, Version Espanola de Lauro Jose Zavala, Fondo de Cultura Economica, Mexico: 1959. DJ.

A Spanish version of Thompson’s Rise and Fall of Maya Civilization, University of Oklahoma Press, 1954 – perhaps the best summary account of Maya culture that has been written, this is, to my knowledge, the only translation of this work into Spanish. The English edition, meanwhile, has undergone extensive revision and updating, and has been re-issued by the University of Oklahoma Press (1967). It is the latter edition of Thompson’s work that is the best.

Item 1178

New World Archaeological Foundation, Publication No. 1, 1956, “An Archaeological Reconnaissance of West-Central Chiapas, Mexico,” by John L. Sorenson. “An Archaeological Reconnaissance in Chiapas, Mexico,” by Edwin M. Shook. “Summary of New World Archaeological Foundation Investigations at Chiapa de Corzo, Chiapas,” by Gareth W. Lowe. See **Item 1192** – Wauchope, Robert. “Activities of the Middle American Research Institute, 1957-1967,” Middle American Research Institute, Tulane University, 1968.

Item 1179 & 1179.1

Andrews, E. Wyllys, "Grant No. 2343 (1957) \$5,000 Archaeological Excavations in Yucatan," Reprinted from Year Book of the American Philosophical Society, 1959, pp. 466-467, 1 page.

No annotations are needed for these brief papers. The author is the directing archaeologist for the restoration of the ancient Maya site known as Dzibilchaltun, near Merida, Yucatan. Discusses the excavation of the Temple of the Seven Dolls.

Item 1180

Thompson, J. Eric S., "Systems of Hieroglyphic Writing in Middle American and Methods of Deciphering Them," Reprinted: from American Antiquity, 24, 4 (April 1959), pp. 349-364.

An extremely valuable analysis of the work already done in the attempts to decipher the Mayan hieroglyphs, some criticisms of the work of the Russian Knorozov, and a useful bibliography for present and future deciphering attempts. Autographed by Dr. Thompson to WFF.

See entry for Yuri Knorozov in Wikipedia.

Item 1181

Andrew, E. Wyllys, "Die Hieroflyphen der Maya-Hand-Schrifte," Reprinted from American Antiquity, (April 1959), pp. 441-443.

Dr. Andrews' praise and non-praise for the work of the German Gunter Zimmermann. Cf **Item 1168** in the collection. 2 copies.

Item 1182

Vazquez, Alfredo Barrera, "La Significacion de los Morfemas Zak (sak) y Chiic (Ci'ik) en los mombres Sacbe y Sacchic (Sensontle)," El Colesio De Mexico: Reprinted from Los Mayas Antigquos.

This short paper utilizes early Maya dictionaries (the Motul, the Pio Perez, and the San Francisico) to point out the meaning, "artificial" for the morpheme "sac," usually translated "white," in such compounds as Sacbe, Sac mul, etc. Dr. Vazquez is Director of the Museo Arqueologico de Yucatan.

Item 1183

Andrews, E. Wyllys, "Preliminary Report on the 1959-60 Field Season, National Geographic Society – Tulane University Dzibilchaltun Program," Middle American Research Institute, Tulane, 1961, New Orleans, 40 pp.

Dr. Andrews' preliminary report of the Dzibilchaltun Program, 1959-60 season, when a vast number of shreds were unearthed (50,000!) work was begun on the main structure, named by Dr. Andrews "The Temple of the Seven Dolls."

Item 1184

Thompson, J.E.S., "Research in Maya Hieroglyphic Writing," Reprinted from the Middle American Anthropology, Pan American Union, 1959, pp. 43-52.

Dr. Thompson prepared this history of research in the field of Maya Hieroglyphic writing in 1955 while still with the Carnegie Institute of Washington. He relates in more or less detail the complications of all glyphs, covering his four years of work. He rejects Carbon-14 dating. Many references.

Item 1185

Thomas Gage's Travels in the New World, Norman, OK: The University of Oklahoma Press, 1958, 379 pp., DJ.

This work comprises a new edition of the classic, "The English-American...or, A New Survey of the West India's..." published in London in 1648. The editor, one of the foremost authorities on the Mayan and the archaeology of Central and Middle American in general, has produced an adroit rendition of the earlier version of this work—one that retains the flavor of a seventeenth-century adventure narrative, yet is easily managed by the modern reader. This certainly is the best of the editions (1758, 1938) that have appeared since the early original printings. The work is principally a narrative of travel and its scope includes the land from Vera Cruz to Guatemala through Panama, and frequent mention is made of Maya ruins.

Item 1186

Thompson, J. Eric S., The Rise and Fall of Maya Civilization, Norman, OK: University of Oklahoma Press, 1954, 287 pp. DJ.

The greatest living Mayan scholar at this time (1969) is generally conceded to be Eric Thompson who was for many years in charge of excavation and exploration in Central America and who continued his interests in this area after retirement. WFF and ESF were privileged to know Dr. & Mrs. Thompson in Merida, Yucatan in the winter of 1959 – 60, and also in the autumn of 1960 in Cambridge, England, his home. Autographed by the author to WFF and ESF in Merida, March 1959. A masterpiece.

Item 1187

Card for **Item 1283** stapled to Card **1187**. It reads: Willard, Theodore A., The Codex Perez, an Ancient Mayan Hieroglyphic Book, the author H. Clark Co., Glendale, CA: 1933, 10 pp.

This photographic facsimile of the small codex Perez Paris Cf. **Item 1242** for proper name was made from the original in the Bibliothèque Nationale in Paris, France. The text accompanying it reveals much information concerning the tree Mayan codices which survived the burning of all books in Yucatan by Bishop Landa. Presented to WFF by David Shulman, December 1962 whose informative note in red ink is enclosed. See **Item 1263**: Codex Perez: Mayatzental by William E. Gates. The NYPL keeps its copy in the rare book room. There is no copy in LC. This reproduction of the Codex Paris (as it is now usually called) is printed on a strip of brownish paper bound into the covers of this pamphlet so that it forms the screen fold that characterized the original. A brief commentary and history of the document accompanies this work, of which only 250 copies were printed for private distribution. The copy is very good for basic work with the codex, but should be used in conjunction with some edition in color. In the FC there is one, the Gates edition of the Codex. The disadvantage of the latter is the conventionalization that Gates introduced into the delineation of the drawings and hieroglyphs. Thus the two used together will probably serve better than either used separately. The best edition of the Paris Codex has recently been published in Graz, Austria by the Akademische Druck-u-Verlagsanstalt.

Item 1188

Morley, Sylvanus Griswold, "Chicken Itza, An Ancient American Mecca," National Geographic Magazine, pp. 63-74.

Dr. Morley was on the staff of the Carnegie Institution of Washington. He was responsible for interesting WFF in the decipherment of the Maya hieroglyphics. In 1922 Dr. Morley persuaded the Carnegie Institution of Washington, DC to offer both WFF and ESF appointments to the Carnegie Institution at a combined salary of \$3,000 per annum. This is an indication that the 1920s were lean years with tax-exempt institutions and foundations.

Items 1189 and 1189.1

National Geographic Magazine, January 1959, "Dzibilchaltun, Lost City of the Maya," pp. 90-109, by Dr. E. Wyllys Andrews, and "Up From the Well of Time," by Luis Marden, pp. 110-129, National Geographic Society, 1958.

This number of the National Geographic gives most of its space to the "dig" at the Mayan site of Dzibilchaltun near Merida, Yucatan. The reconstruction of the Dzibilchaltun was made possible by the joint support of the National Geographic Society and the Middle American Institute of Tulane University. The project was begun in the late 1950s. WFF and ESF spent two

winters 1957-58 and 1958-59 studying Mayan in Merida and observed some of the “dig” at first hand.

Item 1190

Andrews, E. Wyllys, “Excavations at Dzibilchaltun, Northwestern Yucatan, Mexico,” Reprinted from Proceedings of the American Philosophical Society, June 1940, Volume 104, No. 3, pp. 254-265.

This paper was presented by Dr. Andrews in the Spring of 1960. It was sent to WFF “With the compliments of the author.” He is even now in 1970 continuing some work at the “dig” of Dzibilchaltun. Dzibilchaltun in Maya means, “Where there is writing on flat stones.” It is both one of the earliest and latest cities inhabited by the Maya. A city of 20 square miles. The site is north of Merida and much of the stone was stolen when the road from Merida to the port of Progreso was built. Even in 1958 with government efforts to protect the site, fleets of trucks raided the ruins for material to feed near-by gravel crushers. The city was at its peak 500 years before the use of Chicken Itza. In the middle of the site is the *cenote* or great natural well that is four times as deep as the one at Chicken Itza. It has the only temple with windows (seven dolls). Each doll had a deformity which suggested the temple was involved with curing disease.

Item 1191

Anonymous, Publications of the Peabody Museum, Harvard University, April 1967.

This small catalogue of publications of the Peabody Museum at Harvard University calls one’s attention to the early dates of the Mayan researchers- such as, Gates Tozeer, Spinden, Whorf and Kidder. The most active period of Mayan studies began soon after 1900. UPDATE – When was the pre-Columbian Collection at Dumbarton Oaks opened??

Item 1192

Wauchope, Robert, Activities of the Middle American Research Institute, 1957-1962, Middle American Research Institute, Tulane University, New Orleans: 1968.

This gift of WFF by Giles B. Healey, the discoverer of Bonampac, covering the years 1957-67 shows the enormous growth and discovery and exploration in Central American and Mexican archaeology and anthropology. Combined with **Item 1178** (New World Archaeological Foundation, Publication 1, 1956. “An Archaeological Reconnaissance of West Central Chiapas, Mexico” by John L. Sorenson. “An Archaeological Reconnaissance in Chiapas, Mexico by Edwin M. Shook. “Summary of New World Archaeological Foundation Investigation at Chiapa de Corzo, Chiapas” by Garth W. Lowe) form an impressive history of the work in this field.

Item 1193

Von Hagen, Victor W., World of the Maya, New York: The New American Library, 1960, 224 pp. PB.

An excellent story of the Maya World that is told with an easy-going charm which has made Mr. Von Hagen highly respected in anthropology. He has dealt with the Aztecs and the Inca in the same engaging manner.

Item 1194

Evreinov, E.V., Yu. G., Kosarev, V.A. Ustinov, Premeniye Elektronikh Vychislitel 'nyKh Mashbin v Issledovanii Pis'mennosi Drevnikh Maiya. Application of Electronic Computing Machine in Examining Ancient Maya Writing. Izdatel'stvo Sibirskogo Otdelenniya An SSSR, Novosibirsk, 1961, Volumes 1-3.

Item 1195

Knorozov, Yuri V., Selected Chapters from The Writing of the Maya Indians, Cambridge, MA: Peabody Museum, 1967, 152 pp.

Russian translation series of the Peabody Museum of Archeology and Ethnology, Harvard Museum, Volume IV. Translated by Sophie Coe; Collaborating editor: Tatiana Proskouriakoff. In 1952, there appeared in Sovietskaya Etnografia an article by Y.V. Knorozov on the structure of Maya hieroglyphic writing, outlining and approach to its decipherment by the assignment of morphemic and phonetic values to its various signs. This article was translated into Spanish and at once attracted attention. Unfortunately, its contemptuous treatment of American scholars and its extravagant claims predisposed it to adverse criticism. In a review in Yan, J. Eric S. Thompson respected as the foremost authority on Maya epigraphy in this country, not only rejected most of Knorozov's readings but vigorously attacked his basic theoretical stand. A second article in Sovietskaya Etnografia, 1955 gave a longer list of morphemic and phonetic readings. This text publishes in English those parts of Knorozov's monograph that deal directly with the decipherment.

Update: Both WFF and Thompson were wrong. It was Knorozov's approach that helped crack the secret of Mayan writing. See the article on Yuri Knorozov in Wikipedia.

Item 1195.1

Knorozov, Yuri V., "La Antigua Escritura de Los Pueblos de America Central," Copies from Boletin de Informacion de la Embajada de la U.R.S.S., Pages 5-17. Also Mapa Arqueologico del Territorio Maya. Spanish translation of the now famous Knorozov narrative relating his story of the Mayan "Ancient Writings of the Indians of Central America." Photostat Negative.

See the article on Yuri Knorozov in Wikipedia.

Item 1196

Anonymous, Mayan Miscellany regarding alleged solution of the Mayan hieroglyphics. Important: Many items herein having to do with the alleged solution to the Maya hieroglyphics.

Ten Items:

- 1) Article from Der Spiegel.
- 2) U.S. Dept. of Commerce joint report: Foreign developments in Machine Translation.
- 3) A Russian acclaims the great "success" of Mayan decipherment. Published in UNESCO Courier.
- 4) Report on the computer "decipherment" by Felix Shirokov who was not one of the three acclaimed for the computer work.
- 5) The London Times on 25 May 1961 raised a doubt about the Russian "feat."
- 6) Dr. Alfredo Barvera Vasquez, the greatest of the active Mayan scholars alive today, expresses doubt about the Russian "feat."
- 7) A brief summary of the studies of the Ancient Maya hieroglyphic writing in the Soviet Union. Both in Russian and English, 31 pp.
- 8) Correspondence between WFF and J.R. Pierce of Bell Laboratories, 6 pages.
- 9) Very important letters from Dr. Eric Thompson to WFF, September 20, 1962 and November 2, 1962, WFF letters to Dr. Thompson September 8, 1962, September 26, 1962, October 6, 1962 and October 15, 1962.
- 10) Comic sheet relating the Russian "feat" and stating the Soviet Academy will next try to solve the Easter Island Writings. –WFF's comment "NUTS."

Item 1197

Anonymous, Estudios de Cultura Maya, Volumes III & IV, Publication of the Seminar of Maya Culture, The National University of Mexico, August 1963.

NOTE: Volume III – Spanish; Volume IV – English. This periodical publication, highly important in the pursuit of the study of Maya archaeology, is published annually and is, at this writing (1969) in its sixth volume. The present work contains 19 specialized papers related to ancient Maya culture – six deal with archaeological manifestations, seven with Maya epigraphy and calendrics; four with ethnological or ethnohistorical aspects of post-Conquest Maya culture, one with an interpretative view of ancient Maya trade, and another with an historical note on the Carnegie Institute of Washington. Separate envelope containing receipt for the \$50.00 paid for the 4th Volume.

Item 1198

Thompson, J. Eric S., "Symbols, Glyphs and Divinatory Almanacs for Diseases in the Maya Dresden and Madrid Codices," Volume 23, 3, American Antiquity, January 1958, pp. 297-308, Talks about diseases sent from the gods. "Systems of Hieroglyphic Writing in Middle America and Methods of Deciphering Them," American Antiquity, 24, 4, (April 1959), pp. 349-361.

These two valuable papers by Dr. Eric S. Thompson were gifts to WFF by the author. Dr. Thompson was probably the greatest living authority on the Mayan hieroglyphics according to WFF.

The second paper discusses Knorozov approach on which Thompson was wrong.

Item 1199

Thompson, J. Eric S., A Catalog of Maya Hieroglyphs, Norman, OK: The University of Oklahoma Press, 1964. DJ.

This important book represents the latest, and best, effort to systematize the individual glyph elements that occur in the known body of pre-Conquest Mayan inscriptions, and the glyphs included are, in the element, whether main sign or affix is cataloged according to its graphic content, and the classificatory scheme is further enhanced by the inclusion—through the numerical system explained in the preface of the book—of the context in which any given element occurs thus making available the possibility of comparative "phrases" in the inscriptions or codices. Of great use in the present work is the collection of Thompson's system with other efforts to classify the Maya glyphs—that of William Gates (1931) and Gunter Zimmermann (1956). Although the former is little used by epigraphers at the present time, the latter is highly useful, though confined only to those glyphs that occur in the three known Maya manuscripts, or codices. "Expedition is set to old Maya City," New York Times, Sunday, December 8, 1957. Announcing Tulane-National Geographic excavation at Dzibilchaltun. "Dumbarton Oaks has rare Mexican Art Treasure," Washington Post, August 1, 1965. A carved Mayan limestone slab from the late classic Maya period from Kuna in Chiapas was stolen. It turned up in the Dumbarton Oaks Collection [The Robert Woods Bliss Collection]. It is not unusual for pre-Columbian Indian pieces in American collections to have been smuggled out of countries. They are usually acquired from dealers who are supplied by smugglers.

Item 1200

Gates, William, A Grammar of Maya. Printed at the private press of the Maya Society, Baltimore: June 1938, Publication No. 13, 192 pp.

This Mayan grammar is a publication by the Maya Society, the founder of which was the late and inimitable Dr. Gates, who was regarded by some persons as being worthy of being considered to be counted among the world's experts in Mayan hieroglyphs. Copy 30 of an

edition of 105 copies. Autographed by the author. A very beautiful example of the art of printing—all done by Gates himself.

Item 1201

The Maya Society, The Maya Society and Its Work, Baltimore: The Maya Society, October 1937, 32 pp.

An item relating to the study of Mayan hieroglyphics.

Item 1202

Landa, Friar Diego de (Translated by William Gates), Yucatan; Before and After the Conquest, Baltimore: The Maya Society, 1937, 162 pp.

One of the most valuable volumes of basic information for the study of Maya hieroglyphics. Bishop Landa arrived in Yucatan in 1562. Unfortunately, the Bishop's zeal as a missionary led him to destroy many hieroglyphic documents. This translation is copy No. 33 of a limited edition of 80 copies, with hand-colored reproductions. The added notes by Prof. Gates are useful. The book itself is an example of beautiful workmanship and is quite valuable.

Item 1203

Gates, William E., The Maya Society Quarterly, Volume I, Baltimore: The Maya Society at John Hopkins University, September 1932.

Only volume issued of this series, containing misc. papers related to Maya glyph studies and linguistics. This volume contains the following papers:

- No. 1 – The Thirteen Ahaus in the Kava Manuscript (pp. 2-20)
 - The Ancient History of the Yucatan (pp. 21-26)
 - Table for Verifying Maya Dates (pp. 26-28)
 - A Languin Kekchi Calendar (pp. 29-32)
 - Glyph Studies (pp. 32-36)
 - Birth of the Vinal (pp. 38-44)
- No. 2 – Ixcit Cheel, Rainbow Aunt (Maxcanu myth) (pp. 46-55).
 - Calendar and Nagualism of the Tzeltals (pp. 56-64)
 - A Kikchi Will of 1583 (pp. 65-68)
 - Natabal Nu-Tinamit (poem) (pp. 71)
 - Ixtlavacan Quiche Calendar of 1854 (pp. 72-75)
 - Pokonchi Calendar (pp. 75-77)
 - Eras of the Thirteen Gods and Nine Gods (pp. 78-92)
 - The Mayance Nations (with folding map) (pp. 97-106)
 - X'tabay (folk story) (pp. 107-111)

From Cahabon to Bacalar in 1677 (pp. 112-119)
 The Hummingbird and the Flower (pp. 120-122)
 The Testing of the Princes (pp. 123-146)
 Ahavarem Quautimalan (poem) (pp. 147-149)
 Bases of Maya Grammar (pp. 150-153)
 Glyph Studies (pp. 153-187)
 An Aztec Master Musician (pp. 182-187)
 The Landa Alphabet (picture only) (pp. 187)

Item 1204

Gates, William, An Outline Dictionary of Maya Glyphs, with a concordance and analysis of their relationships, Baltimore: The John Hopkins University Press, Maya Society Publication 1 (1931), 174 pp.

An impressive example of Dr. Gates meticulous work on the Mayan hieroglyphs. Autographed by the author in modern Mayan. No Item.

Item 1204.1

Gates, William, An Outline Dictionary of Maya Glyphs, with a concordance and analysis of their relationships, extracts from Maya Society Publication No 1, Baltimore: John Hopkins University Press, 1931, 108 pp.

A paper-bound copy of extracts from **Item 1204**. Autographed by author. No item.

Item 1205

Morley, Sylvanus Griswold, Morleyana, A Collection of Writings in Memoriam Sylvanus Griswold Morley, 1883-1948, Santa Fe: The School of American Research and the Museum of New Mexico, 1950.

This book contains a collection of informally written anecdotes, bibliography, and other records from the unusually rich life of this great scholar of the Maya. Included is Morley's own account of the Guatemala-British Honduras border skirmishing in 1916, in which Dr. Lafleur and another companion on the expedition were killed.

Item 1206

Cottrell, Leonard, The Bull of Minos, with introduction by Professor Alan Wace. The story of the great discoveries in Crete and Greece, London: Pan Books Revised Edition 1955. First published 1953 by Evans Bros. Ltd., 221 pp. PB.

Popular book on the discoveries on Crete Linear A, Linear B, Arthur Evans.

Item 1207

Chadwick, John and Michael Ventris, Documents in Mycenaean Greek, 300 selected tablets from Knossos, Pylos, and Mycenae with commentary and vocabulary, Cambridge: Cambridge University Press, 1956, 452 pp., DJ.

This book deals with the most recent and important feat in the decipherment of an ancient language. This book was a gift from the CUP. The last paragraph of the DJ strikes a very sad note: "This book was already printed and bound when Mr. Ventris was killed in a motor accident in September 1956." By profession Mr. Ventris was an architect and not a classical scholar just as Henry Rawlinson, an Army officer and government official had been. See **Item 1715**, on Chadwick. See also clipping dated 1965 regarding book printed in 1965, pasted inside copy on fly leaf and **Item 1109**.

Item 1208

Freeman, John Finley, "Manuscript Sources on Latin American Indians in the Library of the American Philosophical Society," Proceedings of the American Philosophical Society, 106, 6, (December 12, 1962), pp. 530-540.

It is appropriate that the great THINK Society founded by Benjamin Franklin should house in its library very large manuscript collections, dating from the 16th century to the present. The history narrative notes preceding the bibliography contains much enlightening information. 2 copies. Original journal.

Item 1209

Thompson, J. Eric S., "Maya Hieroglyphics Writing," Handbook of Middle American Indians, Robert Wauchope, general editor, Volume 3, Archaeology of Southern Meso-America, Part 2, Austin: University of Texas Press, 1965, pp. 632-658.

Eric Thompson was chief archeologist of Carnegie Institution for many years. When Carnegie went out of American Archaeology completely (about 1965) Dr. Thompson returned to his native land (England). WFF felt conduct of this sort unworthy of Carnegie Institution. Gift of James Truit. 17 July 1968. (s) 19 July 1968, WFF. Xerox Copy.

Item 1210

Wolff, Werner, Dechiffrement de L'Escriture Maya, Librairie Orientaliste Paul Geuthner, Paris: 308 pp., Separate volume of plates 1938.

Correspondence enclosed reveals the opinion of Dr. J. Eric S. Thompson, greatest living Maya scholar, had a very low opinion of Wolff's work. Thompson states Wolff had better stick to the interpretation of doodling, which was one of Wolff's accomplishments. 2 volumes.

Item 1211

Spinden, Herbert J., The Ancient Civilization of Mexico and Central America, New York: American Museum of Natural History Hard book series, No. 3, 1917. 2nd revised edition.

Though largely outdated by research that has taken place since its publication, this small popular account of the area between central Mexico and the Central American frontier is a readable introduction to the ruins and antiquities of that large and important area, and the illustrations are profuse and good.

Item 1212

Blom, Franz, The Conquest of Yucatan, Boston: Houghton Mifflin Company, 1936, 238 pp. Indexed. DJ.

A popular account of the history of the conquest of the Yucatan Peninsula and the Maya by the Spanish *Conquistadores* during the 16th and 17th centuries. The work also contains a brief outline of the salient characteristics of Maya civilization as it existed before the Conquest, along with some photographic illustrations of some of the more important remains. The work, though somewhat out of date at the present time (1960s?) is still fairly good for the historical accounts of the conquest. The archaeological data is more out of date, and the reader is referred to the work "The Rise and Fall of the Maya Civilization" by J. Eric S. Thompson for a more recent treatment of the subject. It might be noted that Blom, at the time this book was written, was director of the Middle American Research Institute, Tulane University, an agency that was involved in much key work in the Maya area at that time and at the present. Much in the way of fresh primary source material was, therefore, available to Blom for the compilation of the present work. Added note: The FC contains almost 200 items dealing with the civilization of the ancient Central America people known as the Maya. Their system of hieroglyphic writing, except for that dealing with their method of indicating dates (Calendrical glyphs) has thus far resisted any attempts at decipherment. The glyphs representing numbers, days, and months are now well understood. In the collection is also a reproduction of each of the three, and only three, Maya codices which the world now possesses.

Update: see Wikipedia entry on Yuri Knorozov for the history of the decipherment.

Item 1213

Morley, Sylvanus G., The Ancient Maya, Stanford University Press, 1946. No DJ.

This book is, if not the latest, certainly the classic popular account of ancient Maya civilization, and its sheer readability still makes it a valuable contribution. From a more recent version of the same material, however, the reader is referred to the third edition of the same work, edited by George Brainard, which appeared in 1956.

Item 1214

Stephens, John L., Incidents of Travel in Central America, Chiapas, and Yucatan, New York: Harper Bros., 1841, Volume I, pp. 424; Volume II, 474 pp.

The first edition of a two-volume work of enormous historical interest and importance in connection with the Maya civilization and Maya hieroglyphic writing. These volumes have wonderful engravings by Catherwood, the English artist who accompanied the author. This exceedingly important work here represented in the first of many editions that span the period from 1841 to the present is not only a superb travel narrative but the foundation stone of Maya archaeology. The journey it treats was accomplished by Stephens and the artist Frederick Catherwood during the period 1839-1840, when much of Central America was in political chaos and the ruins that dotted the rain forest had received virtually no publication. The text by Stephens is exceptionally valuable for its descriptions of the land and peoples encountered on the arduous trip. The illustrations by Catherwood have proven so accurate that inscriptions damaged or destroyed since the journey can be almost totally restored on the basis of the present engravings. This is a superb tribute to Catherwood, who was drawing not only totally unfamiliar symbols, but rendering an art style that was not rooted in the Western tradition that formed the background of virtually all the early travelers who tried their hand on the same material with often indifferent, and sometimes ludicrous results. VALUABLE.

Item 1215

Charnay, Desere, Translation by J. Gonino & Helen S. Conant, The Ancient Cities of the New World, being voyages and explorations in Mexico and Central America from 1857-1882, New York: Harper & Bros., 1887, 514 pp.

More source material for the study of Maya hieroglyphic writing. This work represents the travels of an extremely observant man who visited virtually every important ruin of Mexico and Central America before they were generally known about or explored by travelers or archaeologists. The book is not accurate in terms of modern archaeology, of course, for nearly all the research that has taken place began after the turn of the century, but the accounts of the buildings and temples, sculptures and inscriptions provides valuable glimpses of monuments that have, since Charney's journey, fallen to ruin.

Item 1216

Thompson, J. Eric S., Maya Hieroglyphic Writing: Introduction, Carnegie Institution of Washington, 1950.

WFF believed this book was the definitive, monumental work on the subject. The revision of the work (University of Oklahoma Press, 1960) differs from the original only by virtue of a preface that reviews work done in Maya epigraphy between 1950 and 1960, and addenda to the original bibliography.

See Wikipedia entry on Yuri Knorozov for the definitive decipherment.

Item 1217

Thompson, J. Eric, Sky Bearers Colors and Directions in Maya and Mexican Religion, Carnegie Institution of Washington, Contributions to America Archaeology, No. 10, 1934. Off print.

This relatively short paper treats an important interpretative aspect of Ancient Mexican culture. The tying together of cosmic concepts with mythology and folklore, and the combined expression of both inscriptions from both Central Mexico and the Yucatan Peninsula. Despite the 35 or so years that had passed since its publication, WFF believed that the subject as presented could be little modified on the basis of new evidence, and the paper remained a landmark publication, subject to expansion rather than modification in recent works.

Item 1218

Thompson, J. Eric, Maya Chronology: The Fifteen Tun Glyph, Washington, DC: Carnegie Institution of Washington, Contribution to American Archaeology, No. 11, 1934, pp. 245-254.

This paper concerns a particular Maya glyph form that Thompson demonstrates as representing a time period interval of 15 Tuns, presented here has proved to be essentially correct.

Item 1219

Thompson, J. Eric, Maya Chronology: The Correlation Question, Washington, DC: Carnegie Institution of Washington, Contributions to American Archaeology, No. 14, 1935, pp. 55-104.

This paper, actually a collection in several parts, is concerned with the key problem of Maya Chronology – the correlation of the Christian Calendars. In all, four general approaches to that problem are discussed and these contributions form an appendix to the principal title paper by Thompson. Included in the latter are the Astronomical Approach, by Thompson; Maya Planetary Observations, by Laurence Reys; Remarks on the Correlation Question, by Lang; and the Maya

Year Bearers, again by Thompson. It might be added here that the problem of Maya and Christian Chronological correlation has not been solved to the satisfaction of all even by the beginning of 1970. The Thompson correlation – actually the Goodman Martinez Hernandez. Thompson correlation – still vies with the Spinden as the likely choices. This collection of papers, as might be gathered from the author list, favors the former, as do recent radio carbon dates from the Classic Period site of Tikah.

Item 1220

Teeple, John, Maya Astronomy, Extract from Contributions to American Archaeology, Volume I or Publication 403 of the Carnegie Institution of Washington, Washington, DC, 1931, pp. 31-115.

A highly technical account of astronomical data contained in the Maya Calendrical inscriptions. Teeple, though untrained in Maya studies, became interested in this very specialized aspect of them, and made this classic contribution, which remains extremely valuable and useful, even after some 40 years.

Item 1221

Morley, Sylvanus G., The Inscriptions of Peten, Washington, DC: The Carnegie Institution of Washington Publication, No. 437, 1937. Plates and Maps only.

The complete set of this notable work in Maya epigraphy consists of five separate volumes, four of text and figures, and one of photographic plates and maps. The present work is only the latter, and includes 178 photographic plates and 30 maps. These are quite valuable, for the photographs are often the best available for any given monument that is discussed in other volumes and the maps, though somewhat out of date in terms of modern surveys in northern Guatemala, are quite detailed.

Item 1222

Carnegie Institution of Washington, Contributions to American Archaeology, Washington, DC: Carnegie Institution of Washington, 1937, Volume IV, pp. 20-23, 220 pp., Publication No. 483.

Contains 4 articles:

No. 20: Smith A. Ledyard, “Structure A-XVIII Vaxactun,” pp. 1-27.

No. 21: Beyer, Herman, “Studies in the Inscriptions of Chicken Itza,” pp. 29-175.

No. 22: Thompson, J. Eric, “A New Method of Deciphering Yucatan Dates with special reference to Chicken Itza,” pp. 177-197.

No. 23: Teosinte in Guatemala, Report of an Expedition to Guatemala, El Salvador, and Chiâpas, Mexico, by J.H. Kempton and Wilson Popenoe, pp. 199-218.

Item 1223

Smithsonian Institution, Annual Report of the Board of Regents of the Smithsonian Institution, showing the operations, expenditures and condition of the Institution to July 1893, Washington, DC: GPO, 1894, 760 pp.

This and the following two books (**Items 1224 and 1225**) have items which are of interest in connection with the study of Maya hieroglyphics. Pp. 617-618.

Item 1224

Smithsonian Institution, Annual Report of the Board of Regents of the Smithsonian Institution showing the operations, expenditures and condition of the Institution for the year ending June 30, 1903, Washington, DC: GPO, 1904, 876 pp., pp. 705-721 on hieroglyphics and Maya.

Item 1225

Smithsonian Institution, Annual Report of the Board of Regents of the Smithsonian Institution, showing the operations, expenditures and condition of the Institution for the year ending June 30, 1915, Washington, DC: GPO, 1916, 544 pp. See **Item 1223**.

Item 1226

Morley, Sylvanus Griswold, The Inscriptions at Copan, Washington, DC: Carnegie Institution of Washington, 1920, Publications No. 219, 643 pp. See **Item 1213**. PB.

Autographed by author: "To my friend and I trust colleague to be W.F. Friedman."
Inscriptions from all periods. The "hotun" or 5 year periods. Correlations of Mayan and Christian calendars.

Item 1227

Powell, J.W., First American Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1879-1880, by J. W. Powell, director, Washington, 1881.

The first volume of 48 that were issued by the Smithsonian Institution's Bureau of American Ethnology containing important research publications related to New World archaeology and ethnology. The present volume contains six major contributions, of which the most significant are Yarrow's study of the mortuary customs of the North American Indian, and Mallery's lengthy monograph on the sign language of the North American Indian. A shorter study by

Holden bears upon the subject of Central American picture writing. P. xxv. "Studies in Central America Picture Writing."

Item 1228

Powell, J.W., Tenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1888-1889, by J.W. Powell, director, Washington, 1894.

This tenth of the 48 major annual publications of the now defunct Bureau of American Ethnology is devoted to the more than 800 page article by Mallery on the picture writing of the American Indian. Though quite out-of-date in terms of modern archaeological and linguistic research, the book is valuable for its profuse illustrations of pertinent material – a total of 54 plates and 1290 figures. Mallery xxvi-xxx. Maya pp. 645-647, 756. Mexican and Central American pictographic writing, p. 665.

Item 1229

Seler, Eduard, E. Forstemann, Paul Schellhas, Carl Sapper, and E.P. Dieseldorff. Translated for the German by Charles P. Bowditch, Mexican and Central American Antiquities, Calendar Systems, and History, Washington, DC: GPO, 1904, 682 pp.

An English translation of Charles P. Bowditch of an illuminating work by German scientists. One of the most important items in the study of Mayan hieroglyphs. This publication represent the first important collection in English related to the study of Mexican and Mayan writing and calendar material. In all, there are twenty-four papers by Eduard Seler, Ernst Forstmann, Paul Schellas, Carl Sapper and E.P. Dieseldorff, all foremost German scholars of the important early period of intensive Mesoamerican Studies.

Item 1230 & 1230.1

Hodge, Frederick Webb, Handbook of American Indians North of Mexico, edited by Frederick W. Hodge, Washington, DC: Smithsonian Institution, The Bureau of American Ethnology, Bulletin 30, (1907), 2 Volumes.

Although early in terms of modern anthropological work, this is a basic and invaluable tool of reference in regard to the study of the ethnology of the North American Indian, if for no other reason than it was compiled at the time when much data on the subject was still available, and the subject had been a little influenced by alphabetic entries A-M and N-Z, respectively.

Item 1231

Morley, Sylvanus Griswold, An Introduction to the Study of Maya Hieroglyphics, Washington, DC: Smithsonian Institution, The Bureau of American Ethnology, Bulletin 57, 1915. 284 pp.

The pioneer study by the then-foremost Mayanist of the subject of Maya writing before the conquest. The work is largely limited to an exposition of the calendar system and its expression in inscriptions that date the stone monuments of the classic period sites of northern Guatemala and the important subject of non-calendrical material (then largely unknown) is not touched upon. Despite its early date the book remains perhaps the clearest treatment of its subject for the beginning student.

Item 1232

Gann, Thomas W.F., The Maya Indians of Southern Yucatan and Northern British Honduras, Washington, DC: Smithsonian Institution, The Bureau of American Ethnology Bulletin 64, 1918, 146 pp.

This work, as do most ethnographies, still has real value for the study of the modern customs of a relatively little known segment of the Maya population of southeastern Mesoamerica. Its author was actually a medical doctor and amateur archaeologist who spent most of his life in British Honduras.

Item 1233

Roys, Ralph L., The Book of Chilam Balam of Chumayel, Washington, DC: Carnegie Institution, (November 1933), 230 pp. 2 copies.

After the Spanish had conquered and burned all the “books” of the Mayans, this Indian population had nothing which they could call their native history. “The Books of Chilam Balam” were repeated from memory and form most nearly the period and thought of the Ancient Maya. Autographed to WFF by the author. Added note: The best available translation and annotation of the most valuable of the early Conquest period native chronicles of the Yucatec Maya. The book is invaluable as a source on Maya tradition and history as reconstructed from the myths and tales that date from pre-Spanish times in the Yucatan Peninsula. Of all the chronicles, or “Books of Chilam Balam,” the Chumayel is certainly the most useful for the scholar seeking data on the chronology of Yucatecan history. The book has recently been reprinted by the University of Oklahoma Press.

Item 1234

Gates, William E., Miscellaneous material, mostly related to the Outline-Dictionary of Maya Glyphs, as follows:

1. Nine pieces: Perez Codex, Glyph Sequence work sheets with number squares.
Twenty pieces: individual sheets of printed edition of Perez Codex black and red only marked “Duplicated for clipping,” Twenty-one pieces: Perez Codex glyph sequence work sheets, ten with glyphs in squares, eight partially filled, and three

- blank.
2. Galley proofs of Glyph Dictionary, 1925 same dated October 1st, 1930, marked “used in Canada,” Misc. lot of individual galley proof sheets.
 3. *Editio princeps* of Outline Glyph Dictionary, Perez Codex portion. Three separate units are included, one of seven sheets, marked “Editio princeps” in pencil on verso; one of eleven sheets; and one of five sheets inscribed, “Gift of William Gates, Aug. 15, 1935.”
 - 4 & 5. Transparent folder containing typewritten MS of nineteen pages, titled “Madrid Codex” Analysis of “Pictures in the Tzolkins,” another five pages (plus one card) is “Analysis of Pictures in the Dresden Codex,” August 15, 1935.
 6. Schematic Outline of Dresden Codex, consists of folder of pages from The Dresden with glyph pictures stuck on.
 7. Schematic outline of Dresden Codex, same as above but sheets are black.
 8. News clipping, May 2, 1935, concerning Gates vs. Frans Blom on subject of long-lost key “to Maya hieroglyphic writing.” The Washington Post Magazine section. Gates brought to light the work of an obscure Spaniard of the 17th C. named R. Gomesta. His work explains Mayan picture signs in Spanish.

Item 1235

Ruppert, Karl, The Caracol at Chichèn Itzà, Yucatan, Mexico, The Carnegie Institution of Washington, Publication 454, Washington: 1935, 294 pp.

This large work is a detailed account of the excavation and restoration of the so-called observatory, one of the principal buildings at the ruins of Chichèn Itzà, northern Yucatan. Profusely illustrated with photographs, drawings, plans, etc. it is mainly descriptive and does not go into actual interpretation of the ruin in terms of the known prehistory of Chichèn Itzà. A supplement deals with the few inscriptions found in the course of excavation.

Item 1236

Burland, C.A., Magic Books from Mexico, Penguin Books, 1953, 31 pp. with 16 plates. DJ.

Apparently this is the first time that the works depicted in these ancient Mexican books have been presented to the general public. The author describes briefly each of the plates and makes comments. This book was a gift to WFF from Brig. John Tiltman and is autographed. A short, well-designed introduction to the art and content of the Pre-Conquest books produced in Mexico by the cultures of the Aztec and Mixtec. Selected pages, with accompanying explanations, are included from a variety of manuscripts, and the color reproduction, while not true to the originals, is well done. The small format of the book and the clear exposition of its contents and scope provide a good “first book of the Mexican codices.”

Item 1237

Scogging, C.E., The Red God Calls, Indianapolis: The Bobbs-Merrill Company, 1926, 264 pp. No DJ.

A romance based upon ancient Mayan history and customs.

Item 1238

British Museum.

A series of post cards dealing with the ancient Maya of Central America, London: Purchased from British Museum by WFF on his visit in 1953. NO ITEM.

Item 1239

Tozzer, Alfred M., A Maya Grammar, with bibliography and appraisal of the works noted. Cambridge, MA: Harvard University, Papers of the Peabody Museum of Archaeology of Ethnology, 9 (1921), 301 pp.

This book is the first study published in English of the grammar of Yucatec Maya. Tozzer's pioneering work, based on information of Maya speakers from Valladolid, Yucatan, is supplemented by data presented in early Spanish works on the subject, notably the Grammars of Corenel, (1620), Beltran de Santa Rosa, (1859); and Lopez Otero, (1914). Many of the data contained in this book have been re-studied in the light of more recent developments in the linguistic sciences by the long-term program currently in progress at the University of Chicago. The major value of this work by Tozzer is its annotated bibliography of works related to the Maya Language contained in a second section that comprises the largest section of the book. The coverage is exhaustive up to the date of publication, and provides the book with everlasting value for scholars of the Maya language. Red leather bound.

Item 1240

Beyer, Hermann, "Mayan Hieroglyphs," Glyph G₈ of the Supplementary Series. Reprint from American Anthropologist, 38, 2 (April-June, 1936), pp. 247-249.

This is a paper which deals exclusively with one hieroglyph of the calendrical series.

Item 1241

Beyer, Hermann, "Decipherment of a greatly-damaged inscription at Palenque," n.d., pp. 1-6.

The author was one of the well-known scholars who specialized in the ancient Maya writing, and whose attempts to decipher that writing were, like those of many others, unsuccessful. Journal – inscription from House A of the Palace at Palenque.

Item 1241.1

Beyer, Hermann, Eine weitere Mayahieroglyphe für, "Tag," n.d., pp. 7-10. See **Item 1299**.
This is the German version of the same article. NO ITEM.

Item 1242

Gates, William E., "Commentary Upon the Maya-Tzental Perez Codex, with a concluding Note upon the Linguistic Problem of the Maya Glyphs," Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, Volume 6, No. 1, Cambridge, MA: Published by the Museum, November 1910, 64 pp. 2 copies.

This short paper is a discussion of the pre-Cortesian Maya manuscript now commonly called the Codex Paris, and should not be confused with the post-Conquest collection of Maya Chronicles called the Codex Perez. In the present work, Gates presents a description of the manuscript itself, its colors, and some of the patterns of occurrence he notes in its glyphic text. The work is less an interpretation than a body of suggestions for approaching an interpretation of the manuscript. It should be used with the Gates reproduction of the codex, of which there is a copy in the FC.

Item 1243

Gruyter, W. Jos. De, A New Approach to Maya Hieroglyphs, Uitgeverij H.J. Paris: Amsterdam, 1946. 71 pp.

This small book is an attempt to elicit the phonetic equivalents of certain graphemes, or glyph elements, in the corpus of Maya inscriptions. In it, the author brings together various specific glyphs, and attempts to equate them with phonetic elements in Yucatec as well as other lowland, and some highland Maya dialects. From a rapid perusal of the work, it appears that some of the chains of reasoning developed by the author for his thesis are flawed by an implicit assumption that the exact phonemes of the present day dialects held their identical values through the whole range of pre-Spanish Maya culture – a span of some 1,200 years – from the Classic Period inscriptions of the large stone monuments to the manuscript books or codices, that date from the Post Classic Period. The scholarship of de Gryter has not been incorporated into the mainstream of productive studies established by the principal scholars of Maya epigraphy.

Item 1244

Field, Henry, The Early History of Man, with special reference to the Cap-Blanc Skeleton. Anthropology Leaflet 26, Chicago: Field Museum of Natural History, 1927, 19 pp.

This is one of the items of archaeological interest in the FC. Compare **Item XXX** ESF's Teacher. Soft cover. On the Cap-Blanc Skeleton, flint implements, the Chellean Period, The Aurignacian Period, the Magdalenian Period, and the Neolithic.

Item 1245

Maudslay, Alfred Percival, British Museum Guide to the Maudslay Collection of Maya Sculptures (casts and originals) from Central America, Oxford: Oxford University Press, 1923, 93 pp., 8 plates, 20 illustrations, 1 map.

There are many examples of Maya sculptures in the British Museum. NO ITEM.

Item 1246

Benedict, Ruth, Tales of the Cochiti Indians, Smithsonian Institution, Bureau of America Ethnology, Bulletin 98, 71st Congress, 3rd session, House Document 580, Washington, DC: GPO, 1931, 256 pp.

This book has nothing to do with the WFF Maya collection, but it contains some very interesting American Indian myths worth preserving.

Item 1247

Satterthwaite, Linton Jr., Concepts and Structures of Maya Calendrical Arithmetics, Joint publication of the Museum of the University of Pennsylvania and the Philadelphia Anthropological Society, No. 3, Philadelphia, PA Univ. Museum, 1947, 168 pp.

This brochure should assist one greatly in understanding the subject of Mayan calendrical arithmetic.

Item 1248

Tozzer, Alfred M., "The Value of Ancient Mexican Manuscripts in the study of the general development of writing," Reprint from: American Antiquarian Society, (April 1911), Worcester, MA: pp. 493-506.

Item 1249

Spinden, Herbert J., "Maya Inscriptions Dealing with Venus and the Moon," Bulletin of the Buffalo Society of Natural Sciences, 14, 1 (1928), pp. 5-59.

The author was one of the great authorities on Maya ancient civilization, grammar and writing.

Item 1250

Villacerta, C.J. Antonia; y Carlos A. Villacorta, Codices Mayas Dresdensis-Peresianus, Tro-Cortesilanus, Reproducidos y Desarrollados, Guatemala, CA: 1930.

This book provides page-by-page reproductions, in black and white, of the three extant Maya hieroglyphic manuscripts, the Dresdensis or Dresden, the Tro-Cortesianus or Madrid, and the Perez or Paris. The inclusion of all three of these in a single volume is unique, and makes the work highly useful to the student of Maya epigraphy. Explanatory charts, one for each codex leaf, accompany the reproductions and show color differences that occur in the numerical notations throughout the manuscripts. For full treatment of the colors, other editions must be consulted.

Identifications of various duties depicted are based on the classification by Schellas, 1904 (**Item 1273**) and subsequent interpretations of chronological data in the manuscripts are summarized by Thompson, 1950 (**Item 1216**). The accuracy of the reproductions in the Villacerta y Villacerta edition is quite high, since they represent tracings of good photographs of the originals. No attempt has been made to extrapolate missing detail and this enhances rather than detracts from the value of the work. The content of *Codices Maya* appeared as a series of short sporadic installments in various numbers of the journal *Anales de la Sociedad de Geographia e Historia de Guatemala*, in the early 1930s. The book, originally produced as an inexpensive aid for students, has become increasingly rare since about 1950. The paper upon which this book was printed varies in quality, not only from copy to copy, but often within the same copy. Thus, care must be taken in turning those pages that have become yellowed and brittle. Check Conservation Concerns!

Item 1251

Whorf, Benjamin Lee, "The Phonetic Value of Certain Characters in Maya Writing," *Papers of the Peabody Museum of American Archaeology and Ethnology*, Harvard University, 13, 2 (1933), 48 pp.

It is believed that the author's work, which purports to give at least a partial decipherment of Maya hieroglyphic writing, has not been accepted by other experts on Maya writing.

Item 1252

Spinden, Herbert J., "The Reduction of Maya Dates," *Papers of the Peabody Museum of Archaeology and Ethnology*, 6,4 (1924), 286 pp.

This work represents a rather thorough treatment of the mathematics and astronomy employed in the Maya calendrical inscriptions, along with tables that give the Christian equivalents of Maya Long Count dates (according to the Spinden Correlation, of course).

Item 1253

Morley, Sylvanus G., *Guide Book to the Ruins of Quirigua*, Supplementary publication of the Carnegie Institution of Washington, DC: 1935, 2 copies.

This represents the best, and most thorough, guide to one of the most important of the Maya ruins, those of Quirigua, located in eastern Guatemala. The work not only describes the visible remains of buildings at the site in great detail, but presents the content of the glyphic inscriptions that represent a long range of dates for the place. The illustrations are quite good, particularly those of the unique sandstone stelae that distinguish Quirigua from all other Classic Period Maya sites.

Item 1254

Thompson, J. Eric, The Civilization of the Mayas, Anthropology Leaflet 25, Field Museum of Natural History, Chicago: 1927, 110 pp.

At the time of its publication, this work was the first general synthesis of Maya civilization for the lay reader, and it reflected the latest discoveries made in the field up to that year. Subsequent work by the Carnegie Institution of Washington in northern Yucatan and the Peten as well as excavations by the Mexican government, have done much to modify and refine many of the basic reconstructions of Maya culture history, and this early work has been superseded by several comprehensive works that have appeared since, among them Sylvanus G. Morley's The Ancient Maya (**Item 1213** in the FC) and J. Eric Thompson's The Rise and Fall of Maya Civilization (**Item 1186** in the FC) is a Spanish version of the work. The 1927 synthesis by Thompson stands as an early milestone in the study of Maya culture by one who, forty years later, stands as the doyen of Maya Studies.

Item 1255

Forstemann, Ernst, "Commentary on the Maya manuscript in the Royal Public Library of Dresden," Papers of the Peabody Museum of Archaeology and Ethnology, 4, 2 (1906), 268 pp.

This work represents the key early contribution of the first great scholar of Maya epigraphy. Forstemann had access to the pre-Conquest Maya manuscript still called the Dresden Codex, and from it elicited not only the calendrical notation employed by the Maya, but offered many interpretations of other passages as well. The present work is a detailed account of the manuscript, page by page, and is still quite valuable. The present account will perhaps be outdated when a similar work by J. Eric Thompson is published, at this writing (June, 1970) the latter work is in press.

Item 1256

Gates, William, The William Gates Collection. Manuscripts, documents, printed literature relating to Mexico and Central America; with special significance to linguistics, history, politics, and economics, covering the five centuries of Mexico civilization from Aztec period to the present time, with reproductions. American Art Association Inc, New York. Professor Gates had

one of the largest private collections of this material in the world. It seems unfortunate that it was all dispersed at the auction which took place after his death. Marked MISSING.

Item 1257

U.S. Government, List of Publications of the Bureau of American Ethnology, with index to authors and titles, Washington, DC: GPO, 1923, 45 pp.

This bibliography may be of considerable interest to students of American ethnology.

Item 1258

Carnegie Institution of Washington Annual Report of the Division of Historical Research, Section of Aborginal American History, Reprint from Year Book No. 31, 1931-32, December 9, 1932, pp. 89-119.

Item 1259

Gates, William E., Conceps Linguistiques dans l'Amerique Ancienne, Congress International d'Anthropologie d'Archeologie prehistoiques, Compte Rendu de la XIV Session, Geneva 1912, 8 pp. Autographed by the author.

Item 1260

Gates, William E., The Gates Collection of Middle American Literature: Section A,

This unbound pamphlet consists of an alphabetical listing of photographic reproductions of manuscripts related to the Maya Language, and dating between 1520 and the 19th century. This vast and unique collection assembled by Gates is now housed at Princeton University. Plans are underway between Princeton and Yale to publish much of the material that it may be made available to scholars.

Item 1261

Gates, William E., Rural Education in Mexico and the Indian Problem, November 5, 1934.

A lecture given at Johns Hopkins University, November 5, 1934 and later printed in Mexico, 1935.

Item 1262

Tax, Sol (edited by), The Civilizations of Ancient America, Selected papers of the 29th International Congress of Americanists, Chicago: The University of Chicago Press, 1951, 328 pp.

This publication contains numerous articles of leading importance in the study of early cultures in Mexico, Central and South America.

Sculpture, archaeology, inscriptions. Linton Satterthwaite, Mean Ages of the Maya: the problem of their Seven-Day Range of Deviation from Calculated Mean Ages, p. 142.

Item 1263

Gates, William E., Codex Perez, Maya Tzental, Point Loma, 1909.

Reproductions of pages from the Perez Codex. Autographed "To William F. Friedman from William Gates, 1935." The FC contains many Gates items, including the entire set of the beautiful Maya Society Publications, as well as the Gates edition of the Dresden Codex.

Item 1264

Friedman, William F. and William Gates, Mayan hieroglyphics, the Study of (1934-1941). Some clippings included. Part I.

Letter December 14, 1941 to Edith R. McComas (sister of Dr. Gates). "We are all working hard but it is good to see how a virile democracy can gird its loins, and speedily we go on a seven-day-a-week basis tomorrow and nowhere have I heard a murmur of even dismay, let alone opposition. What will come out of all of this?" Another prediction: a practical realization and recognition that all men are brothers – a Government of the World. Obituary of Dr. Gates.

Item 1265

Woodbury, Richard B. and Aubray S. Trik, The Ruins of Zaculev, Guatemala, United Fruit Co., 1953, 2 volumes, boxed set.

These two volumes, one of text, the other of illustrations, comprise the trial report on the archaeology and artifacts of this important ceremonial center of the Highlands of Guatemala, excavated and restored by the United Fruit Company. Though not a work that would be considered broad in its interpretative material, it is an important contribution to the factual data on Meso-American archaeology.

Item 1266

Carnegie Institution of Washington, Pottery discovered in Ancient Maya Grave, Carnegie Institution of Washington, News Service Bulletin, School edition, Volume II, No. 36, December 18, 1932, pp. 245-250, 4 plates. Check date of Carnegie Institution. Newspaper article inside publication.

Item 1267

Anonymous, Maya Hieroglyphic Problem, Miscellany of clippings related to the problem of the solution of the non-calendrical Maya hieroglyphs, c. 1933, NY Times Magazine.

Item 1268

Covarrubias, Miguel, Mexico South: The Isthmus of Tehuantepec, London, Toronto, Melbourne: Cassell & Company, n.d., 427 pp. DJ.

This book contains many drawing and paintings by the great artist who was also the author; also a section devoted to the archaeology of southern Mexico. Though the author was primarily an art Historian (and artist), rather than an archaeologist, this work remains essentially correct in its archaeological conclusions concerning the Olmec remains of this area of Mexico. In addition, the superb ability of Covarrubias as a writer makes it the best available account of one of the most interesting areas of Mesoamerica. The scope of the work is not merely archaeological, but ethnological and historical, and the whole is a cohesive and very pleasurable account of the area. This book contains many drawings and paintings by the great artist who was also the author; also a section devoted to the archaeology of southern Mexico.

Item 1269

Woolley, Sir Leonard, A Forgotten Kingdom, being a record of the results obtained from the excavation of two mounds, Atchana and Al Mina, in the Turkish Hatey, Melbourne, London, New York, and Baltimore: Penguin Books Ltd, 1953, 200 pp.

Separate Folder under **1269** contains one newspaper article about Touareg tribe being able to read hieroglyphics.

Item 1270.1

Beger, Hermann, The infix in Maya hieroglyphs; infixes touching the frame, Reprint from Proceedings of the 23rd International Congress of Americanists, September 1928, pp. 193-199. MISSING.

Item 1270.2 (1)

Beyer, Hermann, "Two High-Period Series at Palenque," El Mexico antiguo, Tome 4, No. 5-6, April 1938, Mexico: pp. 145-154.

An article in a now defunct journal. It deals with the calendrical system of the ancient Maya civilization. MISSING.

Item 1270.2 (2)

Beyer, Hermann, "Das zeichen für zwanzig in den Maya-inschriften," El Mexico antiguo, Tome IV, No. 5-6, April 1938, Mexico: pp. 155-161.

An article in a now defunct journal. The article deals with the ancient Maya hieroglyph for the number 20. MISSING.

Item 1270.2 (3)

Reko, Dr. B.P., "Star names of the Chelam Balam of Chumayel," El Mexico Antiguo, Tome 4, No. 5-6, April 1938, Mexico: pp. 163-178.

An article on the ancient Maya civilization published in a now defunct journal. MISSING.

Item 1270.2 (4)

Lehmann, Walter, "La antigüedad histórica de las culturas Gran-Mexicana's y el problema de su contacto con las culturas Gran-Peruanas," El Mexico Antiguo, Tome 4, No. 5-6, April 1936, Mexico: pp. 179-198.

An article on ancient Mexico and its relations with ancient Peru, set forth in a now defunct journal. MISSING.

Item 1270.2 (5)

Schultes, Richard Evans, "Peyote: An American Indian Heritage from Mexico," El Mexico Antiguo, Tome 4, No. 5-6, April 1936, Mexico: pp. 199-208.

An article on ancient Mexico in a now defunct journal. MISSING.

Item 1270.3

Beyer, Hermann, The Analysis of the Maya Hieroglyphs, Reprint from: Internationales Archiv für Ethnographie, 31 (1930), Leiden: E. J. Brill Ltd., 1930, 20 pp., 6 plates.

An attempt to make headway in the solution of Maya hieroglyphic writing. MISSING.

Item 1270.4

Roys, Ralph L., Personal Names of the Maya of Yucatan Contributions to American Anthropology and History, No. 31. (Reprint from: Carnegie Institution of Washington Publication 523, pp. 31-48, June 10, 1940). Autographed by the author. MISSING.

Item 1270.5

Rays, Ralph L., Place Names of Yucatan, Maya Research (Mexico and Central America), Volume 2, No. 1, January 1935, New York Pub. of Alma Egan Hyatt Foundation, 10 pp.

Autographed by author. MISSING.

Item 1271

Morley, Sylvanus G., Thirty-nine Maps of the Maya area and some of the principal sites of the old Maya empire, cross-sections, and architectural restorations. Reprint from: The inscriptions of Peten, Carnegie Institution of Washington, Publication No. 437, published in 1935.

The late Dr. Morley was one of the great authorities on archaeology. These maps are believed to be historically valuable as pre-printed from a book produced several years later by Morley, who was for a short time a friend of WFF.

Item 1272

Gates, William (compiled by), The Maya and Tzental Calendars Composing the complete series of days, with their positions in the month, for each one of the fifty-two years of cycle, according to each system. Cleveland: 1900. Autographed to Major & Mrs. Friedman. "A copy of my first Maya book – and may you produce many." William Gates, July 7, 1935. MISSING.

Item 1273

Schellhas, Paul, Representation of Deities in the Maya manuscripts, Papers of the Peabody Museum of Archaeology and Ethnology, 4, 1 (1904), 47 pp.

This work by Schellhas, originally in German, was the first classification of Maya deities derived from the Codices. The terminology by letters, used here has become the standard for the literature, and the basis for more recent and more extensive treatments of the subject, particularly in the work by Gunter Zimmermann, entitled: Die hieroglyphen der Maya-Handschriften (Hamburg: 1956) and that by Ferdinand Anders, Das Pantheon der Maya, Graz, 1963.

Item 1274

Richeson, A.W., "The Number System of the Mayas," American Mathematical Monthly, (November 1933), pp. 542-546.

A paper intended to acquaint some of the members of the American Mathematical Association with the numerical system of the ancient Mayas. Photostat Negative. Clipping in file from N.Y. Times "Illinois Pyramids Linked to Aztecs."

Item 1275

Morley, Sylvanus Griswold, "The Foremost Intellectual Achievement of Ancient America," National Geographic Magazine 41, 2 (February 1922), pp. 109-130.

This early article by the great Dr. Morley is of great historical importance in the study of the ancient Mayan civilization. The hieroglyphic inscriptions on the monuments in the ruined cities of Mexico, Guatemala and Honduras.

Item 1276

Gates, William, Sections of the Gates edition of the Dresden Codex.

These sections were mounted by WFF for use as a workbook many years ago when he hoped to find time to devote to an attempt to solve the problem of Maya non-calendrical hieroglyphic writing.

Item 1277

Landa, Bishop, "Alphabet of the Maya Writing," pp. 320-323 of a book by Bishop Landa on the Maya.

This alphabet, published by the one Spanish theologian who was responsible for destroying more of the Maya codices than anybody else, has turned out to be a complete delusion if not an outright fraud. Many years ago scholars had given up trying to apply Bishop Landa's alphabet to the writing of the Maya; they had no success whatever. Various explanations have been offered as to how Landa came to set down this "alphabet." 2 pages. Photostat negative.

Item 1278

Healey, Giles G., Ancient Maya Paintings of Bonampak, Mexico, Supplementary publication 46, Carnegie Institution of Washington, Washington DC: 1955, 36 pp.

These are colored reproductions of the marvelous murals found by Mr. Healey quite by accident a few years ago at Bonampak, in one of the ancient Mayan ruins.

Item 1279

Merrill, Robert H., Mechanically Counting by Fives, Maya style, Abstract of a paper read May 8, 1942, at the Cincinnati Meeting of the Society for American Archaeology.

This copy was presented to WFF by Giles G. Healey. It may be important. Technical paper on the Maya Calendar.

Item 1280

Anonymous, Dresden Codex, Maya Society Publication No. 2, Baltimore: The Maya Society, 1932.

This is the William Gates edition of the most important of the three and only three extant codices of the people of Central America who attained the highest state of civilization in the Western Hemisphere several hundred years before the coming of the white man from Europe. The copy in the FC is copy No. 33 and is autographed as follows: "Major & Mrs. Friedman. May you read it and for your part, a great one, in the solution of the problem. 17th of Cumbu 1935, William Gates." This reproduction of the original Dresden Codex is believed to be an unparalleled feat by a scholar whose works will be recognized perhaps in the centuries to come. The book plate which is found in many of the books of the FC was taken from one of the sections of cartouches in the Dresden Codex. The book plate was made for the FC by Prof. Gates who supplied the modern Maya language with the inter-linear translation of a legend devised by WFF. Only the calendrical hieroglyphics of the Maya writing have been deciphered in their entirety. Of the non-calendrical hieroglyphics only about a half-dozen have been deciphered. The paucity of material has probably been the greatest stumbling block in the attempts to a complete solution of the Maya writing, although specialists in the field have been working on this for over a century. WFF's book plate is from the 3 Lamat Section, Chapter VIII Page 42.

Item 1281

The Madrid Codex, Maya Society Publication, No. 21, Baltimore: The Maya Society, 1933.

This is a photographic edition of the Madrid Codex produced by Professor Gates. It is enclosed within wooden covers and the Friedman Collection copy is No. 15. On the inside of the front and rear covers is a statement by Prof. Gates of the most important facts concerning this codex. The contents of the original are not as good as those of the Dresden Codex, but it is likely that this codex would be somewhat easier to use as a basis of material for a solution of the non-calendrical hieroglyphics than would be the Dresden.

Item 1282

Anonymous, Codice Troano, (Facsimile Edition), Junta de Relaciones Culturales, Madrid 1930.

This is one of two closely related codices preserved in the National Museum at Madrid. It is, of course, a reproduction. It was purchased by WFF at the Museum on 19 October 1932 when he was in that country. The codex contains a leaflet of explanatory information concerning it, and this is in English, French, Spanish, and German. This boxed facsimile of the Codex Troano is quite valuable since it is in color, but the unfortunate use of rather coarse photographic screens and some irregularities in the registration of the printing of successive colors render it

questionable. Value in the recovery of fine detail. Later editions, particularly that of the Akademische Druck- u. Verlagsanstalt, Graz Austria (1965), are particularly helpful in resolving these problems. These latter editions, too, contain the entire manuscript – the Codex Troano-Cortesianus which includes the 35 leaves (70 pp.) of the Troano itself, and the Codex Cortesianus, which was subsequently discovered to be a continuation of the former.

Item 1283

Gates, William E. (editor), Codex Perez, Privately published, Point Loma, 1909.

Redrawn and slightly restored, and with the coloring as it originally stood, so far as possible, given on the basis of a new and minute examination of the Codex itself. Mounted in the form of the original. Accompanied by a reproduction of the 1854 photographs; also by the entire text of the Glyphs, unemended but with some restorations. Printed from type, and arranged in parallel columns for convenience of study and comparison. Drawn by William E. Gates. This important Maya hieroglyphic book was discovered in 1859 by Prof. Leon De Rosny among a pile of papers in a chimney corner of the Bibliothèque Imperiale (now Bibliothèque Nationale) in Paris. The name Perez, originally given to the document from the name written on its wrapper, has now been generally supplanted by the name Paris to avoid confusing it with the 19th century Codex Perez, an annotated collection of post-conquest Maya chronicles. The original manuscript is 1.45m long 0.22m high, folded into 11 leaves. Internal evidence shows that at least two pages are missing, at the end or at the beginning and one at the end. The Gates pagination in the present edition is usually that adhered to in the literature. The obverse of the manuscript (pp. 2-12) is a record of 11 successive Katun endings, one to a page; the reverse (pp. 15-25) contains divinatory almanacs, Maya new-year ceremonies, and miscellaneous scenes. The present edition consists of three parts: The section of photographs is an exact copy of the very rare set of prints made in 1864. Though various reproductions were subsequently made (1872, 1887, 1888, etc.) These are particularly valuable from an epigraphic standpoint since the codex, in 1864, was in its best condition. The section of drawings systematizes the material that appears on each page of the manuscript, makes some restorations in damaged areas, and shows the associated color. The sheets in the end pocket arrange the glyphic texts of the document so that relationships of glyph order in the discrete text blocks might be more easily noted. George Stuart, December 1, 1967.

*See Gates, William E., Commentary Upon the Maya-Tzental Perez Codex with a concluding note upon the linguistic problem of the Maya glyphs. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University Vol. VI, No. 1, Cambridge, MA. Published by the Museum, November 1910, 64 pp.

Further Note: This is the Perez Codex which is the most fragmentary of those still extant. The edition was produced by William Gates, and the coloring follows that in the original. Not much is known about the context of this Codex and it is very doubtful if any portions of it will be readable. The FC contains a reproduction of each of the three codices known to have survived

the attempts of the Spanish missionaries to stamp out all of the evidence of culture of the Central American civilizations found by them at the time of the conquest.

Item 1284

Anonymous, Maya Codex,

An envelope containing preliminary drafts of the various editions of Maya codices produced by Prof. William Gates. This material was given to WFF by Gates shortly before his death. Much of it consists of outlines of the Gates editions of the Dresden Codex. It is quite possible that this material is not used by anybody at this date, but it is interesting to see to what lengths a scholar in that field drove himself in attempts to reproduce accurately, at least, one or more of the codices of the Maya civilizations.

Item 1285

Roberts, Frank H. H. Jr., "In the Empire of the Aztecs," The National Geographic Magazine Volume 71,6 (June 1937), pp. 725-750.

This copy of this magazine contains an informative article on the Aztec realm with then magnificent reproductions in color as well as many in black and white. Subtitle: "Mexico City is rich in relics of a people who practiced human sacrifice, yet loved flowers, education and art." Calls Tenochtitlan "barbaric splendor," p. 725.

Item 1286

Morley, Sylvanus Griswold, "Yucatán, Home of the Gifted Maya," National Geographic Magazine 70, 5 (November 1936), pp. 591-644.

Further information in the grand manner about the realm of the Maya; 25 natural color photographs accompany the article. Subtitle: "Two thousand Years of History Reach Back to Early America Temple Builders Corn Cultivations, and Pioneers in Mathematics." Good map of Yucatan. Picture of modern Maya c. 1936.

Item 1287

The Maya Society, Introduction to The Calkini Chronicle or documents concerning the descent of the ah-Canul, or Men of the Serpent, their Arrival and Territory, In facsimile, Publication No. 8, Baltimore: The Maya Society, 1935, 8 pp. Title: The Maya Calkini Chronicle.

Item 1288

Stewart, Elizabeth G. (translated and edited by), Introduction to: Apuntes sobre algunas plantas medicinales de Yucatan. In facsimile, Publication No. 10. Baltimore: The Maya Society, 1935, 24 pp.

This is a translation of items concerning medicinal plants of Yucatan. The original manuscript was written by a Franciscan friar in the early 1800s. Between 1869 and 1913 the whereabouts of this manuscript was unknown. In the meantime, at least five-sixths of the manuscript had been lost, leaving a description of only twenty plants out of the original 123. This is the only work of its kind so far discovered. The booklet was a gift to WWF from Professor William Gates. Missing.

Item 1289

The Maya Society, Introduction to Arte y diccionario en Lengua Cholti, a manuscript copied from the Libro Grande of Fr. Pedro Moran of about 1625. In facsimile, Publication No. 9, Baltimore: The Maya Society, 1935, 8 pp.

The introduction to publication No. 9 of the Maya Society. The manuscript described is of importance for a historical and linguistic study of the whole Mayan families of languages.

Item 1290

The Maya Society, Introduction to The Gomesta Manuscript of Maya Hieroglyphs and Customs, The Maya Society, Publication announcement No. 2, Baltimore, 1935, unnumbered pages.

The introduction to publication No. 2 of the Maya Society. Shows the Gomesta manuscript of Maya hieroglyphs and codices. The so-called bilingual text of the Maya. Not accepted by most scholars.

Item 1291

Forstemann, Ernst, Commentar zur Madrider Maya Handschrift (Codex Tro-Cortesianus) Danzig, Verlag von L. Sauniers Buchhandlung (G. Horn) 1902, 160 pp.

A German commentary on the Mayan hieroglyphics on the Madrid Codex. This is, in the main, a word description of the characters and their locations in this codex which ranks second in completeness of the three extant codices.

Item 1292

Beyer, Hermann, El Mexico Antiquo, Die ziffer eins in den Maya hieroglyphen, Mexico: 1931, 17 pp.

This German pamphlet describes the variant hieroglyphs for the numeral 1.

Item 1293

Beyer, Hermann, La Historia de la Escritura Maya, Publicado en Investigacion y Progreso, año 8, Number 10, Madrid: 1934, pp. 300-305.

The learned archaeologist of Tulane University here writes in Spanish of the History of the Maya and their writing.

Item 1294

Beyer, Hermann, “An Ahau Date with a Katun and a Katun – Ending Glyph,” Reprint from Middle American Research Series, Publication No. 4, “Middle American Papers,” New Orleans: Department of Middle American Research, The Tulane University of Louisiana, 1932, pp. 113-136.

The Department of Middle American Research at Tulane University produced a series of monographs on Maya hieroglyphics. This article deals with only two such hieroglyphs.

Item 1295

Chicherov, V. I., “Voprosy Obshechi Etnografii i Antropologii,” (General Questions of Ethnography and Anthropology), Sovietskaya Etnografiya, Akademiya Nauk, SSSR, 1952. (Soviet Ethnography, Academy of Sciences USSR, 1952). Folder marked **1295** contains correspondence regarding obtaining a copy of the above book and the bill and newspaper clippings.

Item 1295.1

Friedman, William F., Correspondence with J. Eric Thompson regarding Maya Decipherments by the Russians, 1953.

After the Russian Academy of Science issued its three volume edition of the Russian “decipherment” of the Maya hieroglyphics in 1962, with the resultant skepticism on the part of all knowledgeable scholars outside of the Soviet world, WFF isolated his correspondence beginning in 1952, with Dr. Thompson, the greatest English-Mayan authority. This item in the FC illumines much not found elsewhere of the long dispute over the Soviet claim of decipherment. J. Eric S. Thompson wrote a paper on the Russian decipherments for Natural History. It was rejected. A typescript of Dr. Thompson’s first blasting of the Russian “translations” is enclosed. Also a Photostat negative of the unpublished article of Dr. Thompson’s.

It is pictographic. Typescript English translation of the Knorozov work. In his last paragraph, Knorozov says the written language of the Maya is “typical hieroglyphics” and the history of the peoples of Central America can easily be studied by written sources.

Update: Both WFF and Thompson were wrong. It was Knorozov’s approach that helped crack the secret of Mayan writing. See the article on Yuri Knorozov in Wikipedia.

Item 1295.2

Two copies of Y.V. Knorozov’s article, “The Ancient Written Languages of Central America” in Russian.

Bound copies, photostat positive, Second envelope marked **1295.2** contains typescript English Translation of above article. The Ancient Written Language of Central America .

Item 1296

Carnegie Institution of Washington, The Maya of Middle America, New Service Bulletin, School Edition; Volume II, Nos. 17-21, June 7, 1931, pp.119-142.

This bulletin gives a general description of the archaeological problem of the ancient Mayan civilization and describes four outstanding aspects of the problem. MISSING NO ITEM.

Item 1297

Carnegie Institution of Washington, The Ruins of Quirigua, News Service Bulletin, School edition, Volume 3, No. 19, December 16, 1934, pp. 151-156. 2 copies.

Another Carnegie Institution Bulletin relating specifically to one of the leading cities of the Ancient Mayans.

Item 1298

Beyer, Hermann, “The True Zero Date of the Maya,” Reprint from: Maya Research, 3, 2 (April 1936), pp. 202-204.

Another short article by Prof. Beyer on numerical hieroglyphs.

Item 1299

Beyer, Hermann, “Another Mayan Hieroglyph for ‘Day,’” Reprint from American Antiquity Volume 2, No. 1 (July 1936), pp. 13-14.

A short article by Dr. Beyer on the discovery of the two new glyphs, in addition to the seven identified, for the value of ‘day.’

Item 1300

Chute, Marchette, Shakespeare of London, with a preface by Sir Ralph Richardson. London: Secher & Warburg, 1951, 348 pp. DJ.

A chatty and vivid characterization of Shakespeare the man, written for the layman. Although the authorship controversy is not discussed per se, the author is clearly a Stratfordian.

Item 1301

Raleigh, Walter, Johnson on Shakespeare, Essays and notes selected and set forth with an introduction, Oxford University Press, 1946, but first published in 1908, 208 pp. No DJ.

This little volume is the 10th edition, showing its value to university students in Shakespeare. Samuel Johnson intended and planned an edition of Shakespeare’s works, and here is a selection from the Johnson notes and commentary pertaining thereto. The introduction particularly, and the volumes as a whole, is a fascinating commentary on Johnson’s hypochondriacally compulsive behavior even in his dealing with literary people and works. Johnson’s fame mainly rests upon a 2-volume folio work entitled A Dictionary of the English Language, a work which was hailed with acclaim such as no similar work had theretofore ever excited. “In the 2-folio volumes... there is not a single passage quoted from any dramatist of the Elizabethan Age except Shakespeare and Ben Johnson” Encyclopedia Britannica, copy of Hilary Agard Evans, Kings, Cambridge.

Item 1302

Lee, Sir Sidney, A Life of William Shakespeare (with portraits and facsimiles), 4th Edition, London: Smith, Elder & Co, 1899, 479 pp. No DJ.

Considered the most authoritative life of Shakespeare, for its day, by the man considered to be the greatest Shakespearean scholar of his time. The first edition was printed in November 1898. The first sentence of the Preface by Lee is: “This work is based on the article on Shakespeare which I contributed last year on the fifty-first volume of Dictionary of National Biography.” John E.R. Roger. Jesus College, Cambridge: 1952

Item 1303

Brooks, Alden, Will Shakespeare: Factotum and Agent, Cornwall, NY: Round Table Press, Inc. 1937, 374 pp. DJ.

A Harvard University instructor presents a considerable body of material which he used as a foundation for a second volume, *Will Shakespeare and the Dyer's hand*, wherein Brooks attributes the authorship of the Shakespeare works to Sir William Dyer. See the jacket, wherein is revealed that the author, originally a Stratfordian, came to believe that "Shakespeare" was a "movie-magnate type of man."

Item 1304

Swinburne, Algernon Charles, *A Study of Shakespeare*, London: Chatto & Windus, 1880, 309 pp. No DJ.

A biographical sketch of a famous author of the period of Queen Victoria.

Item 1305

Leslie Hotson, *Shakespeare vs. Shallow*, London: The Nonesuch Press, 1931, 375 pp.

On Shakespeare's acquaintances in Southwark, William Gardener and his stepson William Wayte, "lynx-eyed gleaners." Reproduces a number of Elizabethan documents. Regarding a case against Shakespeare claiming he attached William Wayte order for his arrest. Professor Hotson worked with American cryptology in WWII.

Item 1306

Shakespeare, William, *The Temple edition of the Works of William Shakespeare*, 9th edition, 1909.

Thirty-nine pocket volume bound in soft leather. This edition of Shakespeare was first published in 1806. It is highly prized and somewhat rare. A complete set. Indexed.

Item 1307

Wigston, W.F.C., *Hermes Stella*, or notes and jottings upon the Bacon Cipher, London: George Redway, 1890, 182 pp. No DJ.

The author was obviously a believer in Baconian authorship and a follower of Ignatius Donnelly's cipher system, which was long ago discredited. Purchased from The Folger Shakespeare Library when duplicates were sold. The volume was originally a part of the Library of the Famous Baconian, Frank S. Woodward.

Item 1308

Clark, Natalie Rice, *Bacon's Dial in Shakespeare*, a compass-clock cipher, Cincinnati: Steward Kidd Company, 1922, 193 pp. No DJ.

The wife of a professor of Greek turns to cipher to prove that Bacon wrote Shakespeare. Her ‘dial’ or “compass-clock cipher” is a “device” wholly non-existent except in her subjective consciousness. See The Shakespearean Ciphers Examined (**Item 1691**) This item was purchased from the Folger Shakespeare Library as an “extra” in the Frank L. Woodard Collection.

Item 1309

Batchelor, H. Crouch, Francis Bacon wrote Shakespeare, the arguments pro and con frankly dealt with, London: Robert Banks & Son, 1912, 143 pp. No DJ.

The Bacon-Shakespeare controversy. The author includes, among arguments of the usual general type, arguments based upon ciphers dealing with the disputed authorship.

Item 1310

Smith, William Henry(Esq.), Bacon and Shakespeare, An Inquiry Touching Players, Playhouses, and playwrights in the days of Elizabeth I which is appended an abstract of a manuscript respecting Tobie Matthew, London: John Russell Smith, 1857, 162 pp.

One of the early and basic books dealing with the question of authorship of the Shakespeare plays. It was written soon after Delia Bacon published her very extensive work on the subject. This item is heavily underscored and underlined by former owner(s). 1 HB volume. 1 SB copy duplicate.

Item 1311

Greenwood, Sir George, Shakespeare’s Law, Hartford, Connecticut: Edwin Valentine Mitchell, 1920, 48 pp.

The author challenges that Shakespeare had a detailed knowledge of Law, as many non-Stratfordians claim, using this as an argument.

Item 1312

Greg, W.W., The Shakespeare First Folio; its Bibliographical and Textual History, London: Oxford University Press, 1955, 496 pp. DJ.

A most authoritative work on a bibliography and textual history of the first folio.

Item 1313

Symonds, John Addington, Introduction and notes by, Webster and Tourneur, London: Ernest Benn Ltd., 1948, 432 pp. DJ.

Presented to WFF by the late Frank Birch, Historian of GCCS, who thought that John Webster and Cyril Tourneur wrote very much like Shakespeare.

Item 1314

Lee, Sir Sidney, A Life of William Shakespeare, London: Smith, Elder & Co., 1899, 385 pp. Illustrated Library Edition. No DJ.

Actually the fifth edition with added pages and a different frontispiece. See **Item 1302**. See clipping from London Times, May 6, 1930. Frank Marcham discovered a legal document of Shakespeare interest at the Record Office. Shakespeare's house was broken into and books were stolen – taken by John Hall.

Item 1315

Lee, Sir Sidney, A Life of William Shakespeare, London: John Murray, 1922, 776 pp. No DJ.

Sir Sidney's "life" was republished 24 years after his first edition.

Item 1316

Holmes, Nathaniel, The Authorship of Shakespeare, New York: Burd and Houghton, Boston: H.O. Houghton & Company, 1876, 3rd edition, 696 pp.

One of the earliest works by an American author on the questioned authorship of the Shakespeare works. Purchased by WFF in Charing Cross, London, in 1954 along with other volumes by writers on the authorship question. This author added an appendix on "the recently-discovered Northumberland manuscripts," which entwines the name of Bacon with that of Shakespeare on one page, written in a 16th century hand. See **Item 1341**.

Item 1317

Johnson, Edward D., Shakespearean Acrostics, A demonstration of the marginal words in the First Folio of Mr. William Shakespeare's comedies, histories and tragedies. Birmingham, England: Cornish Bros. Ltd., 1942, 76 pp. DJ.

Johnson extends his acrostic cipher method through the marginal words in the First Folio. Same title and preamble as **Item 916** above, but an even further extension of his "adaptation" of the acrostic method for signatures. A gift of W.H. Humphreys Esq. of Birmingham, England, October 1942.

Item 1318

Eagle, Roderick, Shakespeare; New Views for Old, London, New York & Melbourne: Rider & Company, 1944, 110 pp. DJ.

The author has spent some 40 years in research on problems connected with the authorship of Shakespeare. He was one of the leading proponents of Francis Bacon as author of the Shakespeare works. Author spent 20 years in the problems connected with Shakespeare.

Item 1319

Johnson, Edward D., The Shakesper Illusion, London: George Lapworth & Company Ltd., 2nd enlarged edition, 1951, 191 pp. PB.

Further subjective theories and data concerning authorship. A confirmed Baconian and indefatigable expounder of ideas on that subject. Baconians attacked WFF. He never attacked them. He disagreed, but he was always polite.

Item 1320

Moore, William, Shakespeare, Birmingham: Cornish Bros. Ltd., 1934, 324 pp. DJ.

Moore thoroughly understood the significance of the factors which determined whether cryptographic solutions are or are not valid; these considerations, however, are lost sight of when he turns to the development of decipherments which to him “prove” that Bacon wrote Shakespeare. This large volume deals only with Love’s Labor’s Lost. See brief analysis of Moore’s work in The Shakespearean Ciphers Examined (**Item 1691**).

Item 1321

Dodd, Alfred, Francis Bacon’s Personal Life-Story, London: Rider & Company, n.d., 368 pp. DJ.

One of the most vociferous of the believers of the Baconian authorship of Shakespeare constructs a “personal life story” of the great chancellor. His interpretations of actual history definitely reflect the author’s bias. Thirty-eight illustrations in half-tone and 11 line drawings.

Item 1322

Theobald, Bertram G., B.A., Exit Shakespeare, London: Cecil Palmer, 1st edition, 1931, 89 pp. PB.

This and **Item 1324**, are further pleas and “evidence” for the acceptance of Baconian authorship of the Shakespeare plays.

Item 1323

Swinburne, Algernon Charles, Shakespeare, London, New York, Toronto and Melbourne: Henry Frowde: Oxford University Press, 1909, 83 pp. No DJ.

The title page says: “Written in 1905 and now first published.” This first edition copy is therefore valuable, because of Swinburne’s eminence, and his near-idolatry of Shakespeare. The final sentence in this brief essay reads: “It is not only the crowning glory of England, it is the crowning glory of mankind, that such a man should ever have been born as William Shakespeare” signed Algernon Charles Swinburne.

Item 1324

Theobald, Bertram G. B.A., Enter Francis Bacon: a sequel to “Exit Shakespeare,” 1932, 122 pp. London: Cecil Palmer, 1st edition, 1932, 122 pp. See **Item 1322**. DJ.

Another attack on Shakespeare and the Stratford myth.

Item 1325

Baxter, James Phinney, The Greatest of Literary Problems, the authorship of the Shakespeare works; an exposition of all points at issue, from their inception to the present moment, Boston & New York: Houghton Mifflin Company, 1915, 686 pp.

James Phinney Baxter I, spent the latter years of his life, at 80 years of age or more, on the Bacon-Shakespeare Controversy. He became most famous by his espousal of Elizabeth Wells Gallup and her decipherments by means of Bacon’s Biliteral Cipher. This book is scarce and was purchased in England by WFF in 1954, it having been in the library of Frank Woodward, another famous advocate of Mrs. Gallup’s decipherments. The many marginal notes and green-ink additions are Woodward’s. The copy in the FC is autographed by James Phinney Baxter III, grandson of the author and President of Williams College as follows: “This book is now autographed in 1955 by a grandson and namesake of the author with warm regards to William F. Friedman. James P. Baxter, 3rd.” See pp. 224-226 of The Shakespearean Ciphers Examined (Item 1691) which describes Baxter’s insertion of a cipher message in his own book and his faulty conclusions.

Item 1326

Ingelby, C. M., Miss L Toulmin Smith and F. J. Furnivall, The Shakespeare Allusion – Book, a collection of allusions to Shakespeare from 1591 to 1700, London: Oxford University Press, 1932, Volume I, 527 pp., Volume II, 558 pp. DJ.

The non-Stratfordians’ carping insistence that “nothing was known about William Shakespeare” goaded the Stratfordians into compiling a compendium of references made to Shakespeare from 1591-1649 (Volume I) and 1650-1700 (Volume II).

Item 1327

Dodd, Alfred, The Martyrdom of Francis Bacon, London, New York, Melbourne, & Sydney: Rider & Company, n.d., 192 pp. No DJ.

The author constructs a story of the fall of Bacon as Lord Chancellor and demonstrates to his own satisfaction that Bacon was the victim of a plot.

Item 1328

(A Cambridge Graduate,) Is it Shakespeare? The great question of Elizabethan literature. Answered in the light of new revelations and important contemporary evidence hitherto unnoticed, London: John Murray, 1903, 387 pp.

There seems to be no doubt that Begley is the author of this work because there are numerous references in the literature of the Bacon-Shakespeare controversy to that effect the title page does not bear his name but simply the statement "By a Cambridge Graduate." In spite of Begley's exhaustive and brilliant works Biblia Cabalestica and Biblia Anagrammatica, he swallowed whole the Baconians' invalid anagrams on the Bacon-author-of Shakespeare subject.

Item 1329

Bormann, Edwin, Francis Bacon's Cryptic Rhymes and the Truth They Reveal, London: Siegle, Hill & Company, 1906, 251 pp. No DJ.

Another far-fetched attempt to employ some phase of subjective cryptography in the search for an author of the Shakespeare works, and found him to be Francis Bacon. No item.

Item 1330

Vincent, E.R., Gabriele Rossetti in England, Oxford: The Clarendon Press, 1936, 199 pp. DJ.

Rossetti believed there were ciphers in Dante. Autographed to William Friedman March 1946 by the author. With the note: Ch IV may contain matter of interest to you. Rossetti left a vast body of writings, published and unpublished, in which he attempted to prove the truth of his unorthodox interpretation of medieval literature. His works were of "faith and imagination" not reasoning and logic. He believed there was a secret society with humanitarian and secular arms that had united its members in opposition to political and ecclesiastical tyranny (like Freemason). A secret code language was developed in which members of the sect kept each other informed. He believed Dante was a member and that the Divine Comedy and his other works contain codes. He spent his life revealing the sectarian mysteries.

Item 1331

Stopes, Carolyn, The Bacon-Shakespeare Question Answered, London: Trübner & Company, 1889, 266 pp. No DJ.

Dr. Stopes unites an enlarged and more emphatic edition of her book of the previous year.

Item 1332

Hughes, C.E., The Praise of Shakespeare: an English Anthology, London: Methuen & Company, 1904, 342 pp. No DJ.

A collection of contemporary statements in praise of Shakespeare; with a preface by Sir Sidney Lee. An early attempt to prepare an “allusion” anthology of references to Shakespeare from 1596 (Frances Meres) onward.

Item 1333

Prouty, C.T. [Editor], George Gascoigne’s A Hundreth Sundrie Flowres, Columbia, MO: University of Missouri, 1942, Volume XVII, The University of Missouri Studies, No. 2, 1942, 305 pp. PB, no DJ.

Professor Prouty, well-known Elizabethan scholar, now at Yale University, discusses the anthology generally attributed to Gascoigne. Certain of these poems have been attributed to Edward de Vere by believers in the Oxfordian authorship of Shakespeare. Autographed by the author. Unfortunately, the autographed copy was lost and was replaced by another unautographed copy. Prof. Prouty was a colleague of WFF in WWII.

Item 1334

Drake, Nathan, Shakespeare and his Times, including the biography of the poet, etc., London: 1817, 2 Volumes: Volume I, pp. 735, Volume II, 677 pp.

An early 19th century British scholar, a Stratfordian, writes a two-volume account of Shakespeare and his times. See title page for citation. Leather bound. Discusses the object of his sonnets and a new chronology of the plays.

Item 1335

Ogburn, Dorothy and Charlton, This Star of England: “William Shakespeare” Man of the Renaissance, New York: Coward-McGann Inc., 1952, 1297 pp.

This impressively large tome presents argument for the Oxfordian thesis of authorship of the Shakespeare plays. An edition of 8,000 copies at \$10.00 per copy were sold within a few months – so wide was the interest in the disputed authorship of the plays. A second edition was then published at \$12.00 per copy. The work contains one alleged cipher message, but it has no bearing on the authorship of the plays; it deals with the authorship of an anthology attributed by scholars to George Gascoigne. The Oxburns believe the Earl of Oxford was the author of the

anthology as well as of the Shakespeare plays. See The Shakespearean Ciphers Examined, Ch IX. (**Item 1691**). See reviews enclosed in book especially in Shakespeare Quarterly, April 1953. SEPARATE FOLDER. Review of This Star of England by Giles E. Dawson in Shakespeare Quarterly, Volume IV, April 1953, No. 2, Part 1.

Item 1336

Bayley, Harold, The Tragedy of Sir Francis Bacon, London: 1902, 274 pp. No DJ.

Wherein one of the most vociferous of the proponents of the authorship of Bacon as Shakespeare sets forth many phases of that argument.

Item 1337

Halliwell-Phillips, J. O., Outlines of the Life of Shakespeare, London: Messrs., Longmans Green & Company, 5th Edition, 1885, 640 pp.

Almost the Bible of the Stratfordians, by one of the great Shakespearean scholars of his day. Inside is a holographic letter dated 15 October 1885, by this master scholar; the great J.O. Halliwell-Phillips, to a Mr. J.H. Round who has written to Halliwell-Phillips that he has discovered fragments of rare books in the covers of books printed earlier – a discovery highly pleasing. Separate folder contains one letter dated 15 October 1885, signed by J.O. Halliwell-Phillips from Hollingbury Copse, Brighton.

Item 1338

Pott, Mrs. Henry, The Promus of Formularies and Elegancies by Francis Bacon, illustrated and elucidated by passages from Shakespeare, London: Longmans, Green, Co. 1883, 628 pp. No DJ.

Constance Pott, quite knowledgeable in the field of Elizabethan literature, undertook to present many similarities of phraseology in Bacon's Promus and the Shakespeare plays. These parallelisms of Mrs. Pott were extensively quoted by Baconians.

Item 1339

Willis, William, The Shakespeare-Bacon Controversy, a report of the trial of an issue in Westminster Hall, June 20, 1627. Read in the Inner Temple Hall, Thursday, May 29, 1902, Fakenham & London: Miller & Son & Company Ltd. [1902], 88 pp. PB, no DJ.

An imaginary trial supposedly held in 1627 with regard to the authorship of the Shakespeare plays. It contains a voluminous appendix of title-pages of Shakespeare and other works of the 1627 period.

Item 1340

Brown, Ivor, Shakespeare, London: Collins, 1949, 352 pp. DJ.

The eminent British scholar and critic presents a very readable study of Shakespeare on Shakespeare.

Item 1341

Burgayne, Frank J. [Editor], Collotype facsimile and type transcript of an Elizabethan manuscript preserved at Alnwick Castle, Northumberland, Transcribed and edited with notes and introduction; London, New York, and Bombay: Longmans, Green & Company 1904, 166 pp., with facsimile of the manuscript. No DJ.

Probably the most intriguing of all Baconian documents. This is No. 20 of an edition of 250 copies made of the Northumberland manuscript, the discovery of which had caused enormous excitement among Baconians, who saw, in its page of intertwined handwritten signatures of Bacon and Shakespeare the “Long awaited proof of Baconian authorship.” See The Shakespeare Ciphers Examined, Chapter VIII, (**Item 1691**). WFF in 1954 in London made a visit to the home of the daughter of Constance Pott, to talk her out of a copy. See letters included in this item.

Item 1342

Crucis, Fratres Roseae, Secret Shakespearean Seals, revelation of Rosicrucian Arcana, discoveries in the Shakespeare plays, sonnets, and works, printed circa 1586-1740, of “Secreti Sigilli” concealed author’s marks and sign, London, 1916, 88 pp. [with two plates]. No DJ.

“Numerology plays a part in the Bacon-Shakespeare controversy. Completely subjective.

Item 1343

Booth, William Stone, Some Acrostic Signatures of Francis Bacon, Bacon of Verulam, Viscount St. Alban; London: Archibald Constable & Company Ltd., Boston & New York: Houghton Mifflin Company, 1909, 631 pp. 2 copies. No DJ.

This is one of the most pretentious and costly books devoted to the attempt to prove that Bacon was the author of the Shakespearean works. Booth shows some examples of authentic acrostics and then proceeds to find, by wholly unwarranted stretching of the method, what he calls “acrostic signatures of Francis Bacon.” All are purely subjective. See TSCE, Chapter IX, pp. 114-127 incl. (**Item 1691**). See notes taped to copy #2.

Item 1344

Woodward, Frank, Francis Bacon's Cipher Signatures, London: Grafton & Company, 1923 88 pp. No DJ.

Some more numerology used in an attempt to establish Baconian authorship. This book is autographed to WFF. "From the son of the Author." WFF was a luncheon guest of Frank Woodward, Jr. in London on 15 October 1953.

Item 1345

Willoughby, Edwin Elliott, The Printing of the First Folio of Shakespeare, Oxford: The Oxford University Press, for the Bibliographical Society, 1932, 70 pp. PB.

This small brochure is a landmark in the research upon the production and printing of the Shakespeare First Folio. Much of the research thereafter followed along the lines laid down by this author. Autographed to WFF by the author, after the former purchased this little volume. See pp. 242-243 of The Shakespeare Ciphers Examined (**Item 1691**).

Item 1346

Anonymous ["By an Englishman"], Francis, Lord Bacon: or The Case of Private and National Corruption, and Bribery, impartially considered, London: J. Roberts, 1721, 62 pp.

A pamphlet addressed to members of Parliament, members of State and church dignitaries on the guilt or innocence of Francis, Lord Bacon, in the case of corruption and bribery of which the latter was judged.

Item 1347

Owen, Orville W. MD, Sir Francis Bacon's Cipher Story, Book IV, Discovered and Deciphered by Orville W. Owen, MD, Detroit & New York: Howard Publishing Company, 1894, 200 pp. (but numbered 600-800). PB.

Another volume of the Detroit medical man's cipher work.

Item 1348

Stopes, Carolyn, The Bacon-Shakespeare Question, London: T.G. Johnson, 1888, 149 pp. No DJ.

Dr. Stopes was the most tireless of the Stratfordians in the decades circa 1900. She was indefatigable in disputes with the Baconians.

Item 1349

Onions, C.T., A Shakespeare Glossary, Oxford: Clarendon Press, 1911, 259 pp. No DJ.

A glossary of terms in Shakespeare utilized by Baconians to make comparisons with terms used by Francis Bacon. One of the editors of the great Oxford English Dictionary compiled this glossary after working on the Dictionary for 15 years. Mr. Onions was, of course, a Stratfordian.

Item 1350

Arensberg, Walter C., The Cryptography of Dante, New York: Alfred A. Knopf, 1921, 464 pp. with a “list of Cryptograms” on pp. 467-484.

A gift to WFF from the late Father Peterson, of St. Paul’s College. This was the very first book published by Mr. Arensberg and the only one put out by a recognized publishing house, in which acrostics and anagrams or combinations thereof are employed in his attempts to “prove” certain things or historically unacceptable thesis by cryptographic methods. His thesis in this book is that Dante’s Divine Comedy contains a large number of cryptograms. All of these alleged cryptograms are purely subjective. This was the beginning of Arensberg’s preoccupation with the use of cryptology in the field of disputed or questioned authorship and led him directly to his long-continued and quite costly labor in the controversy over the authorship of the Shakespearean works. Chapter one contains considerable useful information concerning the use of cryptography in ancient and medieval times.

Item 1351

Ogburn, Dorothy and Charlton, The Renaissance Man of England, New York: Coward-McCann, Inc. 1947, 1949 & 1955 (newly corrected and augmented by the authors), 57 pp. DJ.

After the great popularity of their large volume, the Ogburns prepared a short version of their belief in Oxfordian authorship of the Shakespearean works (Note the “copyright” statement. There is something here that needs explanation.) A footnote pays tribute to Professor Looney, the first “discoverer” that Edward De Vere was the author of Shakespeare.

Item 1352

Melsome, W.S., The Bacon-Shakespeare Anatomy, New York: Russell F. Moore Co., n.d., 240 pp. DJ.

This British physician, who was also something of a scholar, analyzes the language of the Shakespearean works and of Sir Francis Bacon’s works and concludes that Bacon wrote Shakespeare.

Item 1353

Bridges, Horace James, Our Fellow Shakespeare, How Every Man May Enjoy his Works. Chicago: Pascal Covici, 1925, 301 pp. No DJ.

A Stratfordian attempts to interest “the average man” in the Shakespearean authorship in a chapter called “The Bacon Myth.”

Item 1354

Rogers, John C. A.R.I.B.A., The Parish Church of St. Michael, St. Albans, A short illustrated history of the building’s growth and change from Saxon times to the present day. St. Alban’s: H.A. Richardson, Ltd., 1952, 31 pp.

St. Albans was the residence of Francis Bacon in his later years. His tomb is in this church. The item was purchased by WFF when he visited the church with Mr. T.W.R. Burton Miller, a member of the British cryptographic agency during and for some years after WWII.

Item 1355

Baldwin, Thomas W. and Isabelle Grant, Shakespeare at Illinois, Urbana, IL: University of Illinois Press, 1951, 22 pp.

Deals with notes on an exhibition of the First Folio and other Shakespeareana at the University of Illinois.

Item 1356

Anonymous, Gorhambury [no publisher] 1938, 32 pp.

Francis Bacon lived in Gorhambury for a number of years but it has long been in ruins. When visited by WFF in 1954, it was a scene of desolation and sadness; he could hardly resist thinking, “Sic transit gloria mundi.” This item contains a fair amount of matter concerning the trial of Sir Francis Bacon.

Item 1357

Bridgewater, Howard, Evidence Connecting Sir Francis Bacon with “Shakespeare,” London: George Lapworth & Company Ltd., 1949, 32 pp. No DJ.

A small brochure by a London barrister presenting literary and legal documents on the Baconian authorship of Shakespeare. The so-called legal mind seems to thrive on controversy concerning authorship, be it Shakespeare or someone else. Being advocates, the barristers and lawyers of the world cannot resist “advocating” an author.

Item 1358

Gundry, W.G.C., Francis Bacon, a Map of Days, a guide to His Homes and Haunts, London: The Bacon Society, Inc. 1946, 50 pp.

Autographed to WFF on the author's assumption that he was presenting it to a Baconian. WFF received it from a nephew of Mr. Gundry, in 1953. The nephew, Mr. Tim Muller, a British Colleague, went about with WFF on a Bacon "pilgrimage."

Item 1359

Rose, Mary, Baconian Myths: notes on two great Englishmen and their defamers, Stratford-on-Avon: Shakespeare Press, n.d. 39 pp.

A pro-Shakespeare advocate in the Bacon-Shakespeare controversy also pays tribute to Sir Francis Bacon as a very great writer.

Item 1360

Winsor, Justin [Editor], Was Shakespeare Shapleigh?, Correspondence in two Entanglements, Boston & New York: Houghton, Mifflin & Company, 1887, 76 pp.

A satire on attempts at identifying the author of the Shakespeare First Folios, as prepared by the Librarian of the Harvard University Library.

Item 1361

Craig, Horace S., Dueling Scenes and Terms in Shakespeare's Plays, University of California Publications, in English, Volume 9, No. 1, pp. 1-28, Berkeley & Los Angeles University of California Press, 1940.

Dr. Craig was for a short time a high-level member of the Central Intelligence Agency. This reprint is autographed to WFF. Analyzes Shakespeare's knowledge of dueling, including technical terms.

Item 1362

Wellstood, Frederick C., Shakespeare Tercentenary, commemoration 1616-1916, Stratford-upon-Avon: Edward Fox & Son, 1916, 50 pp.

Catalogue of original documents of the 16th and 17th centuries presently at Stratford-on-Avon, plus facsimiles, illustrating Shakespeare's life in the town. Compiled under supervision of Sir Sidney Lee.

Item 1363

Friedman, William F., Correspondence with Robert M. Smith, Glen Knight, Anne Kathleen Mecker, Harry Holt, Charles R. Eames, and Thomas P. Leary 1937-1965.

A folder containing a miscellany of items on the Bacon-Shakespeare Controversy and the Friedman book. Correspondence and clippings from Wooster College Alumni Bulletin, 1955, relating to the Friedman manuscript winning the Folger Shakespeare Library Prize of \$1,000.

Item 1363.1 (in same folder as **Item 1363**)

Leary, Thomas P., "Odd Numbers," Reprinted from Baconiana, Vol. 49, No. 166, (June 1966).

"This article which is not being taken too seriously, formed the basis of an amusing talk given by the author in London last autumn. It was printed at the request of several members who were present." A copy given to WFF by Brockmann, editor of NSA Technical Journal.

Item 1363.2

Anonymous, (Bacon-Shakespeare Controversy), Clippings from Wooster College Bulletin and newspapers when WFF and ESF won Folger Library Prize, 1955.

The prize was announced on April 3, 1955. That very morning, WFF was stricken with a coronary occlusion and taken by ambulance to the hospital.

Item 1364

Heilbroner, Robert L., "The Murder of the Man Who was William Shakespeare," Esquire, (December 1954), pp. 115-122. On publishers page: "Fair Warning regarding, Page 115," pp. 6, "Elizabethan private eye," pp.74.

The Calvin Hoffman campaign to convince the public on two continents of the validity of his theory that Christopher Marlowe wrote the Shakespeare works was launched with great aplomb by this article and the prominence of the magazine in which it appeared. Is it possible that Esquire published this as a spoof?

Item 1365

O'Connor, Charles J., The Bacon Decree, Some evidence relating to ciphers introduced in the case of Fabyan vs. Selig [Circuit Court in Chancery, William N. Selig vs. George Fabyan, et. al.] (in which the existence and use of the biliteral cipher was passed on by Judge Tuthill: "The evidence in the case," 1916, 30 pp.

In 1916, when George Fabyan was strenuously endeavoring to publicize Mrs. Gallup's decipherments of the biliteral cipher and to obtain scholarly approval thereof, suit was brought in

Chicago courts by William N. Selig, one of the leading motion picture producers of that era, who was planning to produce some Shakespeare plays in Hollywood, against Fabyan, on the grounds that the latter's attempts to prove Bacon the author of the plays were going to cause Selig great financial loss. The presiding jurists, Judge Tuthill, in passing judgment on the suit made statements about the authenticity of the cipher and consequently about the authorship of the plays. The case received wide notice in the press of the U.S. and the Baconians took the Tuthill decision as impressive evidence of real proof of the Baconian authorship. Many years later a ruling was made by the court that Judge Tuthill was in error in his decision because the question of authorship was not properly before the court at the time. For further details of this artificially concocted legal case, see TSCE (Item 1691). Fabyan, Selig and Judge Tuthill were "skating on very thin ice" because it soon became evident that the case contained elements pointing to collusion. This copy presented to WFF on 4 March 1954, by his friend R.D. Parker, at that time retiring from his career as an inventor and engineer in the AT&T Company. This item is probably unique, since it is the actual brief submitted to the court.

Item 1366

Shakespeare, William, The Shakespeare Fellowship Newsletter, London: Baines & Scarsbrock, Ltd., October 1942, 4 pp.

Shelf card marked "missing 2/24/1970," and "Removed from collection."

Item 1367

Franco, Johan, "Visible Evidence for Sir Francis Bacon," no publisher n.d., pp. 100-101, The Rosicrucian Digest, April 1946.

The visible evidence is all subjective. He uses emblems from a Latin Emblem book published in Gouda, Holland by Schoonhaven in 1618.

Item 1368

Anonymous, Fly-Leaves, The Ladies Guild of St. Francis St. Alban,

These are selected issues of a small journal which has since ceased publication. The selected issues contain articles principally devoted to General Cartier and his findings in the study he made of Mrs. Gallup's work on the biliteral cipher.

23 rd Report, Jan 1914	Item 1368.1
No. 3, March 1915	Item 1368.2
No. 7, November 1919	Item 1368.3
No. 13, May 1923	Item 1368.4
No. 20, October 1926	Item 1368.5

No. 24, May 1928	Item 1368.6
No. 25, October 1928	Item 1368.7
No. 31, December 1930	Item 1368.8
No. 33, August 1931	Item 1368.9
No. 36, August 1932	Item 1368.10
No. 36, December 1932	Item 1368.11

Item 1369.1

Shakespeare Quarterly, The Shakespeare Association of America, Inc., Reprint from Volume 10, No. 3, (Summer 1959), pp. 433-446.

Contains a review by Professor Baldwin Maxwell of two books on the authorship subject; one by Churchill, one by Wadsworth.

R.C. Churchill, Shakespeare and His Better: A History and Criticism of the Attempts which have been made to Preserve Shakespeare's works were written by others, London: Max Reinhardt, 1958.

Frank W. Wadsworth, The Poacher from Stratford: A Partial Account of the Controversy over the Authorship of Shakespeare's Plays, Berkeley & Los Angeles: University of California Press, 1958.

Item 1370

Ingelby, Clement Mansfield, Shakespeare's Centurie of Prayse, being materials for a history of opinion on Shakespeare and his works, A.D. 1591-1693, London: N. Tribner & Company, for the New Shakespeare Society, 1879, 471 pp.

A history of allusions to Shakespeare and his works. See **Item 1326** which is a second and enlarged edition in two volumes.

Item 1371

Shakespeare, William, Venus and Adonis from the hitherto unknown edition of 1599; the passionate pilgrime, from the first edition of 1599; of which only two copies are known; Epigrammes, written by Sir John Davies, and certain of Ovid's elegies, translated by Christopher Marlowe, from a rare early edition. Edited by Charles Edmonds, London: Henry Sotheran & Co. (All copies numbered and signed by editor) Copy 85, Charles Edmonds, 23 April 1870, unnumbered pages.

A Shakespeare poem which is often cited as evidence that Shakespeare did not write Shakespeare.

Item 1372

Milne, A.A., "The Shakespeare Theory," Extracted from Birthday Party, New York: E.P. Dutton & Company, Inc., 1948, pp. 241-244.

An imaginary extract from "The Secret of a Horse Holder," wherein the latter Shakespeare indicates his desire that Francis Bacon be the author of his work. A satire in Milne's whimsical vein. Photostat Negative. "Extracted from the secret diary of a horse holder."

Item 1373

Galland, Joseph S., Digesta anti-Shakespeareana, an historical and analytical bibliography of the Shakespeare authorship and identity controversies.

Unpublished manuscript of 1576 numbered sheets, with numerous notes on the reverse side of many sheets. A few copies of this manuscript were made at Northwestern University in microfilm which may be seen in certain libraries. Prof. Galland, of Northwestern University, was working on this monumental bibliography of anti-Shakespeareana when early in WWII he became convinced of the need for a bibliography on cryptography proper. He interrupted his studies on the authorship controversy and prepared an analytical bibliography of the literature of cryptology, which was published by Northwestern University in 1945. See **Item 617**. This manuscript is a carbon copy presented to WFF in 1947. When Professor Galland's sudden death interrupted his monumental task, it was taken up by Prof. Milligan of the University of Illinois, a brother-in-law of Professor Galland and his literary executor. See reverse of fly leaf of **Item 617** for a brief biography of Professor Galland.

Item 1374

Shakespeare, William, The Works of Shakespeare, edited with introductions and notes by C.H. Herford, The Eversley Edition, 10 Volumes, London and New York: The Macmillan Co., 1903.

Another edition of Shakespeare edited by a Welsh professor, Volume XI (included with the set in same binding) is William Shakespeare, Poet, Dramatist and Man, by Hamilton Wright Mabie.

Item 1375

Shakespeare, William, William Shakespeare; some dates, facts and inferences, London: Roberts & Newton Ltd., n.d. 20 pp., one-shilling pamphlet.

Autographed to WFF by J. Osborne 27 July 1954. In same envelope with **Items 1376-1381**. Photostats from STC 12613. Hakewill, George, An Apologie or Declaration of the Power and

Providence of God in the government of the world, London, 1635, 3rd edition. The reference to Strada checks out OK. Strada, Famiano, Proclusiones academicae, Rome, 1617 (Folger 177531). The reference to Vignère has not been checked out. There is no copy of his work listed at Folger, LC, Union Catalogue. There is a reference in the BM Catalogue. Vignère, Blaise de, Histoires de Tite Live, 2nd Volume (1580). Apparently J. Amelin and A. de la Faye, also worked on the translation. (information in Nouvelle Biographie Genereale which also said that it was not a very good translation) British Museum Entry: Les Annotations de B. de Vignère Bourbonnais, sur la première decade de Tite Live, Paris 1580. Photostat positive pp. 326-329.

Item 1376

Shakespeare, William, Shakespeare Memorial Theater Picture Gallery and Museum, unnumbered pages (4), with extract from the Illustrated London News, September 26, 1953, pp. 475.

Pamphlet.

Item 1377

Fox, Levi, Shakespeare's Birthplace.

See: Author Card, Small brochure.

Item 1378

Cartier, Francois (General), "La Système cryptographique de Bacon," Mercure de France, May 1, 1939, Volume 291, pp. 687-693.

Cartier continues further to expound the results of his investigation of the biliteral cipher of Sir Francis Bacon. Photostat negative. See items in folder **Item 2112**.

Item 1379

Kyd, Thomas [Pseudonym of Prof. Alfred Harbage], "The Cosmic Card Game," American Scholar Summer 1951, pp. 325-334.

A Columbia University professor, under the protection of a pseudonym, writes an elaborate satire of interpretation of one of Shakespeare's plays, Antony and Cleopatra. Autographed by the author. "unamibivalently yours."

Item 1380

Wilson, W.S., Ideal Plans of Francis Bacon's House and Garden as described in Essays XLV and XLVI.

Four pages of diagrams of house & garden, floor plan, front elevation etc. Letter from Scott Wilson enclosed. He did it as a term paper at Harvard and received an A. No Card.

Item 1381

Kelly, Walt, Uncle Pogo So-So Stories, New York: Simon & Shuster, 1953, unnumbered pages.

Item 1382

Bonac-Melvrau, F. [F. Bacon/Verulam], Défense de Will, Paris: Librairie d'art ancient moderne 1951, Two parts: Part 1 (text), pp. 151, Part 2 (documents), 98 figures.

It is difficult to know just what the author is trying to prove in this work. He apparently believes that the Shakespeare works were written by Bacon, as the title would indicate but other elements in it spring to the defense of William Shakespeare. The cryptographic system is inane, purely subjective, and quite similar to that used by Cunningham as seen in **Item 994**. Cf **Item 1382.1** Translation of Chapter XVII. Duplicate picture in grey folder with separate correspondence, **Item 2112**.

Item 1383

Oakely, Howard T., "An Application of Bayes' Theorem to the Solution of Transposition Ciphers," undated pamphlet.

A gift to WFF from the author. Enclosed is an analysis of Mr. Oakley's work by F. T. Leahy, Jr. of NSA. Instance of the use of computers in solution of a given problem. More notes in grey folder with separate correspondence. **Item 2112**.

Item 1384

Preyer, Wilhelm, "Eine Geheimschrift von Bacon-Shakespeare," Zukunft No. 52, 29 (September 1895), pp. 607-615.

The Germans, always lovers of Shakespeare, have paid a considerable amount of attention to the authorship controversy. This is one of the earliest German works setting forth the belief that Bacon wrote Shakespeare. Photostat negative.

Item 1385 and 1385.1

Titherly, Arthur Walsh, Shakespeare's Identity, William Stanley, 6th Earl of Derby, extract from Chapter VIII, Winchester: Warren & Sons Ltd., 1952, 338 pp., Extracts from pp. 139-143, 150, 151.

Further data in behalf of another nominee for the authorship of the Shakespeare plays by a distinguished chemist. The reviewer (See **Item 1385.1**) devotes more than four large pages to the Titherly book and therein states: "Practically every anti-Stratfordian has achieved his real distinction in fields other than Elizabethan scholarship." George C. Taylor's review appeared in the Shakespeare Quarterly 1955, No. 2. Anti-Shakespearean Theory.

Item 1386

Greene, Robert, The Spanish Masquerado, London: Roger Ward, for Thomas Cadman, 1589.

Photographic reproductions made from microfilm of the three copies in the British Museum which represents a special problem in bibliography and became the subject of a challenge to Mrs. Gallup's work on the bi-literal cipher. See TSCE pp. 230-33, 274, 276 and 279 (**Item 1691**). Folder contains microfilm. Two editions. Letter from WFF, 15 December 1953, to Lt. H.R. Peterson for getting films. The Air Attache's photographer didn't show up on the day allotted by the BM, so Peterson took his equipment there, blew the fuses and caused a ruckus.

Item 1386.1

Oliver, Leslie Mahin, "The Spanish Masquerado; a problem in double edition," reprinted from The Library, the Transactions of the Bibliographical Society, June 1947, pp 14-19.

On 1689, Robert Green's The Spanish Masquerado was published in two issues although of the same edition. Elizabeth Wells Gallup deciphered both, creating a question as to her capability of distinguishing likenesses and differences in type forms. Consequently, a challenge of the validity of her work arose. The dispute thereon is described at some length in Ch XVI of TSCE (**Item 1691**). The Oliver brochure is a discussion of this Elizabethan work from the standpoint of bibliographical theory and practice. The author of this paper was in 1947 assistant librarian at The Houghton Library at Harvard University. Interesting correspondence between Dr. Oliver and WFF is enclosed.

Item 1387

Goudy, Frederick, Report to Colonel Fabyan on typefaces in Bacon's *Novum Organum*.

Microfilm enlargement of the manuscript report by one of the greatest authorities on typography. The original of this manuscript is in the Fabyan collection in LC without the author's name. A carbon copy was found among the Goudy papers in the Library of Congress by ESF. See TSCE, Ch. XV (**Item 1691**). Fabyan deliberately suppressed Goudy's report, because its conclusions did not please him, since it directly conflicted with Mrs. Gallup's decipherment of this work, disproving it entirely –the greatest blow Fabyan could receive. Photostat positive.

The Riverbank Laboratories had commissioned the writer to make a scientific and critical study of the Italic types on which John Bill, King's typographer, printed Francis Bacon's Novum

Organum (1620) in order to establish the presence of two or more forms of each letter employed or to show conclusively the contrary fact: if varying forms were regular, constant and maintained consistently throughout the alphabet. The problem which the writer was asked to solve was whether the apparent heterogeneity of the form of the Novum Organum is an ordered result or the result of bad presswork, poor ink, broken and distorted letters, etc. or whether due to some essential and inherent variations in the design of the types themselves of which Bacon might avail himself to constitute a biformed alphabet for use in the biliteral cipher that he presents and explains in his sixth book of the Advancement of Learning.

Item 1387.1

Reduced duplicate copy of the Goudy Report.

Item 1388

Dawson, Giles E., "A Bibliographical Problem in the First Folio of Shakespeare," Reprinted from The Library, London: the Transactions of the Bibliographical Society, June 1941, pp. 25- 33. Autographed to WFF by the author.

Item 1389

Hinman, Charlton, "Mark III: New Light on the Proof-reading for the first Folio of Shakespeare," Reprinted from Studies in Bibliography, Papers of the Bibliographical Society of the University of VA, Volume III, 1950-5, pp. 145-153

Writer finds a second example of a corrected proof for the First Folio. (First example was published by Dr. E.E. Willoughby in 1932. Autographed to WFF by author. No Card.

Item 1390

Meeker, Anne, The Queen's Rings, The True Romance of Elizabeth, Queen of England, Chicago: Daniel Ryerson, Inc. 1936, 178 pp. DJ.

This novel was based on cipher stories which came from Mrs. Gallup's decipherments in the bi-literal cipher. It relates to the "marriage" of Queen Elizabeth and Sir Robert Dudley, who, the cipher states, were the parents of Francis Bacon. Dedicated to Col. Fabyan, who died in 1936 before the publication. Miss Meeker was a novelist, not a research analyst and had believed every word of Col. Fabyan's demonstration of the bi-literal Cipher.

Item 1391

Johnson, Edward D., Francis Bacon's Maze, Being a demonstration of the Sixth Live Word Cipher in the First Folio of the Shakespeare plays, The Francis Bacon Society, Canonbury Tower Islington, London: NI 1961.

The author begins his forward with a challenge to the Stratfordians to prove “Francis Bacon’s Word Cipher” is not true in every particular. This ardent and prolific Baconian thus throws the Friedman book to the winds; his obsession with pagenatious and anagrammatic acrostics have no basis in reality. When WFF was a luncheon guest in 1958 of Martin Pares, the then President of the Francis Bacon Society, Johnson was also a guest, and at that time presented this (one of a long list of his brochures on the authorship question) to WFF.

Item 1391.1

Booth, William Stone, Subtle Shining Secrecies. Writ in the Margents of Books Generally ascribed to William Shakespeare, the Actor and here ascribed to William Shakespeare, the Poet, Boston: Walter H. Baker Company, 1925.

Photostat negative of 24 pages of a book by one of the “way out in left field” Baconians.

Item 1392

Weagant, James R., Bacon and Weagant [ORMTS], Published and copyrighted by James R. Weagant, Los Angeles, CA, 1955.

It is possible that the author of this item knew what he was trying to say, but the general reader can gain absolutely no idea of his thesis, which apparently had something to do with the authorship of the Shakespeare plays. The item gives evidences of a mild psychosis. Tries to point out “Bacon’s primary puzzle groups.”

Item 1393

Pares, Martin, Will O’the Wisp, Reprinted from “Ariel,” The Winchester College Magazine, Spring 1958, 12 pp. 2 copies

Presented to WFF in London in 1958 when the latter was a luncheon guest of the author. It is autographed to William F. and Elizabeth S. Friedman. This “seditious” pamphlet, with apologies and cordial greetings from Martin Pares, Westminster 15: VIII: 58. WFF has many letters in the correspondence file passing between him and Pares, President of the Francis Bacon Society. Pares, a commander in the Royal Navy in World War II, was not a “nut” on the alleged ciphers, but a quite well-balanced “believer” basing his Francis Bacon Society work on other grounds. The two works referred on the back corner will be found in the FC **Items 1338 & 1371**.

Item 1393.1

Friedman, William F. & Martin Pares, “Pares-Baconiana,” Correspondence with Martin Pares, President of the Baconian Society of Great Britain, 1960s.

A folder of miscellaneous correspondence between Martin Pares and WFF. Besides the mainspring of the above-mentioned, many Xeroxed pages of Baconiana (magazine); a galley proof of Pares' editorial in December 1959 on the Friedman book TSCE (**Item 1691**); a long rough draft of a proposed article by WFF mostly in his handwriting. Note by ESF: Editor Pares started off with approbation for the Friedman book, declaring the Baconians did not base their claims of authorship on ciphers; but as time went on, he became increasingly vociferous about "the cipher systems" having some-or-many claims to validity. NO ITEM.

Item 1394

Hobson, Paul E. (Lt. Rtd. Royal Navy), "Cryptography," Encyclopedia Americana, 1961, pp. 266-276. Also see **Items 8** and **81**, "Codes and Ciphers by WFF, Encyclopedia Britannica, 1929 & 1956. Correction by WFF pp. 275, re Roger Bacon.

Item 1395

Callimachos, Lambros D, "Cryptography," Collier's (Adult) Encyclopedia, 1962.

See also **Items 8** and **8.1**, "Codes and Ciphers," by WFF, Encyclopedia Britannica, 1929 & 1956. NO ITEM.

Item 1396 & 1396.1

Anonymous, "Bulletin de l'A.R.C.- Amicale des Reservistes du Chiffre." 2 copies, May 1961 and December 1963.

The 1963 A.R.C. contains an article (in French) by David Kahn, a translation of the paper he delivered before the American Cryptogram Association in 1960 entitled "Two Soviet Spy Ciphers." Kahn, also in French, autographed this copy of the journal to WFF and ESF. (page 38). NO ITEM.

Item 1397

De Schepper, H., "Geheimschrift in de Zestiende EEUW," Spiegel Historiae, Netherlands: March 1967, pp. 139-149.

Reproduction of Spanish envoy's ciphers letter of 1593. Also a Spanish musical cipher. Also an unenciphered letter between Netherlands and Luxembourg Chiefs of State. NO ITEM.

Item 1398

Anonymous, "La cryptographie à travers les ages," L'Armée, May 1966, pp. 31-39, Xerox copy.

Pictures of famous French cryptographers Valerio and Bazeries and of the cryptologist Painvin of WWI and WWII fame. No ITEM.

Item 1399

Oakley, Howard T., The Bifid and Trifid Ciphers of Delastelle, issued privately by author in November 1958, 20 pp.

Annotation reproduced from analytic work done in 1940-42, at request of Rosario Candela. Autographed by author to WFF. Some correspondence in separate envelope. Extremely interesting foreword by the author, probably the most skilled in the field of cryptography of any member of the (amateur) American Cryptogram Association. Cf. David Kahn, The Codebreakers, pp. 242ff. More notes in grey folder with separate correspondence. **Item 2112.**

Item 1400

Holmes, Roger W., The Rhyme of Reason, a guide to accurate and mature thinking, New York: Appleton Century-Crofts, Inc., Students' Edition, 1939, 516 pp. No DJ.

A professor of philosophy at Mt. Holyoke College has some precepts which may be useful to cryptanalysts. The U.S. Navy used Mt. Holyoke college (among other women's colleges) to train WAVES in the science of cryptology in WWII. This item was a gift of Professor Holmes to WFF. Page 8 tells something of ciphers and WWI codes. Page 31 cites anagrams and palindromes. He gives as an example the "opposites," united may be anagrammed into untied. Interesting sentence anagram; "The midnight ride of Paul Revere" becomes "Rider gave hint of peril due." Professor Holmes own logic fails, however, in the statement (p. 8) as follows: "one may use a codebook, but if the recipient does not have a copy, no of work will bring out the meaning " because it is not based on a rational system" [WFF: The naiveté of some college professors is astounding!]

Items 1401

Gerard, James W., My Four Years in Germany, News York: George H. Doran, Company, 1917, 448 pp. No DJ.

The World War I Ambassador to Germany relates his experiences. He speaks of Room 40 O.B. Admiral Sir Reginald Hall, Sir Alfred Ewing, British cryptanalytic operations in that war, and the Zimmermann telegram. No Item. Cf. David Kahn, The Codebreakers, pp. 266ff.

Item 1402

Bradley, Omar N., A Soldier's Story, New York: Henry Holt & Company, 1951, 618 pp. DJ.

A major work among the memoirs written by famous leaders in WWII. See pp. 33 for a serious indictment of American Intelligence and the Army's method of selecting intelligence. "In their intelligence activities at AFHQ, the British easily outstripped their American colleagues. The tedious years of prewar study, the British had devoted to areas throughout the world gave them a vast advantage which we never overcame. The American army's long neglect of intelligence training was soon reflected by the ineptness of our initial undertakings. For too many years in the preparation of officers for command assignments we had over looked the need for specialization in such activities as intelligence. It is unrealistic to assume that every officer has the capacity and the inclination for field command. Many are uniquely qualified for staff-intelligence duties and indeed would prefer to devote their careers to those tasks. Yet instead of giving qualified officers for intelligence assignments, we rotated them through conventional duty tours, making correspondingly little use of their special talents. Misfits frequently found themselves assigned to intelligence duties. And in some stations, G-2 became a dumping ground for officers ill suited to line command. I recall how scrupulously I avoided the branding that came with an intelligence assignment in my own career. Had it not been for the uniquely qualified reservists who so capably filled so many of our intelligence jobs throughout the war, the army would have found itself badly pressed for competent intelligence personnel."

Item 1403 and 1403.1

Gilbert, Stuart, James Joyce's Ulysses, a study, New York: Alfred A Knopf, 1943, 379 pp. 1934, 3rd printing. DJ.

A commentary by an English student of Joyce upon the meaning of Ulysses, where in the author attempts to make the unintelligible intelligible. Gilbert wrote his book under Joyce's supervision, according to the publishers of this first American edition. A second edition (**Item 1403.1**), published in 1952, was completely revised and reset under Joyce's supervision. It was in 1934 that it became possible for Joyce's books and for books about Joyce, to be published (or even purchased) in the U.S. Important information on the jackets of both items. **1403.1**. Gilbert presents an explanation of Joyce's technique, of the interior monologue, of the relationship to the Odyssey of Greek mythology, and a detailed study of the symbolism that has influenced so many creative minds. Gilbert was impressed by Joyce's immense erudition and the utter detachment of the Joycean standpoint-a God's eye view of life, so to speak.

Item 1404

Seymour, Charles, The Intimate Papers of Colonel House, Boston & New York: Houghton Mifflin Company, 1926, 2 Volumes: Volume I, 471 pp. , Volume II, 508 pp.

Colonel House, the alter ego of President Wilson, left in his papers considerable historical material concerning the British cryptanalytic operations in WWI and the Zimmermann Telegram which then revealed to Congress by President Wilson, brought forth the declaration of war by the

U.S. The title page gives the title as shown above, with the following sub-title “arranged as a narrative by Charles Seymour, Sterling Prof. of History, Yale University.” WFF bought the 2 volumes in a second-hand book sale. President Wilson had his own private code with Colonel House (see **Item 7**) because the President did not trust State Dept. Codes. Separate file marked **1404** Contains Photostat negative of pp., Volumes 2, 64, 65, 426-435, 450-457.

Item 1405

Byrne, J.F., Silent Years: An Autobiography with Memoir's of James Joyce and Our Ireland, New York: Farrar, Straus & Young, 1953, 307 pp., with a forward by Harvey Brett. DJ.

J.F. Byrne, who is immortalized by Joyce's “Portrait of a Young Man” as the latter's friend and schoolmate, came to the U.S. and was a news reporter in New York City for many years. Although this purports to be only an autobiography, with memoir's of Joyce, the last four chapters deal with cryptography and specifically with a cipher system which Byrne devised and tried to sell to the U.S. Government. See the book review by Harrison Smith, Editor of the Saturday Review in **Item 1405.1**. See also the next time. For related material, see also file cabinet **1405**. A separate folder has clippings on Byrne giving lecture at Cornell, a clipping from Washington Post, July 6, 1962 on the closing of Shakespeare & Company, the Paris bookshop which originally published James Joyce's Ulysses and Finnegan's Wake.

Item 1405.1

Byrne, J.F.,

Correspondence with J.F. Byrne, author of The Silent Years. **Item 1405**; also correspondence with other person, concerning his book. A typescript and also the holographic copy of the Friedman talk in March 1954 before a group of adults studying the writings of James Joyce. “Remarks delivered before The Banshees on 13 March 1954, at the American Association of University Women Clubhouse, 1634 I Street NW.” WFF only reviews the last chapter which contains a cipher (called Chaocipher) and offers \$5,000 to anyone who can solve it. Byrne was interested in cryptography. He claims to have invented a holocryptic cipher, that is one that cannot be solved by pure analysis. WFF pointed out that you cannot buy on the open market books which contain authentic information on the subject of cryptography (or trade craft) because they are secret. He accuses Byrne of plagiarism. Handwritten in WFF's handwriting is a copy and typed copy of talk the invitation from HHP.

In a letter to J.F. Byrne, 3 March 1957, WFF writes that he won't spend any time trying to solve Byrne's cipher. “The days when ‘hard ciphers’ were all that were available are gone –

automation in cryptography began more than a dozen years ago and I don't think even the smaller or smallest nations today care a fig about them." WFF told Byrne he could never sell his cipher system to a government because it was useless and worthless. Folder contains review of Byrnes book by Richard Ellmann in the New Yorker 18. WFF started writing about the uselessness of this cipher as early as September 1922. When he was in the Signal Corps.

Item 1406

Roosevelt, Elliott, As He Saw It, Forward by Eleanor Roosevelt; New York: Duell & Sloan & Pearce, 1946, 270 pp. DJ.

A son of President FDR relates his interpretation of his father's attitude of the days before and after the attack on Pearl Harbor.

Item 1407

Giskes, H.J., London Calling North Pole, London: Wm. Kimbe, 1st edition, 1953, 208 pp. DJ.

Operation Nordpol, also called Das Englandspiel, was an enormous deception operation by the German Abwehr in WWII. German forces captured Allied resistance agents operating in the Netherlands, and used the agents' codes to fool the Allies into continuing to provide the agents with information and supplies. About 50 Allied agents were executed.

An extremely interesting story of the conduct of German espionage units in Holland. The author, a Hollander trained in Great Britain, was captured upon landing in the Netherlands by the Germans and forced to operate his radio for the Abwehr. The author was the former chief of German Counter-espionage in Holland, Belgium and Northern France. A very interesting review from The Washington Post is enclosed. WFF purchased this book in London in 1953 just after publication. An incredible disclosure by the Former Chief of German Counter-espionage in Holland. The story of the duel between SOE in London and German counter-espionage in Holland in 1942-43. For two years: Giskes maintained regular radio contact with London, reporting and receiving reports on the Dutch underground from the unsuspecting British. The RAF dropped arms and equipment straight into the hands of waiting Germans. Then many of the bombers ferrying the stuff across were shot down. Worse still, 54 agents sent from Britain were captured (and most of them later were shot). It wasn't until two of the agents escaped and returned to England that the British Secret Service learned how it had been taken. When the book was published in England, angry members of Parliament demanded an inquiry. The Secret Service refused to respond so there was no counter-story available on Operation North Pole. More recently, see Between Silk and Cyanide by Leo Marks who describes some of the British efforts to detect the ruse, which ran for quite a long time.

Item 1408

Vogt, William, Road to Survival, New York: William Sloane Associates, Inc., 1948, 335 pp. Introduction by Bernard M. Baruch. DJ.

This book has nothing to do with cryptography. It is in the collection because it does have something to do with genetics, the subject of WFF studied in his university days. Mr. Vogt, Chief of the Conservation Section of the Pan American Union, was alarmed over the world population increase and the consequent near-exhaustion of natural resources- an even more valid conclusion now than when this book was published.

Item 1409

Foote, Alexander, Handbook for Spies, New York: Doubleday & Company, Inc., 1949, 273 pp. DJ.

Has an appendix dealing with cryptography of the type which the author says was used by Russian Secret agents; appendix A gives, it is believed, an honest and authentic account of such cipher methods. Appendix B covers the Swiss network and "The Canadian Spy Case". The two appendices cover pp 250-276 inclusive, and both are omitted as Appendix C, in the London edition, published in 1953 (**Item 1409.1**). A review is enclosed, written by the Head of OWI in Europe during WWII also New York Times, May 22, 1945. This item was sent to WFF with the Compliments of Brig. Tiltman of the British Joint Services Mission in Washington. A. Foote was the first Englishman to work for nine years in the Soviet Intelligence Service. He gives a first-hand account of post-war training in Moscow. See reviews.

Item 1409.1

Foote, Alexander, Handbook for Spies, London: Museum Press, Ltd., 1953, 190 pp. No DJ.

The type was completely reset. The British compressed 250 pp into 190 pp. The same book as **Item 1409** but minus the curious and valuable appendices. It is believed that pressure was put upon the author to omit these appendices. An anonymous review, from a British newspaper is enclosed. These two Items (**1409** and **1409.1**) should be examined and considered together. Note the striking differences in the two jackets. Separate envelope contains DJ for **1409.1** (in pieces) plus correspondence. WFF liked the book and thought there was more truth in it than in almost any other of the type WFF had read. NY Times Book Review May 22, 1949. In the wake of many Americans being arrested in Moscow or groups held under suspicion (Boy Scouts, archaeologists). "There was a time when a spy could hold up his head and feel that his business was hardly every man's dish. Today the profession has become as debased as a Chinese dollar." "Since in the course of human events every American has become qualified for the pursuit of espionage, a hard book for the trade is a welcome event." Connection to Lucy. Foote was a sales manager in the English Midlands until restlessness and discontent took him into the communist

party, then into the International Brigade in Spain, then into a Red Army Spy unit working against Germany.

Item 1410

Jackson, Holbrook [Editor], The Complete Nonsense of Edward Lear, New York: Dover Publications, Inc., 1951, 188 pp.

These nonsense rhymes are semi-cryptographic. They belong in the category of the cult of intelligibility “except that there is no pretense of intelligibility.” Unlike the writings of Gertrude Stein and James Joyce, children get a great deal of pleasure from Lear. Second card,

“This illustrated book is a monument to the Laureate of Nonsense. It assembles under one cover, the contents of all nonsense books written and illustrated by Lear and published during his lifetime or by his executors immediately after his death. It is the only popularly priced complete edition.” The foregoing “blurb” appears on the back of the front jacket as its first paragraph and I fully agree. The rest of the “blurb” on the jacket is quite interesting. The book as a whole, at first glance, would appear to have no relevance to the subject of cryptology – but it does have for the “enquiring cryptologist”. I acquired it by purchase in 1951, years after/before the relevance of such writings dawned on me. Pages 286-88 bear reproductions of Lear’s handwritten material. WFF regarded this book, despite its very modest cost in 1951, as valuable in the collection. No ITEM. MISSING.

Item 1411

Pinto, Oreste [LTC], Spy-Catcher, London: Weiner Laurie, 1st Edition, April 1952, 2nd edition, June 1952, 175 pp. No DJ.

Colonel Pinto describes dramatic incidents of his career in counter-espionage. Chapter 9 of the Pinto book recounts the (probably) most shocking take of a treacherous spy of WWII, “King Kong”, the gorilla-eyed leader of the Dutch Resistance Movement sold out to the Germans (To Col Giskes, See **Item 11407?**) just before the Battle of Anhem, where 7,000 allied troops were lost because of King Kong’s giving information to the Germans. Colonel Pinto was highly praised by General Eisenhower. Dutch by birth, he worked with the French Deuxième Bureau and British MI5 for many years. See the entry for Oreste Pinto in Wikipedia.

Item 1412

Sutherland, Donald, Gertrude Stein, a biography of her work, New Haven: Yale University Press, 1951; London: Geoffrey Cumberlege Oxford University Press, 218 pp. DJ.

See comments under items listed under Stein Gertrude. Also see information on DJ. A guide to her work written after her death. Her unpublished writings were left to Yale-authorizing their publication.

Item 1413

Todd, Robert, A Catalogue of Books in the Library of Robert Todd Esq. (Shorthand, cryptograph, etc.), [Catalogue of books on shorthand, cryptography, etc.]; London & Luton: Marshall, Brookes, and Chalkely, Ltd., 1912, 98 pp. No DJ.

This bibliography is not extensive and the identity of Robert Todd is not known to WFF. Given to WFF and autographed to him by Prof. Vincent. Most items concern short hand. The few items regarding cryptography are listed in an appendix entitled: “Chronological List” 45 pages, numbered separately. Cf. Sheldon, EAW on tachygraphy.

Item 1414

Dourlein, Pieter, Inside North Pole: A secret agent’s story, London: William Kimber, 1953, 206 pp. [Translated by F. G. Renier and Anne Cliff]

The allegedly true story of the author’s part in the secret battle between British and German intelligence and counterintelligence agencies in WWII. The author, a Netherlander, trained in England to counter the German Col. Giske’s “North Pole” radio operations in Holland, was captured, escaped, found his way back to England, only to be imprisoned in turn by the British. He was cleared only after the war had ended. Should be considered in connection with **Item 14**. See also Hermann Giskes book Calling North Pole and the entry for Giskes in Wikipedia.

Item 1415

Rowan, Richard Wilmer, Terror in Our Time, the Secret Service of Surprise Attack, New York & Toronto: Longman’s, Green & Company, 1941, 438 pp.

A popular book concerning the operation of secret agents and their communication concealment systems.

Hitler

Sidney Reilly

Felix Djerzhinsky

Poleschuk – Konar

The British Secret Service

O.V.R.A. – *Opera volontaria repressiore – anti-Fascista*

Himmler – The Nazi Dzierzhinsky

International Spy Rings

Terror in the Holy Land

Spanish Civil War

Item 1416

Stein, Gertrude, Four in America, New Haven: Yale University Press, 1947, 221 pp. Introduction by Thornton Wilder. DJ.

See comment above on **Item 931**. Enclosed is a long interview for the Reporter magazine April, 1960, entitled "The Mystery of Gertrude Stein".

Gertrude Stein asked the question: had George Washington been a novelist, General Grant a religious leader, Wilbur Wright a painter, Henry James a general.

Item 1417

Butow, Robert J.C, Japan's Decision to Surrender, Stanford, CA: Stanford University Press, London: Geoffrey Cumberlege, Oxford University Press, 1954, 259 pp. [Foreward by Edwin O. Reischauer.] DJ.

The detailed account of how Japan's decision to surrender was reached. Published under the authority of the Publication Committee of the Hoover Library of War, Revolution, and Peace. Edwin O. Reischauer later became U.S. Ambassador to Japan. In WFF's opinion, the author was a much-misinformed man. Important information on the jacket. The author believes that the dropping of the atomic bombs and the Soviet entry into the war in August 1945 did not produce Japan's decision to surrender.

Item 1418

D'Israeli, I., Curiosities of Literature; London: Edward Moxon, 1734, 6 volumes:
 Volume I 370 pp.
 Volume II 327 pp.
 Volume III 379 pp.
 Volume IV 387 pp.
 Volume V 398 pp.
 Volume VI 392 pp.

These contain many literary curiosities such as brief articles on anagrams, echo verses, acrostics, palindromes and the like, with examples. (See also Walsh, Handbook of Literary Curiosities, **Item 1421**). The D'Israeli volumes must have been extremely popular reading matter in England because the set in the FC is the 9th edition, the 1st edition having been published in 1791. Isaac D'Israeli, father of Benjamin, Lord Beaconsfield, Prime Minister to Queen Victoria was born in 1766 and died in 1841. NO ITEM.

Item 1419

Montagu, Ewen, The Man Who Never Was, Philadelphia & New York: J.B. Lippincott, Company, 1954, 160 pp., Foreward by Lord Ismay.

An allegedly authentic story of a dramatic piece of work by British Secret agents in WWII, whereby they “planted” a dead body carrying the [false] secret plans for the invasion of Italy. Biographical information concerning the author and details in the jacket indicates authenticity.

Item 1420

Kase, Tosh. Kazu, Journey to the “Missouri,” New Haven, Yale University Press, London: Geoffrey Cumberlege, Oxford University Press, 1950, 282 pp. DJ.

The head of the American desk in the Japanese Foreign Office writes the history of the surrender and comments upon events as he saw them before and after Pearl Harbor. An autographed copy. At WFF’s request Roger Pineau, Japanese-expert Naval historian, asked the author of this item to autograph it for WFF which was done. Commended by Joseph Grew, U.S. Ambassador to Japan for many pre-WWII years.

Item 1421

Walsh, William S., Hand-Book of Literary Curiosities, Philadelphia: J.B. Lippincott Company, 1893, 1104 pp. No DJ.

This item is a literary curiosity in itself. Scattered through it are brief essays of interest to the cryptologists. This should be a very intriguing item for young people, for it contains information concerning riddles, rebuses, enigmas, mystery, arcana, puzzles, even charades – matter which the author in the Preface speaks of as “deemed below the dignity of encyclopedias, dictionaries... that the literary trifling which pleased the Keenest wits... has a distinct historical value in retrospect.” Great source of literary quotations in English & Latin. See Enigma.

Item 1421.1

Knox, Renald, A Book of Acrostics, London: Methuen Photostat negative of a section of a copy in LC, published 1924, Methuen & Company, pp. 1-21. Bound in cardboard.

Item 1422

Grew, Joseph C., Turbulent Era, a diplomatic record of forty years 1904-1945; Boston: Houghton Mifflin Company, 1952, 2 Volumes: Volume I, 705 pp; Volume II, 707-1560. DJ.

This two-volume autobiography has a considerable amount of information about the events leading up to Pearl Harbor and the breaking off of diplomatic relations with the Japanese. Autographed to WFF. Edited by Walter Johnson, assisted by Nancy H. Hooker. Ambassador

Grew (see pp. 1233 and footnote) relates that he had forwarded (Jan 1941) to Washington the warning that the Japanese would attack Pearl Harbor, the latter being named although U.S. intelligence claimed that they never been informed of plans for an attack at that particular place. See DJ, Jan 27, 1941.

Item 1423

Fuller, Jean Overton, No. 13, Bob, Boston & Toronto: Little, Brown & Company, 1954, 240 pp. DJ.

Concerns the communications of British counter espionage agents, WWII, which were seized and used by the German's in France. A gift from Dr. & Mrs. Kullback when WFF was in George Washington hospital with a second coronary occlusion (May 1955). An expose that scandalized the British Intelligence and shocked the Allied World. She writes of the activities of the French Section of SOE. The central figure in the book is Captain John Star.

Item 1424

Gouzenko, Igor, The Iron Curtain, New York: E.P. Dutton & Company, Inc., 1953, 279 pp. DJ.

Dramatic autobiography of a man whose work in the Soviet code room in Ottawa led to the exposure of Stalin's espionage network in Canada. Gouzenko's defection exposed [Joseph Stalin](#)'s efforts to steal [nuclear](#) secrets, and the then-unknown technique of planting [sleeper agents](#). With [World War II](#) over, the "Gouzenko Affair" helped change western perceptions of the Soviet Union from an ally to an enemy, and is often credited as a triggering event of the [Cold War](#). Much revelation regarding Soviet codes. This defector from the U.S.S.R. was still living in Canada with his family under the protection of the Canadian Government in 1966 when this entry was made. Gouzenko died of a heart attack in 1982 and his grave was not initially marked. It was only in 2002 that the family put up a headstone. In June 2003, the City of Ottawa and in April 2004, the Canadian federal government put up memorial plaques in [Dundonald Park](#) commemorating the Soviet defector. It was from this park that RCMP agents monitored Gouzenko's apartment across the street the night men from the Soviet embassy came looking for Gouzenko.

Item 1425

Theobald, Robert A. [Rear Adm. USN retired], The Final Secret of Pearl Harbor, The Washington Contribution to the Japanese Attack, NY: The Devin-Adair Company, 1954, 202 pp. DJ.

An important book/brochure written by a biased "revisionist." Correlative forewards by Rear-Admiral Husband E. Kimmel, USN Ret. And Fleet Admiral William F. Halsey, USN. He

believes FDR alone was responsible for the helplessness of the Pacific fleet and the unpreparedness of Adm. Kimmel and General Short. That he had ample advance warning of the attack on Pearl Harbor which he failed to pass on to Kimmel & Short “is proved beyond question”(!)

Item 1425.1

Envelope:

1. Letter acknowledging receipt of the Japanese translation of Adm. Theobald's book from Col Dale M. King.
2. Draft of a review by Roger Pineau of the Theobald. “Haters of FDR will revel in this book.”
3. Short bio of Admiral Robert A. Theobald.
4. English translation of DJ blurbs from Japanese edition.
5. Correspondence about how the purple code is referred to in a Saturday Evening Post article.
6. Copy of the SEP Article, 15 May 1945.
7. The Japanese Translation.

Item 1426

Kimmel, Husband E. (Rear Admiral USN, Ret.), Admiral Kimmel's Story, Chicago: Henry Regnery Company 1955, 206 pp.

This is a full text of the Admiral's story, abbreviated somewhat in the preceding item, (**Item 1426.1**). Clippings enclosed showing varied viewpoints by reviewers, also the official biography of Admiral Kimmel, obtained from the Navy Department. It is revealed in the preface, that Admiral Kimmel's personal attorney urgently demanded the Congressional Investigation of Pearl Harbor in order to prevent the claim that the Statute of Limitations had passed and that the truth must never be revealed. NOTE: As of December 1966, Admiral Kimmel was still declaiming that Churchill and Roosevelt were to blame. His obituary, May 24, 1968, is taped inside the book. He died of a heart attack in Croton, CT at the age of 86.

Item 1426.1

Kimmel, Husband E. (Rear Admiral USN, Ret), “Admiral Kimmel's Own Story of Pearl Harbor,” U. S. News & World Report, 37, 24, (December 10, 1954), Washington, DC, pp. 66-77, 133-159.

Condensation of the book, same title, published in Chicago by Henry Regnery Company, January 1955. The author attempts to defend his failure to take proper action after he had been warned that war was imminent. A detailed commentary upon this book would require much more space than can be given in this bibliography. Given to WFF, bound in boards by Cmdr. Mindte on February 1, 1955.

Item 1426.2

Kimmel, Husband E., Envelope of miscellaneous clippings re: **Item 1426** from 1955 to December 1966.

Item 1427

WFF Back file, Part IV, Friedman, William F., "Bibliographical Note on Collange's "Polgraphia" 1561," in The Quarterly Book List (Summer, 1955) of Sidney Kramer Books.

In this note, WFF indicates that Collange pilfered the whole of his books from Trithemius. On Collange see Galland, pp. 43-44

Item 1427

1) Quarterly Book List, Sidney Kramer Books, Summer 1955, Cryptography by Collange, 2) Order form advertising Collange's translation of Johannis Trithemius' Polygraphia.

Gabriel de Collange (1524-1572) was a mathematician who also delved into the mysteries of the Kabbala and into numerology. Collanges' translation is based on the Frankfort Edition of 1550 published by Adolph von Glauberg. Collange added materially to the information contained in the original.

Item 1428

Begley, Walter (Rev), Biblia anagrammatica or the anagrammatic Bible, a literary curiosity gathered from unexplored sources and from books of the greatest rarity. London: Privately printed from the author 1904, 212 pp.

This is the most extensive collection in the whole field of literature: a remarkable item and rare. It is astonishing; therefore, that Begley became devoted to the theory of the Baconian authorship of Shakespeare and tried to support his belief by using the anagrammatic method. Important bibliography in the volume. More notes in grey folder with separate correspondence.

Item 2112.**Item 1429**

Pixton Jr., John E., "The Pearl Harbor Debate," The Progressive, July 1954, pp. 29-31.

This is an interesting review of Admiral Theobold's book. It is clear that the reviewer has no sympathy for the thesis of the revisionists.

Item 1430

Dulles, Allen Welsh, Germany's Underground, Privately Printed, copyright 1947, pp. 207. No DJ.

Mr. Dulles, then Director of Central Intelligence, United State Government, was in charge of OSS operations in Western Europe during WWII. This book, published after the close of that war, is a fascinating narrative concerning some of his experiences in Switzerland. Out of print. Autographed to WFF by the author. See the enclosed correspondence. (Missing?)

Item 1431

Hashimoto, Mochitsura, Sunk: The Story of the Japanese Submarine Fleet, 1942-1945, London: Cassell & Company, LTD., 1954, 218 pp.

Translated by Commander E. H. M. Colegrave, R.N. (Ret). More about submarine warfare in WWII. The author, Lt. Commander of the Imperial Japanese Navy, gives his reasons for the dismal failure of the Imperial Navy.

Item 1432

Current, Richard N., Secretary Stimson: A Study in Statecraft, New Brunswick, NY: Rutgers University Press, 1954. 272 pp. No DJ.

Material for a study of the Offices of the Secretary of War and State under Colonel Stimson and also the attack on Pearl Harbor and WWII. An incomplete review by Professor Samuel Flagg Bemis (Yale University) is shown in an enclosure. An important book, for a full history, has not yet been accomplished. Professor Current sent this copy as a gift to WFF. There was no correspondence connected with it and it is not autographed.

Item 1433

Sherwood, Robert E., Roosevelt and Hopkins: an intimate history, New York: Bantam Books, 1950, 2 Volumes: Volume I: The Men Who Shaped Our Lives, 540 pp., Volume II: From Pearl Harbor to Victory, 633 pp. PB.

The man, who wrote FDR's speeches during WWII, writes intimate details of events after the attack on Pearl Harbor. Churchill's assessment of Hopkins (See The Grand Alliance), chapter 2, pp. 22-24, says of Hopkins, "In the history of the United States, few brighter flames have burned." In fact in Churchill's 6 volume history of WWII, Hopkins is mentioned with praise hundreds of times. The Sherwood book is really the outgrowth of the book planned by Hopkins and unwritten at the time of his sudden death. (See introduction by the author of **Item 1433**.)

Item 1434

Bell, E. T., Men of Mathematics, Melbourne, London & Baltimore: Penguin Books, 1953, 2 Volumes: Volume I, 322 pp. and Volume II, pp. 323-646. PB.

A work of general interest to the cryptologist. For many years cryptology has been considered a special branch of mathematics. It is becoming more and more so as the science progresses. See footnote, page 169, also see page 187 of TSCE (Item 1691). For author Bell's delightful remarks concerning the tricks that numbers can play on uncritical minds in his book Numerology.

Item 1435

Freeman, William, The Incredible De Foe, London: Herbert Jenkins, 1950, 304 pages. DJ.

De Foe is alleged to have been a member of British Secret Service in his day. "He was one of the most zealous informers ever employed by the British Government," states the publisher. See the jacket for details of this remarkable man, who crowded several lifetimes into his span of life. See the Encyclopedia Britannica for citations and dates of his performances as a secret agent and a political agent for the Crown, not as "spy" or especially "agent" in the present day sense of "secret agent," but rather as a propagandist. One De Foe admirer claims De Foe authored the Shakespeare plays. DeFoe wrote a history of the Devil.

Item 1436

Toledano, Ralph de., Spies, Dupes, and Diplomats, New York: Duell, Sloan, & Pearce: Boston: Little, Brown, & Company, 1952, 244 pp., DJ.

A prolific writer and editor, a hater of communism, writes his own warning against the United States involvement in the Far East. Much discussion of Russian spies, particularly Richard Sorge, who had lured into his organization even a Japanese prince. See entry for Richard Sorge in Wikipedia.

Item 1437

Catton, Bruce, A Stillness at Appomattox, New York: Doubleday & Company, Inc., 1954, 438 pp.

This is a Civil War history of the final days of the Civil War. Winner of the Pulitzer Prize for 1954. Mr. Catton is the most distinguished of the Civil War historians.

Item 1438

Barber, Joseph Jr., Hawaii: Restless Rampart, Indianapolis & New York: The Bobbs-Merrill Company, 1941, 285 pp. No DJ.

A book that outlines the author's "break with tradition." Interesting because it was published only a few months before the attack on Pearl Harbor and deals glowingly with the strength of the military installations on Hawaii. "How mistaken can we be!" *A ole make Ka waai Ka ale owaho aia noi Ka ale olo a Kawaa*. A canoe is not swamped by the outside wave, but by the inside wave. Hawaiian proverb.

Item 1439

Puleston, W. D. (Captain, USN), The Armed Forces of the Pacific, a comparison of the military and naval power of the United States and Japan; New Haven: Yale University Press, 1941, 273 pp.

A former head of Naval Intelligence writes a timely book. Interesting because it was published in 1941 on the eve of the attack on Pearl Harbor. See the author's conclusions, pp. 252-260. This was a gift to WFF from Commander Richard Mindte whose underline appears on page 116 and states there could be no attack on the invincible bastion of Pearl Harbor, then "under a war-regime," according to Adm. Puleston's assessment. Compare following (**Item 322**) where the same author writes about "blunders of WWII." "There will be no American Port Arthur!!" Encourages America to support Europe in the war and abandon isolationism.

Item 1440

Lowell, Joan, The Cradle of the Deep, New York: Simon & Schuster, 1929, 261 pp. No DJ.

A famous literary forgery of the 1920's. Miss Lowell made fools of her admiring critics when she herself disclosed that her whole journey had existed only in her imagination. Rousing sea tales of the South Seas.

Item 1441

Weitzenbock, Roland Doctor, Invariantentheorie, excerpt (Vorwort) from Groningen: P. Noordhuff, 1923. Folder with bound copy in board.

This extract from a sober and dry book on mathematics is in the FC because in the Foreword there is an authentic acrostic composed of the initial letters of the successive sentences. The acrostic (in German) says: "Down with the French." "Neder mit den Franzosen." First letter of every sentence.

Item 1442

Ferrell, Robert H., "Pearl Harbor and the Revisionists," The Historian 17, 2, (Spring 1955), pp. 215-233. PB.

The author is a Professor of History at Indiana University. The revisionists hope to prove how in 1941 President Roosevelt purposely exposed the Pacific Fleet at Pearl Harbor and goaded the

Japanese into attacking it, thus bringing the United States into the war on the side of the allies. Professor Ferrell examines the claim of the revisionists especially those in connection with the attack on Pearl Harbor. A sober and fair appraisal. *Kriegschuldfrage*, “There is a fair-sized amount of balderdash in Theobold’s book. The Roman philosopher Seneca one said, “It is better to have useless knowledge than to know nothing.” Not in the intelligence business!

Item 1442.1

Smith, Murphy D., Book Review: Benjamin Franklin and American Foreign Policy by Gerald Stourzh; Chicago: University of Chicago Press 1954, *The Historian*, pp. 247-248, missing.

Item 1442.2

Barnhart, John D., Review: The Burr Conspiracy by Thomas Perkins Abernethy in The Historian, Volume 17, No. 2, 1955, pp. 248-249, missing.

Item 1442.3

Sparks, David S., Book Review: A Stillness at Appomattox, by Bruce Cotton, pp. 250-251, missing.

Item 1442.4

McKee, Delber L., Book Review by Richard N. Current, pp. 254-255, missing.

Item 1443

Frank, Wolfgang, Die Wolfe und der Admiral, Hamburg: Gerhard Stalling Berlag, 1953, 552 pp.

A Story in detail of the trials and tribulations of the German submarine fleet in WWII. Many clipping, from Germany newspapers including reviews, with this item. [clippings missing].

Item 1443.1

Wolfgang, Frank, The Sea Wolves, The story of German U-Boats at War, Translated by Lt. Cdr. R.O.B. Long, R.N.V.R.: forward by Vice-Adm. Leland P. Lovette, USN (Ret.), New York and Toronto: Rinehart & Company, Inc., 1955, 340 pp. DJ.

Purports to be a translation of the **Item 1443**, but it is merely a condensation and not a good one. On the reverse side of the flyleaf are many references of note-the page numbers wherein are found the German’s theories to account for high losses in their submarines. Story of German U-Boats effort. Secret rebuilding of the Flotilla under Admiral Dönitz in 1735.

Item 1444

Moorehouse, A. C., The Triumph of the Alphabet, a History of Writing; New York: Henry Schyman, 1953, 223 pp. DJ.

The influence of the invention and development of the alphabet on history. Professor Moorehouse covers “the epochs from the fourth millennium BC to the present day and the chief systems are the cuneiform, Egyptian, Chinese, and the alphabet.” The latter is traced to a Semitic source. (Phoenician) Linguistic groups still exist in the world today that have not yet evolved a written language. Chapter II is on decipherment. The Rosetta Stone, Young and Champollion. Phaistos disk. Hittite cuneiform. Hittite hieroglyphics. Cf. Sheldon, EAW and Jean-Jacques Glassner, The Invention of Cuneiform. On the Phaistos disk, See Jerome M. Eisenberg, “The Phaistos Disk: A One hundred-year Hoax?” Minerva, (July/August, 2008), pp. 9-24.

Item 1445

Layton, Edwin T. (Captain, USN), “Rendezvous in Reverse,” Reprint from United States Naval Institute Proceedings, 79, 5, (May 1933), 478 pp.

Captain Layton believes that a story by Captain Wilfred J. Holmes, (pseudonym Alec Hudson) which was published in The Saturday Evening Post in August, 1941 was followed by the Japanese in their second attack on Pearl Harbor, during the early morning of May 4, 1942. Layton believes the Japanese routinely scan American publications and that Alex Hudson’s story, “Rendezvous,” was imitated. Not just coincidence. See Michael Mewshaw, Day of the Gun.

Item 1446

Gardner, E. Stanley, The Case of the Empty Tin, New York: Pocket Books, Inc., 9th printing, September 1950, 276 pp.

Another romantic tale involving ciphers. PB. Fragile pulp fiction. What murder message did the empty tin can hold? Della Street deciphers the message.

Item 1447

Baxter, James Phinney, III, Scientists Against Time, Boston Little, Brown and Company, 1946, 473 pp. DJ.

Contains a chapter entitled “The See Saw of Submarine Warfare,” which gives credit to radar as the principal weapon in winning the Battle of the Atlantic. Much valuable information on jacket. Foreword by Vannevar Bush. The book is autographed “To Wm. F. Friedman, with the author’s compliments and deepest respect and admiration-James P. Baxter III, October 11, 1955.” The author, President of Williams College, on leave to serve as historian for the Office of Scientific Research and Development, is the grandson of the Baxter who wrote The Greatest of Literary Problems, described in **Item 1325**. The official inside story of Office of Scientific Research and Development.

Item 1448

Morton, Louis, "Did Franklin Roosevelt Sink the Pacific Fleet?" The Reporter, June 8, 1954, pp. 42-45.

Review of Rear Admiral Robert A. Theobald's book, The Final Secret of Pearl Harbor, New York: Devin-Adair. Replacement copy provided by VMI Department of History.

Item 1449

Johnen, Christopher, Kurzgefässte Geschichte der Stenographie, Berlin: Buchhandlung des Stenographenverbandes Stolze-Schren Wilhelm Reh, 1917, 76 pp.

Deals with the history of shorthand. Very authoritative book. Covers Greek Tachygraphy. Tironian Notes. Late antiquity. See Sheldon, EAW.

Item 1450

Speziali, P., "Le Logogriphe d' Euler," Bulletin de la Société Suisse des Bibliophiles, 10^{eme} Année, No. 1/2, (April 1953). Two folders: 1) Photostat positive copy of a four page article devoted to the decipherment of a cryptogram prepared by the famous mathematician Euler, and 2) original copy, letter from Speziali.

The greatest mathematician Euler put a discovery of his into cipher and this article tells something about the occasion. Exchange of letters between Professor Speziali and WFF enclosed.

Item 1451

United States Government, The Science of Fingerprints, FBI, US Department of Justice, n.d., 197 pp., Carries imprint of GPO inside title page, Has also a subtitle: Classification and Uses.

In late 1968, a number of persons suggested to WFF that his inventive creativity might develop a device that would solve the problem of bank robberies. He did think of something and pondered it. He tried to get the very latest information on finger prints, but ran into irreversible obstacles. Finally, he put a personal telephone call to J. Edgar Hoover (other offices in FBI had all refused him) and received the usual stalling. WFF told the secretary, "Please ask Mr. Hoover himself, tell him that WFF is making the request." She came back at once saying a copy would be mailed out that day.

Item 1452

Read, Oliver (Managing Editor), "Radio Intelligence," Radio News, (October 1944), pp. 1-8, Photostat positive.

The editor of a trade journal writes on radio monitoring, intercept, etc. A popular and fairly good description of how radio transmitters are located by taking bearings on transmissions. Bound in boards.

Item 1453

Mashbir, Sidney Forrester, I was an American Spy, New York: Vantage Press, Inc. Extract of pp. IX.

The principal reason which Colonel Mashbir assigned for the failures of the U.S. in the field of intelligence is the manner in which the services treat the whole subject of intelligence. The extracts are therefore of considerable interest in connection with the study of the U.S. Armed Forces in their use of intelligence. The extract included a very interesting quotation from an article by Gen. Omar Bradley which appeared in the April 9, 1951 issue of Life magazine. No item.

Item 1454

Chamberlin, William Henry, America's Second Crusade, Chicago: Henry Regnery Company, 1950, extract of pp. 158-160, 170-175.

Mr. Chamberlin is one of the leaders of the revisionist's school. He presents in his book the principal arguments employed by the revisionists, including the arguments based upon what they constantly refer to as withholding of "Magic" from the commanders at Pearl Harbor. No card, no item.

Item 1455

Egidi, Pietro, Archivo, Storico per le Province Napoletane Anno XXI, extract from, Fasc. II, 1906; "La Scrittura Segreta di Giovanni I di Napoli in una sua lettera dell 'A 1380," pp. 360-384.

Photostat positive-article of importance in connection with the history of cryptography. A cryptographic letter written in 1380 appears therein. Item of historic value. Cf. Galland, p. 60.

Item 1456

Claus, Joseph Henry, The Lost Code, Revealed Key to the Alphabet and Language, extracts from Philadelphia, PA, 1928, pp. 1-16.

One of the "curiosities" of cryptographic literature. It has meaning only to the author. Bound in Boards.

Item 1457

Hime, Henry W. L. (LTC), Gunpowder and Ammunition, Their Origin and Progress, extract from "The Origin of Gunpowder-Friar Bacon," London: Longmans, Green & Company, 1904, pp. 141-162. Photostat (positive)

An officer in the Royal Artillery writes of Roger Bacon and the origin of gunpowder. Since numerous persons have believed that the Voynich Ms. was the work of Roger Bacon, this study is referred to by some person's in their attempts to solve the cryptic writings of the Voynich Ms. The extract allegedly contains two anagrams dealing with the invention of gunpowder. Bound in boards.

Item 1458

Goheen, Harry, "A Cryptographic Machine," Proceedings of the Iowa Academy of Science, 60 (1951), pp. 489-491.

A mathematician invents a cryptographic machine. The comments on the memorandum slip on the back cover gives an evaluation, which is very low. What does he say? Or mean? In non-math lingo, "The meat of this paper is in the last 3 paragraphs and is really just carrion. From Dr. Lebler, 26 August 1954.

Item 1459

Nicholas, Nicholas Harris, Esq. Lt. RN, "Naval Signals," The United Service Journal and Naval and Military Magazine, Part I, (1829), pp. 50-61. Photostat positive.

Deals entirely with flag and semaphore signals. Of historical interest, because written almost a century before the invention of radio and modern systems of signaling. Bound in boards.

Item 1460

Ayres, Waldeman, No. 9 Stenographic Keyboard, Commercial Research Department, International Business Machines Corp., April 16, 1937, 28 pp., plus 1 figure.

Frequencies of letters, syllables and words useful in the study and practice of shorthand, and a special keyboard. The frequencies might be useful in developing a machine that would take stenographic records and transform them into regular plain language English. Photostat positive. Cf. Sheldon, EAW stenography.

Item 1461

Hsu, Immanuel C. Y., Article: "Kurusu's Mission to the United States and the Abortive Modus Vivendi," The Journal of Modern History, 24, 3, (September 1952), pp. 301-307.

A Japanese historian unites upon the Kurusu mission to Washington in the days immediately before Pearl Harbor. The last sentence is the author's uncompromising dictate: "Kurusu and Nomura knew nothing of the plan to attack Pearl Harbor." Original journal purchased from Cosmos Club.

Item 1461.1

Kublin, Hyman, Book review: The Road to Pearl Harbor, The Coming of the War Between The United States and Japan; by Herbert Feis, pp. 320-321. The Journal of Modern History-34, 3 (September 1952).

A book review on the Volume by the distinguished economic advisor of the U.S. State Department. Enclosed, two pages with review missing from journal, in the Feis book, Item 645. Washington Post editorial, April 10, 1954 on Saburo Kurusu. His death at the age of 66. There is a mystery still over what transpired between Kurusu and Nomura and Cordel Hull. Hull believed Kurusu was deceitful. Kurusu always claimed he was ignorant of Tojo's intentions. The messages decoded by the Navy Department show that Kurusu was repeatedly instructed not to break off negotiations and that Yamamoto wanted to avoid conflict with the US. K agreed. K had an American wife and two of his daughters were married to Americans. Kurusu was never brought to trial as a war criminal.

Item 1462

Truman, Harry S. (U.S. Senator from Missouri), "Our Armed Forces Must be Unified," Collier's, August 6, 1944, extract from pp. 16 & 63.

The article by Mr. Truman was written when he was U.S. Senator from Missouri. The title of the article indicates that Mr. Truman realized how serious a problem was presented by the differences between the Army and the Navy. He advocated that they be united in a single armed force. The extract has a bearing upon the relations between the Army and the navy commands at Pearl Harbor before the attack by the Japanese.

Item 1463

Farley, James A., Jim Farley Story; The Roosevelt Years, New York and Toronto: Whitteshey House, 1948, extract of page 345. no item.

James A. Farley was Postmaster General during some of the years of the administration of FDR. The extract included in this item is of considerable interest in connection with the attack on Pearl Harbor.

Item 1464.1 (1)

Current, Richard N., "The Stimson Doctrine and the Hoover Doctrine," The American Historical Review, 59, 3 (April 1954), pp. 513-542. Basic material for a study of American political policy preceding Pearl Harbor.

Item 1464.1(2)

Romulo, Carlos, Review of : The Fall of the Philippines by Louis Morton, 1953, AHR 59, 3 (April 1954), pp. 662-663.

Item 1464.1(3)

Johnson, Victor, Review of: The Traitor and the Spy; Benedict Arnold and John André, by James Thomas Flexner, 1953 in AHR 59, 3 (April 1954), pp. 724-725.

Item 1464.1(4)

Hesseltine, William B., Review of: A Stillness at Appomattox by Bruce Catton, 1953, in AHR 59, 3 (April 1954), pp. 727.

Item 1464.2

Cole, Wayne S., Perpetual War for Perpetual Peace, a critical examination of the Foreign Policy of Franklin Delano Roosevelt and its aftermath, edited by Harry Elmer Barnes, in The American Historical Review, 59, 4, (July 1954), pp. 961-962.

Barnes is one of the leaders, with Beard, of the "revisionist" school in regard to U.S. participation in WWII. No Item.

Item 1464.2(1)

Sioussat, St. George, Review of: The Papers of Thomas Jefferson, edited by Julian P. Boyd, 1951-1952 in AHR 59, 4 (July 1954), pp. 938-940.

Item 1464.2(2)

Ellis, L. Ethan, Review of: the Undeclared War, 1940-41, The world crisis and American Foreign Policy, by William L. Langer and S. Everett Gleason, in AHR 59,4 (July 1954), pp. 960-961.

Item 1464.2(3)

Cole, Wayne S., Review of: Perpetual War for Perpetual peace: A critical examination of the foreign policy of FDR and its aftermath, edited by Harry Elmer Barnes in AHR 59,4 (July 1954), pp. 961-962.

Item 1464.3 (1)

Burke, Robert E., "Charles A. Beard; an appraisal," review of, Edited by Howard K. Beale, 1954, in The American Historical Review, 60, 1, (October 1954), pp. 116-117.

Interesting because of Beard's position on the question of how the attack on Pearl Harbor came about. He was one of the early founders of the "revisionists" school of thought with regards to US entry into WWII.

Item 1464.4 (1)

Conroy, Hilary, "Japanese Nationalism and Expansionism," The American Historical Review, 60, 4, (July 1955), pp. 818-829.

Additional material for the study of the origins of the war in the Pacific. Original copy. See pp. 818, 910, and 927. Review of Kimmel's book removed and put in folder, **Item 1426**. Page 910, papers of Thomas Jefferson, edited by Julian P. Boyd. Page 927 Review of The Rise and Fall of Maya Civilization by J. Eric S. Thompson by Robert Redfield, University of Chicago.

Item 1464.5 (1)

DeWeerd, H.A. Book review of MacArthur: His Rendezvous with History, by Major General Courtney Whitney, The American Historical Review 62, 1 (October, 1956), pp. 163-165.

This review, which attempts to deal objectively with General Whitney's book about general MacArthur, puts the book in proper perspective when it closes with the following statement: "For those who want General MacArthur presented without a single flaw in the full glory of his rhetoric, this is the book."

Item 1464.5 (2)

Sontag, Raymond J., Book review of The Meaning of Yalta; Big Three Diplomacy and the New Balance of Power, by John L. Snell, Forrest C. Pogue, American Historical Review, 62, 1 (October, 1956), pp. 101-102.

Further data on what happened at the Yalta Conference, in the form of a review of a book which analyzes three U.S. Government brochures on this subject.

Item 1464.4(3)

Redfield, Robert, Review of: the Rise and Fall of Maya Civilization by J. Eric Thompson, 1954 in AHR 60,4 (July 1955), pp. 927-928.

Item 1464.5 (3)

Albright, W. F., Book Review of The Dead Sea Scrolls and Modern Scholarship by Solomon Zeitlin in the Jewish Quarterly Review Monograph series, Volume III, 1956. The American Historical Review, 62, 1, (October 1956), pp. 103-104.

An important review by one of the leading scholars in the field of research on the history of the Old and New Testaments. See **Item 1106.3**.

Item 1465

Biemiller, Carl L., "The Long Day of Pearl Harbor;" Holiday Magazine, 20, 6, (December 1956), pp. 88-91, 152, 154, 156-157, 159-160, 162, & 164-165.

The Executive Editor of Holiday Magazine writes his account of the events on the day of the surprise attack by the Japanese on Pearl Harbor. It is of interest to note that this article appeared practically on the same day as the one by Walter Lord in Life Magazine . (**Item 1472**).

Item 1465

Welles, Sumner, Seven Decisions That Shaped History, New York: Harper Brothers, 1951, extract from 95-97. SLC marked missing.

Item 1466

Johnson, Walter, The Battle Against Isolation, Chicago: University of Chicago Press, 1944, Extract of pp. 3-4, 222-223, 228.

Three extracts from a book by an historian who is not in the camp of the revisionists. They contain some useful ideas concerning the diplomatic events leading to the Japanese attack on Pearl Harbor.

Item 1467

Bailey, Thomas Andrew, The Man in the Street, The impact of American Public Opinion on Foreign Policy, New York: The McMillan Company, 1948, extract of pp. 83-84, 85-86.

Extracts from this book are of interest in connection with the manner in which the United States became involved as a belligerent in WWII. No Item.

Item 1468

Feis, Herbert, "15 Years of Hindsight Justify FDR," The Washington Post, "Outlook" Sunday, December 2, 1956.

This brief and popular explanation of how it happened that the U.S. was caught by surprise by the Japanese, who attacked Pearl Harbor on December 7, 1941, was written by the former State Department advisor on Economic National Affairs. The Washington Post printed the following,

two days before the article appeared: The “mythology” which has sprung up around the attack on Pearl Harbor 15 years ago, December 7, is examined by author Herbert Feis in the Sunday Outlook Section.

Item 1469

Biemiller, Carl L., “The Long Day of Pearl Harbor,” Holiday Magazine 20,6 (December 1956), pages 88-91, 152, 154, 156-157, 159-160, 162, and 164-165.

An article written 15 years after the event describes the events of December 7th.

Item 1470

Togo, Shigenori, The Cause of Japan, New York: Simon & Schuster, 1956, extracts of pp. 118-119, 167-169, 197, 210-213, & 218-221.

Extensive article on Pearl Harbor attack by former Foreign Minister Togo. He claims it is a different story from the “ones the Americans have been hearing.” He sees the attack stemming from “actions taken in Washington, not Tokyo. He accuses the Americans of distorting intercepted Japanese messages and misrepresenting Japan’s position. He charges FDR with lying to string Japan along until the US was ready for war. Togo completed the book in July 1950, just before he died in prison. Togo returned to the office of Foreign Ministry in 1945 in time to direct Japan’s negotiations for surrender. He lists good and bad translations of the intercepted messages. Folder also contains 9-page typescript of Extracts from The Causes of War by Shigenori Togo, NY: Simon & Schuster, 1956.

Item 1470.1

Togo, Shigenori, “Why Japan Attacked Pearl Harbor,” U.S. News and World Report, (August 31, 1956), pp. 122-151

This is an extract from the book described in the preceding item. It is an apologia for Japanese actions that precipitated the war.

Item 1471

National Security Agency, NSA Technical Journals. All issues as received.

These were confiscated by the NSA. Declassification has begun, however, and selected articles from 1956 through 1973 are available on the NSA website.

Item 1472

Lord, Walter, Day of Infamy, Henry Holt & Company, New York, 1957, pp. 243. DJ.

The disaster at Pearl Harbor, December 7, 1941, continues to fascinate the American people as is evidenced by this latest (1957) of the popular accounts of the events on that day. The author made a great name for himself by his account of the sinking of the Titanic in a book entitled A Night to Remember. This is a similar treatment of an event described in a dramatic and personal record of interviews with persons who lived through that day, including officers in The Armed Services. Page five begins the story of the “open code” telephone message from Tokyo to Honolulu on the day before. Review clipping inside book. Washington Post & Times Herald, March 24, 1957.

Item 1472.1

Lord, Walter, “Day of Infamy, The Human Drama of Pearl Harbor,” Life, December 3, 1956, 3 parts.

The author who has built his career on telling the personal stories of many persons who were either actors or observers in famous or great events published this sense of excerpts of his forthcoming book “Day of Infamy” in Life Magazine. Contains letters to the Editor from Life, January 7, 1957, December 3, 1956, pp. 165-182, December 10, 1956 pp. 160-176, December 17, 1956 pp. 117-133.

Item 1473

Shearer, Lloyd and Gorkin, Jess, “15 years after Pearl Harbor;” Parade interviews the man who planned the sneak attack,” The Washington Post Parade, December 2, 1956, pp. 8-15.

This is a rather interesting interview with Lt. General Minru Genda concerning the Japanese planning for the surprise attack on Pearl Harbor. At the time of the attack, he was Lt. Commander. Genda complains that they didn’t listen to him-“we should have invaded Hawaii.” After the attack on Pearl Harbor, “we could have taken Honolulu pretty easily.”

Item 1474

Tanaka, Vice Admiral Raizo and Roger Pineau, “Japan’s Losing Struggle for Guadalcanal,” U.S. Naval Institute Proceedings 82, 7 (July, 1956), pp. 687-699.

Items 1475 thru 1498

No card, no item

Item 1499

Anonymous,

A listing of Code and Cipher items, also secret inks and microphotograph, in different languages (Dutch, German, English, French, and Portuguese). Compiled in 1962 by M. de Vries and sent to WFF in August 1962. Marked A-I, Part V.

Item 1500

Roosevelt, Eleanor, This I Remember, New York: Harper & Brothers, 1949, 387 pp.

The wife of President FDR writes briefly on the days immediately before and following the attack on Pearl Harbor. Her story of Pearl Harbor begins with Chapter 14. Successive chapters deal with WWII; an important FDR biography in informed manner by the person closest to him.

Item 1501

Sandler, Richard, Chiffier: en Bok om Litterära och Historiska Hemligskrifter, Stockholm: Wahlstrom & Widstrand, 1943, 168 pp. PB.

At the time, the most recently published book on cryptology in Sweden. Gift of Boris Hagelin and autographed by him. Not a technical book – more nearly a recapitulation of cipher methods known for a long time in stories, novels, or the like.

Item 1502

Beach, Edward L., Commander USN, Submarine!, New York: Henry Holt & Company 1946, 1952, 301 pp.

Personal account, by the man who later became Naval Aide to President Eisenhower, of submarine warfare, in the Pacific in WWII. The first book about submarines in WWII by a man, who served in that branch of the service. First copyrighted in 1946, serialized and published in book form in 1952. Foreword by Vice-Admiral Charles A. Lockwood. Story of the USS Trigger in the Pacific. Beach was born in Brooklyn in 1918, brought up in Palo Alto, son of a naval officer. He graduated second in his class from Annapolis in 1939.

Item 1503

Beach, Edward L., Commander USN, Run Silent, Run Deep, New York: Henry Holt & Company, 1955, 364 pp. DJ.

A romance which involves submarine warfare. The naval aide to President Eisenhower writes a novel concerning life beneath the sea in wartime. Beach served aboard The USS Trigger (SS 237) and participated in ten consecutive war patrols against the Japanese Forces. In May 1944, he was transferred to the USS Tirante and in May 1945 to the USS Piper.

Item 1504

U.S. Department of State, The Conflict in Korea: Events prior to the attack on June 25, 1950, Washington DC: GPO, 1951, 36 pp. Publication 4266, Far Eastern Series 45. PB.

A document likely to be of great historic importance in future years. It deals with the machinations of the Soviet government which culminated in the conflict in Korea.

Item 1505

Mott-Smith, Geoffrey (Pseud. "Moojub"), Ciphers for Solvers, Privately printed, 1954, 30 pp.

Cryptograms for crypto fans that are:

- a) Long enough to solve by statistical methods.
- b) Use well-mixed alphabets and explore some of the tougher cipher systems.
- c) Afford practice in diagnosing the system used from characteristics of the cipher text.

All the crypts are substitutions. The texts are taken from newspapers and are mostly war reports. The system of encipherment is not stated with the cryptogram. There is a list of the systems for each crypt. Examples of systems:

Four square, Periodic poly, Delastelle bifid, PT autokey, Pollux, Checkerboard, Nihilist sub, Two square, Compound period poly, St Cyr, Trifid Morse, Playfair, Linear bifid, Numerical four quad, Phillips, Progressive poly, Numerical checkerboard.

Item 1506

Pepys, Samuel, The Diary of Samuel Pepys: deciphered by the Reverend J. Smith, M.A. from the original shorthand ms. in the Pepysian Library, Cambridge with notes by Richard Lord Braybroole, with an introduction by Guy N. Pocock, London & Toronto: J. M. Dent & Sons, Ltd., and in New York by E. P. Dutton & Company, 1924, Volume I, 666 pp., Volume 2, 717 pp. No DJ.

The first and partial edition of Pepys diary deciphered, with added introduction and notes. For 200 years the Pepys diary was unread because it was in shorthand with peculiarities and addition that made it almost into a cipher system, and was only "solved" in the end by the discovery of a transcription of a story done both in Pepy's shorthand and his longhand, providing a "key". The Encyclopedia Britannica states: "If there is, in all the literature of the world, a book which can be called "unique" with strict propriety, it is this." The copy in the FC is imperfect because some vandal has excised not only a facsimile of a sheet of the Pepy's diary itself, but also a reproduction of a portrait of the Reverend J. A. Smith, who deciphered the diary.

Item 1507

Fuchida, Mitsuo (Captain) & Mastake Olumiya, Midway: The Battle that Doomed Japan, The Japanese Navy's story, A Naval Institute Publication, Menasha, Wisconsin: George Banta Pub. Company, 1955, 266 pp. DJ.

In this article the authors attempt, rather timely, to account for the failure of the Japanese to follow up the air attack to its logical conclusion. For related material, see also file cabinet-1507. Separate folder, New York Times Book Review, The New Yorker: The Battle of Midway was the turning point of the Pacific War. Inscribed: "For WFF in hope that he finds the reading less arduous than we did the editing." Roger Pineau. Midway was "a victory of intelligence wisely and bravely applied."

Item 1508

Croci, Emillio (Editor), L'arte di scrivere in Cifre, Milan: Giuliani & Company n.d., 207 pp. Tiny PB.

An attempt at a general history of cryptography. Although no date, it was certainly before 1900. This item was a gift of Dr. Revilo P. Oliver, head of the Department of Classical Languages at the University of Illinois and a member of the Army Security Agency during WWII. Contains some information of general nature concerning cryptography. The book also contains a chapter devoted to the use of cryptography in literature. Listed in Galland, page 50, with no author indicated. Galland apparently thought little of this item (WFF: Before he went off the deep end as an extremist right-winger). Tattooed slave, *scytale*, Spartans. Chapter 3 on Romans. Tironian notes, Raben-Maur. See Sheldon, EAW. Needs preservation.

Item 1509

Brinnin, John Malcolm, "Gertrude Stein in Paris," Atlantic Monthly, (September 1959), 7 pp.

Brinnin was a poet, teacher, editor, and literary critic. He is the author of Dylan Thomas in America. On the problems Stein had in being published, of the public difficulty in reading her work, and her place as a personality in Paris among young writers.

Item 1510

Josselson, Harry H., The Russian Word Count and Frequency Analysis of Grammatical Categories of Standard Literary Russian, Detroit: Wayne University Press, 1953, 274 pp.

A very detailed analysis of the characteristics of the Russian language. Autographed by the author.

Item 1511

Sapir, Edward, Language, and introduction to the study of speech, New York: Harcourt, Brace & Company, 1921, 242 pp. PB.

A basic and early treatise on the nature of speech. Copyright renewed 1949 by Jean V. Sapir. A classic in the field. The brief preface is of great interest.

Item 1512

Busch, Harold, U-Boats at War, translated from the German by L.P.R. Wilson, London: Putman, 1955. No DJ.

First published in Germany as So War der U-Boot Krieg. See **Item 1535**. No Card

Item 1513

Halasz, Nicholas, Captain Dreyfus: The story of a mass hysteria, New York: Simon & Schuster, 1955, 274 pp.

The spy revelations and false accusations from all over the world following WWII, recalled to the minds of many people the famous Dreyfus case of the 1890's. This book is detailed in the study of the mass hysteria induced by the accusations against Captain Dreyfus of the French General Staff. This historical account gives considerable information about the falsification of a telegram sent in code to his government by the Italian Minister in Paris. "This book is the most complete account in English of a sensational and dramatic case which is still ringing a danger alarm in the ears of civilized men." Dreyfus, vindicated, served in WWI, was made a member of the Legion of Honor, and left military service as a LTC. Enclosed in the book is an extract from the French Journal-Mercure de France, dated August 1940, by a journalist, Henri Guillemin, which deals almost entirely with the forged Panizzardi Telegram. (November 1894).

Postscript: In the Halasz book, in a section entitled, "an epilogue," pp. 265-267, will be found a few words as a denouement of L'Affaire Dreyfus." It contains a statement of George Clemenceau, which must have served as the "model" for the world famous Winston-Churchill charge to the British people to fight after Dunkirk and his dramatic call never to give up. See pp. 43, 53, 55, 202-203, 223-225, 257, 258, 265-256. Cf. David Kahn, The Codebreakers, pp. 254ff.

Item 1514

Walter, W. Grey, The Living Brain, London: Gerald Duckworth & Company, Ltd., 1953, 216 pp. DJ.

A work of considerable importance to persons interested in analogies between the human brain and high speed digital computing machines. It is not now of direct interest to the cryptologist in view of the fact that some of the functions of the brain have been duplicated by electronic digital computers.

Item 1515

Robertson, Terence, Le Loup de l'atlantique, trans. by Jean Gravard, Paris: Amiot Dumont. PB.

“The Golden Horse Shoe,” is given as the title. The translation is: The Wolf of the Atlantic. English version,. Preface by the admiral of the Fleet, Sir George Creasy.

Item 1516

Bello, Francis, “The Information Theory,” Fortune Magazine, December 1953, pp. 136-141, 150-159.

Photostat copy of a popular article on this subject, one which has become of increasing importance in the cryptologic field. Photostat negative. Discusses the work of Norbert Wiener.

Item 1517.1

Tindall, William York, “James Joyce and the Hermetic Tradition,” Lancaster, Pennsylvania & New York: Journal of The History of Ideas, 15, 1 (January 1954), pp. 23-39.

Further data with regard to the cult of unintelligibility. Original journal. A comparison of Joyce and Hermes Trismegistus. Joyce created a world complete and self-subsistent (sic). An aesthetic world for poets.

Item 1517.2

Deininger, Whitaker T., “The Skepticism and Historical Faith of Charles A. Beard,” Journal of the History of Ideas, 15, 4, (October 1954), pp. 573-578.

An inquiry into the reasons for the change in the historical attitude after the beginning of WWII, of Charles A. Beard, a leading “revisionist.” “History is a cat dragged by its tail to places it rarely wants to go.” Original journal.

Item 1518

Backmann, Ida, Fran, Filare Till Storindustriell, Stockholm: Albert Bonniers Forlag, 1935, 319 pp. PB with DJ.

This is the biography of a great Swedish engineer and business man. Karl Wilhelm Hagelin, the father of the famous cipher-machine inventor Boris Caesar Wilhelm Hagelin. Mr. Hagelin, Sr. was the first to develop commercial shipping on the Volga River. He also was one of the leaders in the development of the oil industry in Russia, and was both employed by and associated with the Nobel Brothers. For some years, Mr. Hagelin Sr. served in the Swedish Diplomatic Service as Consul-General in Russia. The inventor's son was born in Russia during his father's diplomatic service, but sent back to Sweden when he was five years of age and

remained in his homeland for all of his schooling. His father lost practically all his fortune as a result of the uprisings in Russia in the early 1900s. The book is autographed, "To My old friend Bill from the son of a great father." Sundsvik, October 17, 1946. Uncut pages.

Item 1519

Rohrbach, Hans, "Mathematische und Maschinelle Methoden beim Chiffrieren und Dechiffrieren," Angewandte Mathematik Band 3, Teil I, pp. 233-257, printed in 1953. PB.

A modern German cryptologist writes of statistics, mathematics, and computers as applied in the solution of problems in cryptology. From the series Naturforschung und Medizin in Deutschland, 1939-1946.

Item 1519.1

Rohrbach, Hans, Translation of **Item Number 1519**, by Dr. Daniel M. Dubin, Army Security Agency, September 1949. (Mimeograph Copy) 32 pp., Appendix and 3 figures. Photostat copy. Mathematical and Machine Methods in Cryptology by Hans Rohrbach. Restricted copy #20 of 35.

Item 1519.2

Rohrbach, Hans, Up-to-date Cipher Systems. Translation of "Chiffrierverfahren der neuesten Zeit," published in Archiv der Elektrischen Übertragung, 2, 9, (December 1948), Wiesbaden, pp. 362-369, NSA publication DF-323.

A magazine article on cryptology by a modern German cryptanalyst. The author of **Item 1519**. Translation by Dr. Ray Pettingill, 22 pp. Copy #20 of 35, mimeographed.

Item 1520

Flicke, Wilhelm P., War Secrets in the Ether, Parts I and II, Part III, 2 Vols., Washington: Translation from the German. NSA 1953. In two volumes: Volume I, Part I, pp. 159, Part II, pp. 263-271, Volume II, Part III, pp. 420, 2 copies.

This is one of the fascinating works of literature based upon Germany's WWII cryptologic operations as seen by the author upon whose activities comment was made in **Item 755** above. Translated by Dr. Ray W. Pettengill. The restricted classification was, of course, obliterated by President Eisenhower's executive order eliminating such classifications. However, that classification was given this document not for the usual reason, namely because the contents were considered classified, but because the U.S. government did not wish to pay royalties to the author. Card 2: This two volume work represents a fascinating item in cryptologic history. Between 1945 and 1950 a U.S. agency learned that this German cryptanalyst had ready for publication a book in three parts covering the period of intelligence, intercept works, and

solution, from 1919 to 1945. The author relates that much of his work and notes had been captured and he had only his memory to rely on-except for part III. The U.S. therefore conducted an operation to purchase the book and prevent publication, in German at least. The effort was successful and the U.S. acquired the manuscript for a relatively small sum. The NSA acquired the manuscript and translated the Flicke three part work into English. Part I is purely historical in character. Part II throws light on development of intercept service in European countries. Part III deals with decisive role of cryptology in WWII. The English translation, made by Dr. Pettengill, a highly skilled scholar in the German language, was given initially the classification RESTRICTED, later abolished: See title page, Part III. Parts I & II (in the same volume) have an eight page preface, partly by Flicke and partly by the translator, which sets forth Flicke's purpose in compiling his work-mainly "this book is intended as a warning, and so to serve the cause of peace." The author claims his work is a mine of information. WFF does not agree. There is a note page preface "To the Reader" in Part III signed, "The Translator," which constitutes a sketchy summary of the three parts, last of which was brought out in 1954. There is no information in this work concerning the techniques of cryptanalysis. However, although the U.S. may have believed that they had purchased, in 1950, all of Fliche's writing, he had previously published, in 1949, a fictional treatment of Communist espionage nets called Die rote Kapelle or The Red Bands. See **Item 755**. Green Binder. "Original printing of this document was accomplished prior to the establishment of Executive Order 10501 dated 5, November, 1953. This document is now unclassified in accordance with the above referenced executive Order. NSA 1954. De-Classified NSA, July 25, 1975. 2 sets.

Item 1521

Green, Murray, "Intelligence on a Silver Platter," The Reporter, May 19, 1955, pp. 19-21.

Discusses Eisenhower, leaks in the government, procedures for clearing military information, the Press vs. National Security, and internal policing.

Item 1522

Anonymous, Intelligence Activities, a report to the Congress by the Commission on Organization of the Executive Branch of the Government, Washington DC: GPO, June 1955, 76 pp. PB.

A report which endeavored to point out some of the weaknesses in our organization for intelligence activities. Task Force chairman was Mark W. Clark, President of the Citadel and included Fritz Hollings (SC), Eddie Rickenbaker. Some members traveled abroad to study intelligence activities in foreign countries.

- 1) Administrative flaws noticed: Failure to produce certain elements of intelligence has been due in part to the restrictive effects of some of our national attitudes and policies toward the collection of intelligence so necessary for effective resistance to the Soviet union "Also among some of those responsible for implementation of our foreign policy by

diplomacy and negotiation there seems to exist an abhorrence to anything that might lead to diplomatic or even protocol complications. [State Department].

- 2) Data on the Soviet Bloc inadequate (never solved). Recommendation #1: That the CIA be recognized internally to produce greater emphasis on certain of its basic statutory functions.
- 3) Recommendation #2: That a bicameral commission for oversight be established. Recommendation #5: All agencies should recheck the security status of all personnel engaged in intelligence activities. Recommendation #3: That the salary of the DCI be raised to \$20,000 and the deputy director to \$17,500.

Item 1522.1, 1522.2

U.S. Government, Investigations of the National War Effort, "A Report on the System currently employed in the collection, evaluation, and dissemination of intelligence affecting the war potential of The United States," 79th Congress, 2nd Session, Union Calendar, No. 860, H. R. 2734, Washington, DC: GPO 1946, 10 pp. Two copies.

This item is of interest in connection with the investigation of the intelligence effort in the United States after the disclosures of the cryptanalytic successes of the United States prior to the attack on Pearl Harbor. See page 2 on Women in Intelligence. Truman's directive on need for intelligence agency. Should the CIA engage in covert operations?

Item 1523

Bradley, General Omar N., "A Soldier's Farewell," The Saturday Evening Post, Part I, August 22, 1953, pp. 21-66, Part II, August 29, 1953, pp. 22-49.

General Bradley's last remarks in public print before returning from active duty. Original. First Chairman of Joint Chiefs.

Item 1524

Baldwin, Hanson W., "Battlefield Intelligence; the Battle of the Bulge as a Case history," United States Army Combat Forces Journal, 3, 7 (February, 1953), pp. 30-41.

The New York Times military expert, 1924 graduate of the U.S. Naval Academy, and Pulitzer Prize winner (1924) described a case of the consequences of the failure of intelligence. In this case, the absence of proper intelligence included that of communications intelligence. The fact that there was no COMN 7 also was unnoticed—Hitler had directed complete radio silence. This article is of considerable historical importance, and there are lessons of significance. Good map pp. 31 and pp. 34, 41, position of American Division.

Item 1525

Warburn, James Paul, Extracts from: The United States in a Changing World, a historical analysis of American foreign policy, New York: G.P. Putman's Sons, 1954, pp. 312-313, 336-339, 472-473, or 483.

The extracts deal with the attack on Pearl Harbor. Banker Warburg served in the Office of the Coordinator of Information (COI) in Washington during early years of WWII and was director of European activities for the office of War Information (OWI) in the remaining years of WWII. Photostat positive.

Item 1526.1

Greenacre, Phyllis, Extracts from: Swift and Carroll, a psychoanalytic study of two lines, New York: International Universities Press, 1955, pp. 164-65, 282-283.

The footnote on page 165 indicates very clearly that Dodgson was much concerned with cryptography and invented numerous "schemes" for ciphering." He perhaps invented independently the Vigenère square, for he writes of it as if it were known only to him and this cipher square was indeed devised several times by different persons. The item also contains a portion of a large bibliography devoted to Dodgson. Reference No. 64, indicated that Dr. Warren Weaver, one time head of one of the most important divisions of the Rockefeller Foundation (Humanities), was much interested in Alice's' Adventures in Wonderland when he was a member of the faculty of Princeton University. Photostat positive.

Item 1526.2

Swift, Jonathan, "Langues Imaginaires et Langue Secret," n.d. unnumbered pages. Photostat positive. Date? Publisher?

Item 1527

The Entry of the Soviet Union into the War Against Japan, Military Plans 1941-1945, pp. 107, September 1955. Card Marked 8/11/75, (SB). No other markings. Mimeograph copy.

Item 1528

Commission on Organization of the Executive Branch of the Government, Commission report on Intelligence activities, a report to the Congress, June 1955. Task force report on intelligence activities in the Federal Government, May 1955, Washington, 48 pp. (Mimeograph copy).

Pertinent newspaper clippings are in the book. The chairman of the Commission was Herbert Hoover. The taskforce was presided over by General Mark W. Clark. The Commission was appointed in 1953 and the report was received by Congress in June of 1955. The recommendation made, among others, was that a watch-dog permanent commission be appointed

to continue the job of overseeing intelligence and counter intelligence efforts in the interest of internal security. In addition to the report, the commission sent a classified report to Congress.

Item 1529

Gamow, George, "Possible Mathematical Relation between Deoxyribonucleic Acid and Proteins," Copenhagen, Det Kongelige Danske Videnskabernes Selskab, 22, 3, (1954), 13 pp.

Dr. Gamow delves deeper into the cryptology of molecules. Autographed by the author to "Mr. & Mrs. Friedman-to the fellow cryptologists from G. Gamow." Enclosed is a reprint from Nature (a British Magazine, on the same subject, same author (**Item 1520.1**). Also a bulletin of the Institute of Radio Engineer's announcing that Dr. Gamow will discuss the cryptography and information content of the protein structure.

Item 1530

United States Navy, The Index of Coincidence, A multilith pamphlet of 27 pages n.d. but circa 1950.

This is the Navy's version of the theory and application of this important procedure in crypt analytics, first evolved and described by WFF in his Riverbank paper of the same title, written and published in 1920.

Item 1531

Clark, Neil M., "Paper Detective," The Saturday Evening Post, 226, 35 (February 27, 1954), pp. 27, 124-126.

Counterfeit money, the exploded Japanese war balloons of WWII, and other amazing cases of paper detective work are herein described, but the principal reason for this being in the FC is that WFF thought the author might be of some assistance in evaluation the age of the parchment on which the Voynich Ms. was written. Dard Hunter paper museum. Paper identified from exploded Japanese War Balloons. Public heard little about it and no great damage was done. In March 1945, several hundred balloons reached The North American continent loaded with high explosives and authorities feared that one might land in an important defense installation or a tender dry forest. They were pasted together by women. They were released near Tokyo at high altitudes. Timing devices were set to discharge the explosives after 40 or 50 hours. About one in ten of the balloons reached North America.

Item 1532

No Card, No Item.

Item 1533

Barnett, Lincoln, "The World We Live In: Conclusion, The Starry Universe," Life, (December 20, 1954), pp. 34-38.

WFF's very good friend, fellow club member and fellow member of the NSA Scientific Advisory Board, Dr. Howard P. Robertson, assisted in the preparation of this, the last article in this series. See Robertson's autograph on pp. 54. Morrison, Arthur, "The Flitterbat Lancers," Ellery Queen's Mystery Magazine, 23, 125, (April 1954), pp. 115-131. Another romantic tale utilizing ciphers.

Item 1535

Busch, Harold, So war der U-boot-krieg, Deutscher Heimat-Verlag Bielefeld, 1945, 472 pp. DJ.

A German's narrative of submarine warfare from 1939 to 1945. See English translation, **Item 1512**.

Item 1536

Beeker, C.D., Swastika at Sea; The Struggle and Destruction of the German Navy, 1939-1945, London: William Kimber & Company, LTD., 1953 (?), 207 pp. DJ.

This book, in English, was written by a member of the German Navy and is certified as being absolutely truthful and written in an objective manner. It is asserted by a German Admiral to constitute a proper memorial to the German Navy in WWII. This is no doubt intended to be a popular and brief account. The author's real name is Hans Dieter Berenbrok; the American edition of this book is entitled: Defeat at Sea; the Struggle and Eventual Destruction of the German Navy, 1939-1945, New York: Henry Holt & Company, 1955. The texts of the British and American editions are identical. Chapters 5, pp. 54-69, relate the true story of the Graf Spee, Hitler's so-called "pocket battleship" and how its destruction was brought about by the British propagandists by successful deceiving the captain of the Graf Spee.

Item 1536.1

Berenbrok, Hans Dieter, See Bekker, C.D.

Missing. No item.

Item 1537

Andrews, Bert, Washington Witch Hunt, New York: Random House, Inc., 1948, 218 pp. DJ.

Of interest in connection with the personnel security problems in the United States just about the time the Alger Hiss case was prominent in the public press. Bert Andrews was the Chief of

the New York Herald Tribune Bureau in Washington, winner of the Pulitzer prize in 1947. The fight to protect civil liberties and to keep people from being dismissed from military jobs as “security risks.”

Item 1538

Jowitt, The Earl (Former Lord Chancellor and Attorney General of Great Britain), The Strange Case of Alger Hiss, New York: Doubleday & Company, Inc., 1953, 380 pp. DJ.

Of interest in connection with the personnel security problems of the United States. One of the most distressing and interesting of the episodes in this field concerns Alger Hiss, who, after a good career in the government service, had risen to be President of the Carnegie Foundation for Peace. After two trials of a spectacular nature, he was convicted of perjury and served several years in prison. Whittaker Chambers, an admitted Communist, was Hiss’ accuser. The Earl Jowitt analyzes the trials in a most penetrating manner. The author and legal analyst was a former Lord Chancellor and Attorney General of Great Britain. His concluding sentence in the prefaces states: “My endeavor in writing this book is to present the facts fairly to the reader so that he may become acquainted with the issues involved and form his own conclusions.” See Wikipedia entry under Alger Hiss for an update.

Item 1539

McCullum, A. H., “The Calamitous 7th,” Book review of: The Final Secret of Pearl Harbor by RADM, R.A. Theobald, USN (Ret), Saturday Review, May 29, 1954, pp. 13 and 25.

This regular Navy Admiral does not give any credence to Theobald’s thesis of various persons and FDR conniving to bring on the attack on Pearl Harbor. Admiral McCollum states that the Theobald book is of dubious, if any value. Copies of letters are enclosed showing the usual controversy between author, readers, and editors. Captain McCollum rejects the thesis of the “revisionists” as expressed by Rear Admiral Theobald. Contains correspondence from A.H. McCollum to the Saturday Review.

Item 1540

Roberts, Owen J. [Chairman], Attack on Pearl Harbor by Japanese Armed Forces, Report of the Commission appointed by the President of the United States to investigate and report the facts relating to the attack made by Japanese Armed Forces upon Pearl Harbor in the territory of Hawaii on December 7, 1941, Washington D. C.: GPO, 1942, Senate Document No. 159, 77th Congress, 2nd session, 21 pp.

This was the very first of the several official investigations into the cause of and the events leading up to the attack by the Japanese on Pearl Harbor. The Roberts’ Commission was not given all of the facts since “Magic” was not made available to them. The folder contains three

different editions of the Roberts' Report: (1) the printed version as published by the GPO; (2) an original typed version of the report marked "the copy hold for release, and (3) a mimeographed copy of (2). This item is very important in the FC. 2 Copies.

Item 1541

Lederer, William J., A Nation of Sheep, New York: W. W. Norton & Company 1961, 192 pp. DJ.

Although it would have been an impossible task for WFF to keep in his collection all the books on international situations which he read, the Southeast Asia problem, in all its ramifications, is represented by this single book. Chapter 7 portrays Secrecy in Government, which was a bugaboo on WFF's mind for many years. Hence this one item in this category is retained. Author wrote The Ugly American with Eugene Burdick. "The cult of government is growing."

Item 1542

Proceedings of the Fifth Symposium-National Security Agency Office of Research and Development, 27 January 1955, Arlington Hall Station, signed by S. Kullback.

No Card, Unclassified.

Item 1542.1

Kullback, S., "Introductory Remarks," Proceedings of the Fifth R & D Symposium, National Security Agency, January 27, 1955, pp. 5-6. No Card.

Item 1542.2

Campaigne, Howard H., "Probability," Proceedings of the Fifth R & D Symposium, NSA, January 27, 1955, pp. 7-13.

Item 1542.3

Billingsley, P. (Lt. USN), "Likelihood Ratios," Proceeding of the Fifth R & D Symposium, NSA, January 27, 1955, pp. 14-20.

An interesting article having a bearing on probability.

Item 1542.4

Dawson, R. B., "Application of Chi Square," pp. 21-25

Item 1542.5

Getchell, B. G., "The Incomplete Gamma Function and the Poisson Distributions;" pp. 26-31.

Item 1542.6

Ohman, C. R. Lt., "Estimation of Confidence Intervals," pp. 32-40.

Item 1542.7

Harris, B., "Testing of Hypotheses," pp. 41-59.

Item 1543

Harry S. Truman, "Cold War Starts at Potsdam, Big Three talks convinced Truman the Soviets were not in earnest about peace." Life, 39, 16, (October 17, 1955), pp. 175-200. Part IV of the Truman Memoirs. No Card.

Item 1544

Mendelsohn, Charles E.,

A series of 12 notebooks in which are contained handwritten comments on various books of cryptology. In many cases there are extracts from the books themselves, translated into English where necessary. Each notebook is preceded by an index of contents.

Volume IV-A: Hottinga, Schwenter, Daniel; Selenus cryptomantices; Vossius, Gerardus Ionnes; mentions *scytale*; Cospi, Anton Maria; Belot, Jean; Willins, John; duCorlet, Jean Robert; Dal garno, Petra saneta.

Volume IV-B: Kirscher, Scott.

Volume V-A: Heidel, Seligman, Ep Buo, Harsdorfdfer, Miller Frederic: Falconer.

Volume V-B: Comiers, Baillet, Sestri, Costadan, Barwich, Sternserius, Davys, Brieven-Seligrer, Breithaupt, Conradi.

Volume V-C: Klüber, Warburton, Rees, Meister, Wilkes, Hine, Burnell; Gardhausen, Griechische Palaeographie, Cf. Sheldon, EAW.

Garthausen, Victor, Griechische Paleographie, in Revue Critique, October 1911, pp. 300 by Ruelle Wehrs, von Papier, pp. 650-651 and supplements 154-156;

Montsanson, Pal Gr. 285-290.

Lupi, Manuale de palaeografia delle carte, pp. 145-152,

Thompson-Lambros, Palaeographie, pp.156. Archaeologische Zeitschrift, Volume 9, 10, 11. Neue Folge 2, pp. 45, 184, and 3, 21.

Ruelle and Marita, J., "Note Relative à la cryptographie grecque," Bulletin de la Société des Antiquaires de France, 1894, pp. 120-122, 126-127.

Ruelle, C.E. , La cryptographie greque of Rev Crit, Volume 46, I, 318.

Wagner, F., "Studien zu einer Lehre den Geheimschrift Löher," Archivalische Zeitschrift 12 and 13.

Kalyzniacki, "Beitreige zu alteren Geheimschrift der Slaven," in Sitzungsberichte der Wiener Akad 102 I, 1882, pp. 287-308.

Ewald, "Gotische Geheimschrift," in Archiv für altere deutch Geschichte 8, 2, pp. 357-260.

Latin cryptography, Schwab, Revue des Etudes Grecques, on the *skytale*, see 1911, pp. 99. 152.

Dziazko, K., Zwei Beiträge zur Kenntnis des Antiken Buchwesens, Göttingen, 1892, pp. 6-8.

Leopold, J. H., "de scytale Lacedaemon," Mnemosyne ns, 28 (1900), pp. 365-391.

On old Syriac see, Wright, Journal of Sacred Literature and Biblical Record, 1863, pp. 128-130.

For cryptography in the Koran, see Nöldere Enege Brit 9, ed XVI, pp. 604.

Wüstanfeld, "Eine arabische Geheimschrift eintzistent in Gotting Gel Anz, 1879, No. 15, pp. 349-355 and Zeit fur die Kunde des Morgenlander, 1842, pp. 349.

Codex Vat Palatinus 7 has a cipher like Augustus' cipher. Aeneas Tacticus affect on Middle Ages. Desjardins CRAI, 1871, pp. 189-191.

Volume VI-a: Miscellaneous.

Volume I-a: List of ancient authors and references to cryptography. Use for Source book, Gold mine. Pliny.

Volume II- Alberti, Pelisser, Trithemius. Cf. David Kahn, The Codebreakers, pp.125-156.

Volume VIb: Elizabethen cipher book. Bibliography from NYPL, LC.

Volume IIIb: History of Peru Fornady, Vigenère, Biandet, Colorni, Panciroli, Walchius.

Volume IIIa: Porta, Palatino, Cardan, Belaso, Collange.

Volume Ib: More classical references.

Mendelsohn, Charles J., Card file of references keyed to the work cipher.

Card file of references keyed to the word cipher. Includes ciphers in Greek, Hebrew, Atbash, Caesar's cipher, etc. Cf. Sheldon, EAW.

Item 1544.2

Mendelsohn, Charles J.,

Card file of terms that would normally be found in a large volume devoted to the history and methods of cryptology. Bibliography of names. Bibliography of Books.

Item 1544.3

Mendelsohn, Charles J.

Card file dealing with cryptology as these items are to be found in books, periodicals, pamphlets, etc. Each card contains one item and its provenance.

Item 1544.4

Mendelsohn, Charles J.

Card file marked "miscellaneous." This set of about 500 cards appears to give the contents of the Mendelsohn Collection, now in the library of the University of Pennsylvania. Part I & Part II.

Item 1545

E. Scoggins, The House of Darkness, Indianapolis, IN: 1931, 1st edition. No DJ.

A novel with a cipher.

Item 1546

Wicks, Charles, "Charles Wicks Describes Three Effects," The Sphinx, 30, 3 (May 1931), 130 pp.

This is a single item of three "effects" which uses the technology of the magician fraternity. The first "effect" entitled "Prophecy," uses a pair of alphabets on concentric disks- an example

of the double cipher disk consisting of a normal A to Z alphabet; and the other disk carrying a random-mixed alphabet. The “magic” trick of decipherment being performed by a number of the audience. A device for coding messages.

Item 1547

Anonymous, “IL, SIL, Mine, Phyl,” The New York Magazine, July 14, 1956, pp. 16-17.

This article is interesting in that it deals with the construction of artificial “words” for new medical compounds and with the mechanics of their construction by using digital computers of the modern electronic type. Pfizer commissioned IBM to produce a dictionary to come up with 42,000 nemeses words with an appropriately scientific look and sound.

Item 1548

Anonymous, “Book of a Thousand Tongues,” excerpt from Library of Congress, No. BS391-N81. 3 copies of one page.

Good illustrations on page 293-Shan, 296-Siamese, 297- Various, 298 Sinhalese, 299-Slavonic, 314, Ancient Syriac, 315-Ancient Syriac, 319-Tai Lu, Tai Ya, Tai Yuan, 324-Taungthu, 325 Telugu, and 327-Tibetan.

Item 1549

Mosteller, Frederick & Wallace, David L., “Notes on an Authorship Problem,” May 12, 1961.

Professor Gleason (Harvard University) familiarly known in Washington during WWII as “Andy” (for Andrew) here adds to the theorization of what computers can or cannot accomplish. Mimeographed copy. Presented to Harvard Symposium on Digital Computers and their applications, American Academy of Arts & Sciences, April 5, 1961. To be published in Harvard Symposium on Digital Computers and their Applications by Harvard University Press.

Item 1549.1

Mosteller, Frederick and David L. Wallace, “Inference in an Authorship Problem,” September 9, 1962.

A comparative study of discrimination methods applied to the authorship of The Federalist Papers. See **Item 1549**. Sent to WFF by Dr. Kullback and autographed to him. The writers of this statistic-filled article feel that they have proven that Madison was the author of the Federalist Papers.

Item 1550

Anonymous, Language and Machines, Computers in Translation and Linguistics, National Academy of Science, National Research Council, Washington, DC: 1966, Publication 1416, 124 pp.

John Pierce of Bell Telephone Laboratories, Advisory Committee, Chairman for Automatic Language Processing, issued this 124 page report. This copy was sent to WFF by Dr. Pierce and autographed by him to WFF. 7/31/67.

Item 1550.1

Friedman, William F. & John R. Pierce, Correspondence with John R. Pierce, Ph.D., Bell Telephone Laboratories, 1967.

The folder contains some correspondence between J. R. Pierce and WFF in which the latter expresses skepticism of the basic conception of machine translation.

Item 1550.1

Friedman, William F., Correspondence with John R. Pierce, Ph.D., Bell telephone Laboratories, 1967.

WFF said Farago's book on espionage history of WWII (subtitled, Burn After Reading) should have been entitled Burn Before Reading. WFF said he got bad translations because they lacked: "a good knowledge of what I was taught in my formal schooling as being acceptable as first class idiomatic English, grammatically and syntactically correct, as well as being semantically perfect or nearly so." WFF's comments on the futility of having machines translate.

Item 1551

Bolt, A. B. & M. E. Wardle, Communicating with a Computer, Cambridge: Cambridge University Press, 1970, 80 pp. Connection to Crypto. No Item.

Paperback which provides basic information on computing primarily for teachers who need to include the subject in the curriculums at an elementary level.

Item 1552

"A Post War Bibliography of Cryptography, 1945-1953," Mimeograph, 1953, 26 pp.

In a lengthy preface, this author acknowledges that Professor Galland had done a masterful bibliography in the field of Cryptology up to 1945; therefore this writer states: "By considering this list a continuation of Galland's work, you may think of it as bringing cryptographic bibliography right up to date. The author did not include WFF's article in the Encyclopedia Britannica because the article had not been revised since its original publication in 1927. (The article was revised at the request of the Editors in 1956.) Near the end of his lengthy introduction

to the bibliography, the author requests that “this work be considered the first of a continuing series of bibliographies.” Since this appeared the author has written and published several magazine articles and a great heavy tome called The Codebreakers. He is indefatigable and a devoted amateur. WFF: As to professional experience, he has none whatsoever.

Item 1553

Kahn, David, “Crypto clips,” Newspaper clippings on cryptography from January 1923 to January 1961, Unmarked items are from The New York Times, Xerox n.d., 50 pp.

The statement made re **Item 1552** that the author is “indefatigable” is proved by this extensive series of news clips covering a period from the time H. O. Yardley was given the DSC (1923) through December 1960. He must be commended for diligence, persistence and sheer doggedness. There is no selectiveness, however. If the press used the information, Kahn records it. No attempt whatsoever to sift the truth as, for example, the entries on page 40, re Safford’s invention: “The most important cryptographic apparatus ever invented.” Article from Evening Star, Washington, 2 May, 1958. Criticism of WFF on page 4.

Item 1554

Dr. Cryptogram (Newman, Erwin L.), “Cryptanalysis: A New Horizon,” Mimeograph of address to the 1960 annual convention of the American Cryptogram Association, Labor Day Weekend, 1960, 10 pages.

Item 1555

Winter, Werner, “American Cryptography,” The Armenian Review, (Autumn 1955), pp. 53-56.

This article describes items in the collection of H. Kurdian, Wichita, Kansas. Attention is called to a manuscript of the XVII century exhibiting a cipher composed of strokes (‘’) and dots (. . .); other descriptions show the ciphers were relatively easy to find and to decipher. A question is raised, therefore, as to why cipher was used in these ancient manuscripts. See Sheldon, EAW.

Items 1556-1599

No Card, No Item

Item 1600

Anonymous, The Voynich Manuscript, A photostatic copy of the Ms.

On May 25, 1944 WFF wrote a letter to the widow of Dr. Wilfred M. Voynich, who was the discoverer of this famous Ms, requesting a photostatic copy. This request was granted and a complete copy was made from a negative photostatic copy provided by Mrs. Voynich. In her letter, dated May 31, 1944, she stated that photostatic copies were extremely rare. One is in the NYPL, another is in the BM; another was given to Father Petersen of St. Paul's College; another was given to a scholar whom Mrs. Voynich did not identify; finally Mrs. Voynich, herself, had a copy. With the copy in the FC, there now appears to be all six copies in the world. The Voynich Ms consists of over 200 folio sheets of writing, not a single word of which has yet to be deciphered although certain investigators claim to have reached a solution. The FC contains much correspondence and many miscellaneous items of direct and indirect interest bearing upon this fascinating problem.

In the opinion of WFF, the solution to this problem is certainly not likely to add anything to the stock of the world's knowledge, however it would bring an end to the mystery that has fascinated many savants for several hundred years. At the writing of description by WFF, the Ms. was still owned by Mrs. Voynich and her secretary-companion, Miss Nil. It was kept in a vault in the Guarantee Trust Company in New York City and in 1920 was valued at over \$100,000. The Ms. was discovered by the antiquarian book dealer, Dr. Wilfrid M. Voynich in a castle in Italy around 1912. For further details see two articles by Professor John M. Manley (**Items 47 and 130**). In his first article, Professor Manly designated it as "the most mysterious manuscript in the world," a designation which is still believed to be valid. In the opinion of WFF, the solution to this problem is certainly not likely to add anything to the stock of the world's knowledge, however it would bring an end to the mystery that has fascinated many savants for several hundred years.

Addendum #1: Mrs. Voynich died in early 1960. The Ms. was next owned by Miss Nill and a protégé, Miss Winifred Gay, her unadopted daughter. The FC contains numerous other items dealing with the Voynich Ms., all highly interesting. The book dealer, Kraus, bought it from Miss Nill's estate and put it up for sale for \$65,000 and later for more than \$200,000. After Miss Nill's death and at the time of acquisition of the Ms. by Mr. Kraus, its value began to be boosted. From \$200,000 it rose in price to \$250,000, later to \$265,000. At the present time (June 1970) the Ms. is understood to be at Yale University Library (Beneiche Rare Book Room) when it is undergoing all the new types of tests to which old parchment, paper and ink are subjected. The hope, of course, is that something new may be learned which might enable a breakthrough to be made in this age old puzzle.

At the time the Ms. was placed in a sale by Mr. Kraus along with many other famed and beautiful books and Mss., the dealer was asked why he put such a high price on a Ms., the contents of which are unknown. Mr. Kraus's reply was, "When the cryptic writing is deciphered, the Ms. would be worth one million."

Has notes on back of pages indicating color of plants, identity of plants. Oversized.

Item 1600.1

Anonymous, Newspaper clippings re Voynich Manuscript, Philadelphia Enquirer, January 5th and 6th, 1921.

First public appearance of the Voynich Manuscript. These were prior to allegations made months later by Newbold of the University of Pennsylvania. WFF and Professor Manley attended the two lectures. Professor Manley's exposé of the Newbold cipher methods appeared in Harper's Magazine (June 1921) and may be seen in **Item 47**. The Roger Bacon Manuscript, 1921 Valuation (Voynich). Xerox of newspaper articles, Philadelphia Enquirer, January 5, 1921: "Wonderful book, seven centuries old, deciphered here." Tome of Roger Bacon, famous English monk, unearthed. Newbold's Theory presented as fact.

Item 1600.2

Friedman, Elizebeth Smith, "Most Mysterious Manuscript is Still Undeciphered," The Washington Post, Outlook Section, August 5, 1962.

In June 1962, there appeared here, there, and everywhere, new items about the mysterious ancient Ms. in an unknown script which had been placed on sale in New York City by the rare book dealer Hans Kraus. The price Kraus first placed on this item was \$100,000 (later it rose to \$200,000, etc.) The ambitious young "new man," David Kahn, then with Newsday, instantly wrote an article for Newsday: "The Secret Book." Then managing editor of the Washington Post, Alfred Friendly, in late June, broached WFF to write an article for that newspaper. WFF was a full-time consultant for RCA in 1962 and replied that he could not himself do it. He first suggested David Kahn, whose article could be used, if convinced that the "most mysterious manuscript in the world" was a medieval attempt to create a universal that is artificial language. ESF's article explains why it cannot be ciphered, but could fit the known characteristics of an artificial language.

Item 1600.2

WFF has a dream about the key to the Voynich and writes it down on an envelope. Three folders of clippings. Handwritten and type script versions of ESF's article with corrections. Copies of article as printed.

One folder with correspondence to ESF including a letter from someone who knew a diviner who could hold his hands over the Ms. and find a rapport with it. Handwritten note. Letter from someone who receives mental impressions from writings and thinks the Voynich Ms. is Sanskrit.

Item 1601

Clark, Emery, "John Wilkins Universal Language," Isis 38, Part 3 & 4, (February 1948), pp. 174-185.

Wilkins believed a language needed to be invented characterized by facility and usefulness, founded upon a logical system of classification. Included in folders a clipping from Washington Post, September 30, 1962, "The Case Against World Language," by Alan S. C. Ross. 2 copies. 1 photostat positive. 1 photostat negative.

Item 1602

Top, Alexander, The Olive Leafe, or Universal ABCE, London: 1603, unnumbered but consists of four signatures.

Attempts to devise a universal language began to appear several centuries ago. The best known is perhaps that of Cane Beck, (1657) The Universal Character, by which all the nations of the world may understand one another's conceptions..... Letter to Brig. Tiltman. Photostat positive of Ms. Description of book, photostat negative.

Item 1603

Bodmen, Frederick, "Pioneers of Language Planning," Chapter XI of The Loom of Language, New York: W. W. Norton & Company, 1944, pp. 448-460.

This item gives a brief history of the various attempts to devise a universal language. Important in connection with the WFF theory of the nature of the Voynich manuscript. Photostat negative.

Item 1604

Hime, Henry W. L. (LTC, late, Royal Artillery), "Roger Bacon and Gunpowder," Chapter XII of Roger Bacon Essays, collected and edited by Andrew George Little, Oxford: Clarendon Press, 1914, pp. 321-335.

This chapter is devoted to an explanation of the rather mysterious formula for making gunpowder, one of which was supposed to have been an invention of Roger Bacon. The connection of the item with the Voynich Ms. is that Professor Newbold thought he had reached a solution to the Voynich Ms. and placed great emphasis in Roger Bacon as its creator. Photostat negative.

Item 1605

Hime, Henry W. L. (LTC), "The Origin of Artillery," Chapter VII of "Friar Bacon," London: 1915, pp. 102-116.

Further material concerning Roger Bacon and his alleged invention of gunpowder. Regrettably, the item does not contain data concerning the provenance of this material about Roger Bacon, but it does deal with his alleged invention. Bacon used the Argyle cipher described long afterwards by G. B. della Porta.

Item 1606

Steele, Robert, "Luru Vopo Vir Can Utriet," Nature 121 (11 Feb. 1928), pp.208-9.

A brief article in the British publication Nature about Bacon's "gunpowder cipher."

Deals with the attempts to solve the cipher passages in one of Roger Bacon's works, "Epistola de secretis operibus artis et naturae et de nullitate magiae." The passage deals with the formula for making gunpowder. This is only one of many articles which deal with this mysterious passage and which was seized upon by Professor Newbold in his "solution" of the Voynich manuscript which he believed was written by Roger Bacon.

Item 1607

Chao, Yuen Ren, Language and Symbolic Systems, London: Cambridge University Press, 1968, 240 pp., Indexed. PB.

Chao was Agassiz Professor of Oriental Language and Literature, University of California, Berkeley. An introduction to the study of language for the non-specialist or beginner in linguistics. He deals with such basic topics as phonology and syntax as well as foreign language study.

Item 1608

Aristotle, Photostats of five pages of Laur. Plaut. 30.29 which contained the text of the Ars Notaria Aristotelis.

This item was a gift from Father T. C. Petersen of St. Paul's College, the Catholic University in Washington, D.C. It was his desire to bring to their attention the short hand characters allegedly used by Aristotle. Some of these characters resemble some of those in the Voynich manuscript. This item also contains a letter from Father Petersen to WFF.

Item 1609

Part IV, Friedman, William F., Voynich Ms., notes on.

A heavy envelope of miscellaneous notes and materials. More material on the deciphered manuscript believed by some persons to have been written by Roger Bacon in the 13th century. Oversized.

Item 1609, 1609.1, 1609.2

Anonymous (Voynich Manuscript).

Large gray folder containing "Tenative IBM Transcript," made at Arlington Hall by officers awaiting discharge at the end of WWII. Two sheets in handwriting of WFF (2 Xerox pages, copy of same without WFF comments and assessment of the Ms. characters.) About 12-15 xerox or mimeograph copies (VALUABLE). Also WFF's notations as to appearance and no-appearance of certain manuscript characters as initial letters and frequency of the former. Also, folder containing frequency tables and other data compiled at Arlington Hall; one sheet of WFF's handwriting showing his analysis of compound characters unused in the Ms-xerox copies of this. Two sheets in WFF's handwriting (one signed and dated June 13, 1944) as agreed at meeting on June 9, 1944. Very important. Captain Mark Rhoads, Ret. was in charge of this project at Arlington Hall.

Item 1609.3

Anonymous, RCA Computer run of characters of certain chosen pages in the Voynich Manuscript.

Item 1609.4

Anonymous.

Minutes of RCA meeting where project Voynich Ms. was launched. Also incomplete computer run and keys used for 301 computer.

Item 1610

Part I, WFF backfile, Friedman, William F., Voynich Manuscript.

This file contains numerous letters exchanged between WFF and both Dr. & Mrs. Voynich and many other persons who were more or less directly or indirectly concerned with this famous and mysterious manuscript. Correspondence with Anne Nill, Father T. C. Petersen and A. Howard Carter. 1924-1961.

Item 1610

Tiltman, John H., "The Voynich Manuscript."

A lecture delivered by Brigadier Tiltman to the "Baltimore Bibliophiles" in 1964. Also two letters from Brigadier Tiltman to WFF and/or ESF, May 1964 and March 1967. Some impressions of the Voynich Ms. typescript by Albert Howard Carter. Also correspondence with Anne M. Hill, about who had copies and prevention of anyone publishing a pirated edition. Photostat positive of pages of the Voynich Ms.

Item 1611

Tiltman, John H., The Voynich Ms. The Most Mysterious Manuscript in the World, (not in file, correspondence only), Pamphlet: Offprint from NSA Technical Journal, 1969, 45 pp. Autographed to WFF by the author.

Item 1612

Bacon, Roger, Opus Majus. Photopositive 14 pp., Enclosures: Letter from Father Petersen to WFF; copy of letter from WFF to Miss Nill (then owner of Voynich Ms., 1954), shorthand written note by WFF clipped to letter.

On the back of the first photostat page, WFF has copied notes of Miss Nill, making comparison between the Voynich Ms. and this actual work of Roger Bacon. See Vault.

Second Card: Opus Majus: Two photostat copies of seven pages of this work. This file is of considerable importance in that certain of the characters in this Ms. resemble quite closely certain of the characters in the Voynich Ms. The Bacon Ms. itself is supposed to have been written by a scribe but there are marginal handwritten notes allegedly by Roger Bacon himself. These sheets were obtained from negatives provided by the Vatican Library to Miss Nil at that time co-owner with Mrs. Voynich of the mysterious Voynich Ms. This file also contains certain correspondence directly connected with these seven photo stat sheets.

Item 1612.1

Anonymous, Photostats of examples of style of Old Latin writings, n.d.

No connection with Newbold-Bacon data. Vatican documents Lat 3102. Handwritten notes.

Item 1613

WFF worksheets on the Voynich Ms., 1921-1962. Letter from Father Petersen.

Friedman, William F., Worksheets pertaining to Voynich Ms. 1921-1966.

Item 1613.1

Friedman, William F., Correspondence with Charles J. Mendelsohn and John M. Manly re Voynich Ms. 1922-1931.

Correspondence with Mendelsohn and Manly. Notes on the Voynich Ms., October 20, 1962.

Item 1613.2

Voynich Ms. Misc. notes by WFF.

Item 1613.3 and 1613.4

No card, no item.

Item 1614

Friedman, William F., Correspondence with Albert Howard Carter, Erwin Panofsky, and John von Newman re Voynich Ms. 1946-1954.

Item 1614.1

Friedman, William F., Correspondence with Hans P. Kraus, Alfred Friendly, H. Horwood, Stewart S. Cairns, Leslie A. Rutledge, Loren McKinney, Dr. Helmut Lehmann-Haupt, and Jonathan Price re Voynich Ms. 1962.

Item 1614.2

Anonymous, Miscellaneous correspondence, notes, and clippings.

Note re Mrs. Voynich, with a photograph, one on Universal language, John Dee Willoughby, Hugh O'Neill. Correspondence with John Seaman and George McCracken. All re Voynich Ms., 1930-1950.

Item 1614.3

Friedman, William F., Correspondence with Father T. C. Petersen re Voynich Ms., 1953-1962.

Item 1615, 1615.1-1615.27

There is an Index to **Items 1615-1615.27**, Petersen, Father Theodore Christian. Father Petersen's collection of correspondence and work papers pertaining to his study of the Voynich Ms., 1931-1966. Collection presented to WFF in May 1969.

Father Theodore Christian Petersen was born of Lutheran Missionary parents in India, February 1, 1883. He died March 14, 1966. He became a Catholic in 1907 and proceeded to the United States where he was ordained in the Paulist Father's Seminary in Washington, D.C. May 24, 1912. He taught at St. Paul's College from 1919 thru 1925 and from 1932 thru 1936. Most of his priestly service was at Catholic University and St Paul's College. From 1952 until his death he was mostly engaged in private research, particularly in Coptic studies and in connection with the Voynich Ms. **Item 1615.1**, Petersen copied the Ms. by hand.

Item 1615.1 and 1615.2

Contains Father Petersen's handwritten transcript of the Voynich Ms. Its special value is that he carefully corrected his transcript in all places where his photostats were not fully readable by reference to the original. (Until Mrs. Voynich's death the Ms was kept in a safe deposit in a New York Bank). The transcript is in ink, the illustrations being indicated faintly in pencil. He ringed in color certain commonly occurring words and combinations of symbols for his own purposes. On many pages of the herbal section he noted provisional identifications of the plant illustration and a root illustration in the pharmaceutical section. There is a note on the first page of the transcript to the effect that July 19, 1944.....(?)

Items 1615.3 and 1615.4

Constitute what Father Petersen called his "Dictionary." It is a concordance of the whole manuscript showing the words in conventional order with reference to the pages on which they occur together with the four or five words preceding and following at each occurrence. In the case of many words, his listing appears to be complete and in the absence of any complete computer analysis, students might find this concordance very useful.

Item 1615.4

Missing

Item 1615.5

Contains Father Petersen's tracings of the herbal illustrations, also some tracings of the herbal illustrations in the Vienna Dioscoridis Ms., and other herbal manuscripts.

Item 1615.6

Contains Father Petersen's obituary, a photograph taken about 1965, and WFF's correspondence with the Paulist Fathers after his death. He first saw Mrs. Voynich's photo stats of the Ms., April 20, 1931. On April 29, 1931 he had 122 sheets of photostats made from Mrs. Voynich's copy at a cost of \$25.00. Virtually all copies of the ms. in private hands are derived from Father Petersen's photostats. **Item 1615.6** Missing

Item 1615.7

Contains what is presumably Father Petersen's first study of the Ms. It contains an autograph of Mrs. Voynich dated April 20, 1931 and his earliest provisional identifications of plant illustrations in the herbal part of the Ms., also a note on the signs of the Zodiac and two astrological diagrams. Missing.

Item 1615.8

Contains lists of "proper names" and plant names.

Items 1615.9, 1615.10, 1615.11

Refer to the work of Ramon Lull. Dr. Sydney Fairbanks was good enough to examine these and his remarks follow (1615.9). Contains Father Petersen's detailed description of a XV century Ms. written in German of the Ars Brevis of Raymon Lull (No 189.52.2 in the John Crerar Library, Chicago, Illinois). He says: "The alchemical content of the Ms. is of the slightest, being chiefly confined to a few general observations of Folio 50a-51a, regarding metals, stones, salts, sulphur, and the methods of decoction, confraction, etc. Nevertheless, the Ars Brevis is at times mentioned in al chemical catalogues...So that a description here may be deemed useful." This is followed by pencil copies of three circular al chemical diagrams and by photo stats of the first, second, fifteenth and sixteenth pages of the Ms. which include other similar circular diagrams and a columnar table of letters. Photostats of certain pages (listed on the margin of the first photostat of the 1567 printed edition of *De Secretis Naturae* of Raymond Lull) (BF 1630. L9. Rare Book Room, University of Chicago.) A blue-covered notebook containing:

- a) A transcript of the title page of the printed edition just mentioned. The text reads: Raymond Lulli/ Deetissimi et Celeberrimi Philosophi/ De Secretis Naturae/ seu de Quinta Essentia/ Libra Unus/ in tres Distinctiones divisus/ omnibus iam partibus absolutus/ Adjuncta est eius dem Epistola/ as Regem Robertum/ de Accuratatione lapidis Philosophorum/ cui adjunctus est Tractatus de aquis ex scriptis Raymundi super Accurtationis Epistolar ab Artis Studioso collectus Coloniae/ apud Joanem Birkmannum/ Anno DMLXVIII cum gratia et privilegio Caes. Majest.
- b) Father Petersen's table showing which parts of the text he had transcribed and which were to be found in the photostated pages above.
- c) A transcript of the alphabetical index and the dedication.

A transcript of the rest of the book (other than the photostats) omitting the Distinctio Secunda 33 pp. and the *questionarius* at the end 58 pp. See a further description of the text in 1615.10. Contains photo stats of folio, 78b-102a and 160b-164a, of a paper manuscript (Naples 1470-1490AD) now in the possession of Lehigh University. The first group of photostats contains the *Tertia Distinctio* of Raymond Lull's *De Secretis Naturae* (see under **Item 1615.9**); the second group, by various hand deals with similar matters and includes an interesting al chemical diagram. These are followed by fifty-two pages of Father Petersen's notes, a large number of them being transcripts of quotations from "Thorndike, History of M. E. Science." The latter being apparently a typewritten mimeograph on the Lehigh Ms. The theories set forth in the Tertia Distinctio are not explained in the notes. The text consists largely of rectangular tables of letters from four or more mystical alphabets and the lines furnish shorthand statements of different recipes on opera. They are "evidently" based on the three fold diagram of revolving circles as used by Lull in his Ars Generalis, Ars Brevis, and elsewhere. A draft of a letter on page 10 discusses the relation between the versions of the Lehigh Ms. and the 1967 printed edition.
Missing

Item 1615.12

Items referring to St. Hildegard of Bingen.

- 1) Notes regarding St. Hildegard of Bingen taken from: Hans Liebeschutz. Das allegorische Weltbild de hq. Hildegard von Bingen, 1930, 179 pp. Complete table of contents, 3 pages of references cited in notes, 1 page of notes of Hildegard's vision of the universe, 7 pages of illustrations of her visions, 1 page Adams Überlieferung (heritage), 7 pages of extracts from Charles Singer the scientific views and visions of St. Hildegarde (1098-1180). (The first of these pages is headed June 23, 1935 at NYPL).
- 2) Five pages of Photostats of illustrations in Bedas de Natura rerum (Venerable Bede).
- 3) About 10 pages. Extracts from Picatrix Ms. Ibn Ezra) Derived from: Boll & Begold, Sternglaube und Sterndeutung. Ms. in Cracow Library.
- 4) Astrological Abstracts from various books.
- 5) Six pages. Index to Voynich Ms. and note about Ms.
- 6) Cutting from Boston Post 1949. Evolution of Calendar.
- 7) Ruttinger, Das alte Buch-, 2 pages.
- 8) Further extracts from Bede-3 pages
- 9) Tracings from some of the Voynich Ms. illustrations, 11 pages.

Item 1615.13 & 1615.14

Contains questions Father Petersen asked himself about the Voynich Ms. and various notes on points of which he wished to remind himself, also some miscellaneous workings which might be worth preserving.

Item 1615.14

No card, no item

Item 1615.15

Contains a bibliography of herbals, also indexes of plant names in three or four herbals, e.g. Gart der Gesundheit.

Item 1615.16

Contains newspaper clippings and articles on cryptology.

Item 1615.17

Contains Photostats of thirty pages from Huntington Library Ms. 1051 ("photographed January 10, 1936")- Compedium of Alchemy-a curious XV century common place book.

Item 1615.18

An index of words in the Voynich Ms. This was presumably superseded by Father Petersen's "Dictionary" (**Item 1615.3 & 1615.4**).

Item 1615.19

Contains an analysis of Latin words in Rufinus' Botany.

Item 1615.20

Contains correspondence with WFF (also with Dr. Sinkov). The only copies of his own letters which Father Petersen kept are first drafts and difficult to read.

Item 1615.21

Contains correspondence with Libraries, chiefly with Mr. W. J. Wilson of the library of Congress.

Item 1615.22

Contains various newspaper clippings and notes with reference to the Voynich Ms.

Item 1615.23

An index work in the Ms. reading from right to left.

Item 1615.24

An envelope containing bibliographical references. Copy of The Paulist Father and Paulist Press catalogue.

Item 1615.25

A folder of papers having no reference to the Voynich Ms. Miscellaneous. Dead Sea Scrolls.

Item 1615.26

A card index containing bibliographical references, an index of words in the Ms. (presumably superseded by the “Dictionary” and an index of plant names.

Item 1615.27

A very large number of workings that are probably not worth preserving. A considerable portion consists of single sheets containing only one word as heading—all presumably superseded by the “Dictionary” (**Item 1615.3, 1615.4**).

Item 1616 & 1616.1

Wiener, Norbert, Ex-Prodigy, My Childhood and Youth, Mass. & London: The MIT Press, 1953, 309 pp. Index. Softbound. PB.

Item 1616.1

Wiener, Norbert, I am a Mathematician, The later life of a prodigy, Mass: The MIT Press, 1956, 380 pp. Indexed. Softbound.

Norbert Wiener coined the word “cybernetics” and opened up a new world. Cybernetics is a term to cover the idea of the feedback control of machines, the steersman toward artificial

intelligence and machine languages. One mathematician (a protégé of Wiener's) calls his work in cybernetics "that of applied mathematics;" other specialists in this science call Wiener a pure mathematician. This child prodigy, who entered college at the age of 12 and graduated at 14, was at first drawn to biology as his métier, also to philosophy. It was his father, an immensely learned man speaking 40 languages, who suggested mathematics to his son. He enrolled in Harvard for a Ph.D. in philosophy when he was 16 (1911), was appointed to study with Bertrand Russell at Cambridge the following year. Also with G. I. Taylor, later Sir Geoffrey Taylor, with von Neumann, Bernard Koopman and the other greats, Alan Turing, a young British prodigy who died at a tragically early age; and with these and many others in many countries, Wiener became associated at times. His last book was God and Golem, MIT PB series. (See **Item 1618**).

Item 1617

Wiener, Norbert, Cybernetics, or control and communication in the animal and the machine, Cambridge, MA: The MIT Press, 1965, Second edition, 212 pp. Indexed. Softbound.

See **Items 1616 and 1616.1** for write-up. Considered one of the most influential books of the 20th century.

Item 1618

Wiener, Norbert, God and Golem, Inc. A comment on certain points where cybernetics impinges on religion, Cambridge, MA: MIT Press, 1964, 99 pp. Indexed.

See **Item 1616 and 1616.1** for biographical write up. PB.

- 1) What do we make of a machine that "learns" and the method of its learning was no different in principle from that of the human being?
- 2) What about machines that reproduce themselves? Is God to Golem as man is to machine?
- 3) Relation between man and machine.

This book is still in print and available on Amazon.

Item 1619

American Mathematical Society, "Norbert Wiener, 1894-1964," Bulletin of the American Mathematical Society, 71, no. 1, Part 2, 1966, 145 pp. HB no DJ

"Gift of Dr. S. Kullback, former student and colleague, August 19, 1967. WFF." In WFF's handwriting. Special issue of the bulletin of the AMS dedicated to the memory of Norbert Wiener... Nine Contributions by outstanding mathematicians, with a bibliography of Wiener's works.

Item 1620

Anonymous, Newspaper and magazine clippings on various subjects of interest historically.

From the years 1925 on, WFF kept clippings from newspapers and magazines which were of interest to him at the time and which he thought might be of interest after a quarter of a century had passed. These clippings are in random order and to be really useful would have to be arranged sequentially according to date or subject, if the latter categorization is possible. Baconians, Shakespeare, and libel suit on Baconian cipher.

Item 1621

Porohovshikov, Pierre S., Shakespeare Unmasked, London: Arco Publishers, 1955. DJ.

The author was a winner of the Pushkin Award of the Russian Imperial Academy of Science. Professor of History at Oglethorpe University, the author believes the plays were written by Roger Manners, The Earl of Rutland.

Item 1622

Sweet, George Elliott, Shake-Speare - - The Mystery, USA: Stanford University Press, 1956, 125 pp. Second printing of the first edition. DJ.

Foreword by Earle Stanley Gardner. This author's nominee for the Shakespeare crown is Queen Elizabeth herself. Unsolicited gift from the author in 1957. Review in Chicago Sunday Tribune preserved in book.

Item 1623

Yardley, Herbert O., The Education of a Poker Player, New York: Simon & Shuster, 1957, 129 pp. Including where and how one learns to win. DJ.

Item 1624

Pereira, Captain J., A Distant Drum, Aldershot, London: Gale & Polden Ltd., 1950, 213 pp. DJ.

“War Memories of the Intelligence Officer of the 5th Battalion, Coldstream Guards, 1944-1946,” is the subtitle, first published in 1948. The foreword by General Sir Charles Lloyd, Colonel of the regiment, states that Captain Pereira “Served his regiment as efficiently and faithfully as his father had done thirty years before. He did so as an intelligence officer and his main duty was to predict, from day to day to his commanding officer, the solution and intentions of the enemy.... He displayed uncanny intuition.....”

Item 1625

Praun, Albert, Soldat in der Telegraphen-und Nachrichten-trappe, Wurzburg, Germany: J.M. Richter's Buch-und Steindruckerei, 1965, 287 pp. Indexed. DJ.

The author served 32 years in the Signal Corps (as it would be termed in the U.S.), first as a common soldier, ending as a General in the Wehrmacht. The years covered are 1913 to 1944. Many charts in a holder inside back cover. No index except by names. Received by WFF direct from Germany in 1969, name of giver unknown. [It could of course, have come from the author himself, who certainly must have known what WFF did-ESF].

Item 1626

Neilson, Francis, Shakespeare and His Tempest, Rindge, New Hampshire: Richard R. Smith, Publisher, Inc., 1956, 181 pp. DJ.

A gift from the author, a staunch Stratfordian and actor-manager of the Shakespeare plays. "An actor-manager's analysis of the play from the stand point of production. Also a stout reinforcement of the true identity of William Shakespeare and diverse other provocative comments and interpretations-literary, instinctive, and histrionic. He supports Shakespeare as Shakespeare.

Item 1627

Dupree, A. Hunter, Science in the Federal Government, A history of political activities to 1940, Cambridge, MA: Belknap Press at Harvard University Press, 1957, 460 pp. Indexed. DJ.

Dupree sees science as a dynamic motive force in every sphere of life and he sees the government as able and willing from the start to use the science of the day not only for its citizens. He discusses the Lewis & Clark expedition, the creation of the Smithsonian, the National Board of Health, the TVA, the Soil Conservation Service and the shift to weapons research after WWI. The creation of Institutions and the ideas behind them.

Item 1628

Ellis, Ruth, The Shakespeare Memorial Theater, London: Winchester Publications, LTD, 1948, 162 pp. DJ

History of the theater, the famous actors & plays, 1879-1948.

Item 1629

Allen, Robert S. (Col), Lucky Forward-The History of Patton's Third U.S. Army, New York: The Vanguard Press, Inc. 1957, 424 pp. DJ.

Col. Allen (formerly Drew Pearson's other half in "the Washington Merry-go Round" and General Patton's Operations Exec. G-2), states of the Battle of the Bulge (and the same of Pearl Harbor that these tragic disasters "were due solely to the fact that intelligence was not employed." See Chapter 7 "Battle of the Bulge," pp. 206-280. Col. Allen's contempt for Intelligence Officers shows up throughout his book; his analysis says that "intelligence as evaluated information" was not lacking-it was the command officers who failed to use that "evaluated information." Compare conclusions in **Item 1775** (re: Pearl Harbor). Czechoslovakia Pilsen, Plaven, Fulda Gap.

Item 1630

Gamow, George, Mr. Tompkins in Paperback, contains Mr. Tompkins in Wonderland and Mr. Tompkins Explores the Atom, Cambridge: CUP 1965, 186 pp. Soft bound. PB.

Here, united in paperback are the two separate volumes, originally published as a series of stories in the British science magazine Discover, with some additional chapters. Both whimsical and scientific, the average reader can delight in it and learn much. Professor Gamow was with George Washington University when he devised these fascinating diversions to educate the layman. He was later with the University of Colorado at Boulder, until his tragic death from cancer in 1969. His wife, formerly Barbara Perkins, who composed the verses and songs, was the public relations member of the staff at CUP where WFF and ESF met both-where the two themselves met, in fact during the preparations for the publishing of the respective books. George Gamow saluted us as his "fellow-cryptographers." The book was sent to the Friedmans as a gift at his request by CUP.

Item 1631

Rowley, H. H., The Zadokite Fragments and the Dead Sea Scrolls, Oxford: Basil Blackwell, 1955, 133 pp. DJ.

Rowley was a Professor of Hebrew at the University of Manchester. He believed the Zadokite fragments and other of the Dead Sea Scrolls are from the same section. The group is bound together by a covenant, and this is found in the Zadokite work, the Habakkuk Commentary, and the Manual of Discipline. These are "the Sons of Light." The leader of the other sect is the Wicked Priest Prophet of Untruth, leader of "the Sons of Darkness."

Item 1632

Agate, James, The Later Ego, introduction and notes by Jacques Barzun, New York: Crown Publishers, Inc. 1951, 625 pp. DJ.

This book is a gift of Jacques Barzun and autographed by him to WFF and ESF when Trilling-Barzun Book Club put out an edition of their Shakespeare Book. At that time they had some correspondence with Professor Barzun. See index of this book for comments on the Bacon-

Shakespeare controversy. James Agate has been compared as a great diarist, to Samuel Pepys. See page notations inside front cover. Inscribed to WFF and ESF: "With admiration and gratitude for their Shakespeare book," Jacques Barzun. Biography by one of the great drama critics. He writes about his friends, H.G. Wells, Noel Coward, the Sitwells, Lord Alfred Douglas, Lawrence Olivier, and G. B. Shaw. WFF has marked pp. 286-287, 304-305 that mentions the Shakespeare controversy.

Item 1633

Downes, Quentin, They Hadn't a Clue, London: Arco Publications Ltd., 1954, 200 pp. DJ.

A detective tale, involving ciphers. A gift of WFF's British friends, Joan and Vernon Pilling. The Kosher-Rozzer (Det. Inspector Abraham Kaminsky) finds a murdered Harley Street psychiatrist and on his desk is a notebook containing professional records of his "cases."

Item 1634

Thurber, James, The Wonderful O, New York: Simon & Schuster, 1957, 72 pp. DJ.

Enclosed is a review from Time Magazine: "Thurber's new fairy story is written for a special breed of children and adults-those who like their anagrams and riddles sprinkled with poetic dust." A man who hated the letter O because his mother had become wedged in a porthole, sails to an island where he bans the letter O. All names and words become codes?

Item 1635

Long, E. John, American Geographical Society, Mexico: Around the World Program, Garden City, New York: Nelson Doubleday, Inc., 1955, 63 pp. Glued stamps with pictures.

Item 1636 & 1636.1

Seaton, Ethel, "Thomas Hariot's Secret Script," AMBIX, Volume 5, No's. 3 & 4, October 1956, pp. 111-114. Correspondence included. **Item 1636** is original and **Item 1636.1** has 2 copies.

The distinguished classical scholar, Fr. Ethel Seaton, retired from St. Hughes College, Oxford University, achieved a commendable piece of analysis in deciphering Thomas Hariot's secret script, a contrived form of short-hand which he used to conceal scientific and alchemical findings. Her achievement with the Elizabethan Hariot symbols and characters, however, led her astray. She then began to see meaningful messages, chiefly acrostic-anagrams, in other places. WFF and ESF investigated her findings in these later productions but unfortunately her premises were faulty, her "signatures" non-existent. The first case examined is seen in Item 1647, Studies in Villon, Valliant and Charles d'Orleans, which is reviewed by ESF and WFF in **Item 1647 and**

1647.1. The second in **Item 1647.2, Acrostics, Anagrams, and Chaucer.** Folder with Correspondence. WFF purchased copy of article from Taylor & Francis.

Item 1637

Mackenzie, Compton, Water on the Brain, London: Chatto & Winus. DJ.

Blenkinsopp is summoned to meet the Director of Extraordinary Intelligence at the War Office and is charged with a secret mission. His plan to restore King Johannis to the throne of Menacia was jeopardized by the rival organization, the Safety of the Realm Department. A farce and a “deliberate concature of intelligence.”

Item 1638

Ayer, Frederick, Jr., Yankee G-Men. DJ.

A proper Bostonian, just graduated from law school in 1941, and rejected for service, because of absolutely impossible eye sight for service, he chose to go into the FBI. He eventually got the Europe (his passionate hope) where he served on General Eisenhower’s staff in charge of FBI attached personnel. Pages 146-150 tell “the missing Sigaba” story. Other page numbers noted inside front cover. Mr. Ayer served as the Intelligence Officer to the Secretary of the Air Force for 8 years-1953-1961.

Item 1639

Carroll, Lewis, The Complete Works of Lewis Carroll, New York: the Modern Library, 1963 pp. DJ.

Copies and illustrations by John Tenniel, the original illustrator. Introduction by Alexander Wollcott. Carroll, creator of Alice, not only wrote a poem wherein an acrostic gives Alice’s real and full name, but the book reveals many examples of acrostics, anagrams, riddles, and the like. See page numbers, for example, 272, 275, 893, 922 ff. Carroll also wrote of the Vigenère Square under the name of “The Alphabet Cipher” pp. 1283-1294.

Item 1640

The Roosevelt Letters: Being the Personal Correspondence of Franklin Delano Roosevelt, Volume I- The Early Years 1887-1904, with a foreword by Eleanor Roosevelt, edited by Elliott Roosevelt, London, Sydney, and Toronto: George G. Harrop & Company Ltd., 1949, 470 pp. Volume II-1905-1928, 528 pp. edited by Elliott Roosevelt, assisted by James N. Rosenau. Volume III-1928-1945, 541 pp. edited by Elliott Roosevelt, assisted by Joseph P. Lash. DJ.

Volume I shows the family tree of FDR, showing also the Roosevelt descent of Eleanor, and such close relatives as are mentioned in the correspondence. [follows p.7] Anna Eleanor Roosevelt and FDR married in 1905, were fifth cousins once removed. Eleanor Roosevelt was the daughter of Elliott, brother of Theodore, the niece of President TR. The tree also shows the Delano line, that of Franklin's mother, Sara Delano Roosevelt. Many handsome photographs. FDR at 22, Harvard graduate 1904, Eleanor at 18 and again in bridal attire, are surprisingly alluring as the childhood portraits of FDR. He began to vary his signatures when very young-in 1892 (5 years old) he signed Roosevelt Delano Franklin. When six years old NILKNARF (reversed spelling). Also when 6 (December 1893) he wrote in French entirely and signed TLEVESOORD NILKNARF. From the time he went to Croton, the signature FDR became more and more common, although previously he had experimented with many forms of writing (one Greek). Volume II covers his public service under President Wilson, the seven years he was out of political life while recovering from polio. It is rarely mentioned and never a complaint and ends with his unexpected election as Governor of New York (1928).

FDR's first meeting with Winston Churchill in July 1917. Pages 286 and 287 are the editor's narration of the Churchill-FDR relationship at the time of WWI. Volume III contains far fewer personal, that is, family letters. He addressed many of the well-known personages of the period, particularly from 1930 on. The Roosevelt-Churchill relationship can be followed in considerable detail and all, practically, of the official relationship can be deduced there from. He usually addressed Churchill as "the former Naval Person." In spite of tragedies and worried concern of the WWII period, the letters convey humor and grace. What astounding energy! These letters alone would never cover a lifetime of work for any ordinary man.

Item 1641

Langer, William L. & S. Everett Gleason, The Challenge to Isolation, The World Crisis of 1937-1940 and American Foreign Policy. PB, Volume I, 404 pp. and Volume II, pp. 405-794.

An exhaustive study consuming two years of both authors time. Scholarship usually does.

Item 1642

Rovere, Richard H., Senator Joe McCarthy, London: Methuen & Company, Ltd. 1960, 224 pp. DJ. (No update on Roy Cohn).

The distinguished writer for the New Yorker Magazine covered the Senate hearings in which the Senator from Wisconsin destroyed people as if insects; this study is a thoughtful reporting and analysis of the character of the demagogue in action and what happens to one when his forum fails him and he is himself put on the rack. Purchased by WFF in London (WFF & ESF spent the latter part of 1959 and early 1960 in England). McCarthy insulted Presidents,

humiliated generals, and flouted authority of the U.S. Senate. He overrode the Constitution while his followers cheered. Outside of America he was a gift to Russian propaganda.

Item 1643

Dostert, Léon (ed.), Monograph Series on Language and Linguistics, Institute of Language and Linguistics, Edmund A. Walsh, School of Foreign Service, Georgetown University.

Report of the eight annual Round Table meetings on linguistic and language study.
Research in machine translation. Original journal.

Item 1644 and 1645

Cohen, J. M. (Collected by), The Penguin Book of Comic and Curious Verse, Harmondsworth, Middlesex: Penguin Books, Ltd., 1952, 315 pp., 1645, More Comical Verse, 1956.

Both volumes were gifts of Vera and P. W. Filby. These fall into the category of “literary curiosities.”

Item 1645

Cohen, J. M. (collected by), More Comic and Curious Verse, Harmondsworth, Middlesex: Penguin Books, Ltd., 1956, 319 pp.

Gift from the Filbys, January 1958. P.W. Filby was a member of the British Cryptological Organization. The comic verses in the enclosure record and interchange of charges and retorts, all in good fun, between Filby and the then mentor GCHQ.

Item 1646

D’Albas, Andrieu, Capitain Marie Impériale, August 11, 1975 S.B. Les flottes du Mikado dans la seconde guerre mondiale, d’après des documents Japonais inédits, Paris: Amiot, Dumont.

Item 1647

Seaton, Ethel (D.Litt), Studies in Villan, Vaillant and Charles d’Orléans, Oxford: B. H. Blackwell, 1957, 48 pp. See **Item 1636 & 1636.1**.

A small brochure where in Dr. Seaton reveals anagrammatic-acrostic type signatures, none of which are valid when judged by authentic cryptologic standards. A review of this item, written at the request of the editor of Medium Aevum (Oxford University Quarterly) may be seen as **Item 1647.1**. Earlier Dr. Seaton had performed a legitimate cryptographic feat in the solution of “Thomas Hariot’s Secret Script” (**Item 1636**). However, her later work does not withstand

scrutiny. This study of the Medieval French poets, plus an article published in Medium Aevum (Volume XXV, 1957, pp 107-109), “The Parliament of Foules and Lionel of Clarence” proclaims the presence of acrostic signatures in the above named French poets and in Chaucer. The scholarly world took sides and a controversy continued for some two years. **Item 1647.2** (Philological Quarterly, January 1959, Volume I) is a lengthy disquisition of 9000 words which once and for all sets forth the distinguishing characteristics of genuine acrostic and anagrams and those which are purely subjective. Dr. Seaton, a very distinguished classical scholar, after returning from a career of teaching (what?) at St. Hughes College of Oxford University, fell a victim to the acrostic-cum-anagram pursuit and found secret messages in these French (why) poets. WFF & EEF reviewed this book and other acrostic “finds” of Dr. Seaton. See Medium Aevum, 27, 3 (1955), (listed under Friedman, author). Two copies, NO DJ, bound in blue buchram.

Item 1647.1

Friedman, William F. and Elizebeth S., “Studies in Villon, Vaillant and Charles d’Orleans,” Review of Medium Aevum, 27, 3, (1958), pp 194-198.

Original issue complete of the Journal, 1 off print of review and two Xerox copies.

In 1957 when WFF and ESF were in England at the time of the publication of their book (**Item 1691**) wherein they demolished numerous so-called literary ciphers, they were approached by Dr. J.A. W. Bennett, editor of Medium Aevum (quarterly published by Oxford University) to write a review of the small brochure prepared by Dr. Ethel Seaton, proclaiming anagrammatic-acrostic signatures in the above named medieval French poets. To judge the “messages” Dr. Seaton found in these poems, WFF and ESF set forth six criteria by which such messages must be judged for validity. (See Seaton, **Item 1647**). In 1961, Dr. Seaton retaliated by persuading a London publisher to bring out a tremendous tome of 592 pages, compiled by her under the title Sir Richard Roos, circa 1410-1482, Lancastrian Poet (Rupert Hart-Davis, London 1961). Therein she makes an appeal for greater leniency on our part toward her cryptography and for greater flexibility on the part of all cryptologists toward the type of cryptography allegedly used in literary works. Dr. Seaton referred also to the type of acrostic published in the London Daily Telegraph, stating the methods therein were very flexible. Frank W. Lewis, one of the topmost experts on acrostics in the United States (see **Item 1647.3**). Lewis on question of validity of Solution of Acrostics.

Item 1647.1a

Friedman, William F. & Elizebeth S., Review of “Studies in Villon, Vaillant and Charles d’Orleans” by Ethel Seaton, Medium Aevum, 27, 3 (1958) pp. 194-198.

Off print, original journal, notes, original draft (handwritten), and typescript copy. Preparatory copies for review of Seaton article in Medium Aevum 1957. Also corrections and changes suggested by Professor J.A.W. Bennett, Editor.

Item 1647.1b

Anonymous, Series of Items re controversy of “The Parliament of Faules” by Dr. Ethel Seaton, 1957-1958.

A series of items relating to the controversy launched by Dr. Ethel Seaton, a very distinguished scholar (retired) from St. Hughes College, Oxford. She published in Medium Aevum some researches of hers in Chaucer’s The Parliament of Faules. She was praised and attacked. Margaret Galway, a British scholar praises Katherine Emerson, an American scholar attacks. See **Item 1647.1a**.

Item 1647.1c

Friedman, William F. & Elizebeth S.,

Correspondence with Professor J.A.W. Bennett and Ethel Seaton re review of Seaton article in Medium Aevum, 1958.

Item 1647.2

No Card, Folder with correspondence from George McCracken, Worksheets, “Acrostics, Anagrams & Chaucer,” by WFF & ESF typescript (carbon & copy), 2 folders: one has photostat positive of article in Philological Quarterly 38, 1 (January, 1959), pp. 1-20 by WFF & ESF.

Friedman, William F. & Elizabeth S., “Acrostics, Anagrams, and Chaucer,” Philological Quarterly, 38, 1 (January, 1959), pp. 1-20.

This long article of 9,000 words was researched and written by request and given first place in this issue of the Quarterly. Because of the comment and argument, both in Great Britain and the United States, concerning the claims of Dr. Ethel Seaton of Oxford that she had found acrostics in the works of the Medieval French poets and also in Chaucer’s long poem, Parliament of Foules; and also because of our review (**Item 1647.1**) of Seaton’s brochure on Villon, Vaillant and Charles d’Orleans; the editors of the Philological Quarterly requested WFF and ESF to prepare and set forth criteria and critical standards on the subject of acrostics and anagrams, which would enable scholars to judge for themselves the validity of such claims as Dr. Seaton’s. The editors stated that it was the first time in twenty years that an article had been solicited, since all academic journals are showered with unsolicited offerings. The editors felt that in this field of literary cryptology particular and exact standards must be formulated. The article was researched (although much relevant material had accumulated over many years in our collection) at UCLA

(one of the fine lending libraries in the country at that time) while WFF and ESF spent the summer there in 1958 at that institution while WFF participated in a symposium. Writing was done after returning to Washington in the autumn. The inflexible rules for the true acrostic or anagrammatic messages are set forth on pages 19 and 20. The association with Professor Zimansky (an editor of the Quarterly) led to the Friedman contribution to the memorial to Professor Baldwin Maxwell. See inscription on page 1 of copy 1. (**Item 1647.2**) Also in box copies 1 & 2. Original journal. William F. Friedman and Elizebeth S. Friedman, "Acrostic, Anagrams, and Chaucer, Philological Quarterly 38, 1 (January 1959), pp. 1-20.

Item 1647.3

Lewis, Frank W., On the Validity of Acrostics,

A response (to a request by WFF) to evaluate Dr. Ethel Seaton's claim that the acrostic puzzles in the London Daily Telegraph utilized "loosely and flexible" methods. Correspondence and comment. This folder also contains a booklet prepared by Mr. Lewis, one of the foremost U.S. experts on crossword puzzles called "The Nation's Best Puzzles; A Collection of "British-type Crosswords." Dr. Seaton's claim is unfounded. As Mr. Lewis points out the letters-all of them-in acrostic puzzles are "contagious" not "scattered at random-the "method" utilized by Miss Seaton.

Item 1647.4

Lewis, Frank W., "The Nation's Best Puzzles," a collection of "British-type" Crosswords-The Most Challenging Brain-teasers Ever Concocted!" See the very illuminating long autograph to WFF inside front cover. Crossword puzzles published in The Nation.

Item 1648

Nicoll, Allordyce, The Elizabethans, Cambridge: University Press, 1957, 174 pp. DJ.

Gift of Ronald Mansbridge, Manager, American Branch, Cambridge University Press. Beautiful cuts, half tones, etc. A compilation of and about Elizabethians "by themselves."

Item 1649

Downes, The Scarlet Thread, Adventures in wartime espionage, New York: The British Book Centre, 1953. See author card. DJ. WFF has marked pages 87-102, 120, 128, 168-169, 171.

These are the espionage memoirs of an American who worked first for British then for American Intelligence from 1940 until 1945. He trained agents and sent them through enemy lines, stole secret military and diplomatic codes from neutral embassies in Washington. Made clandestine contacts with Balkan terrorists and was involved with numerous plots against the Axis powers ranging from counterfeiting to German sabotage and espionage schools. Pp. 87-102,

J. Edgar Hoover makes war. Page 120, “He who controls G-2 and communications controls all.” William Donovan.

Item 1650

Goldsmid, Col. Sir Frederick, John C. B. K.C.S.I., Telegraph and Travel, London: MacMillan & Company 1874, with maps and numerous illustrations, 659 pp. Indexed. No DJ.

WFF in his history of code language, dealt with telegraphy as an historical instrument for transmitting ciphers and codes. This 19th century volume is important for history, although it covers a limited area. Beautiful wood carvings. Begins with the Ottoman Government.

Item 1651

Don Whitehead, The FBI Story, A Report to the People, New York: Random House 1956. DJ.

This book was written with the cooperation of J. Edgar Hoover and FBI Personnel. Whitehead was a reporter. No listing under “intelligence” or “counter intelligence.” Discusses the Hiss Case, Palmer’s Red Raids, Pearl Harbor, German Saboteurs, and SIS.

Item 1652

Documents on German Foreign Policy, 1918-1945, Series D, Volume IX, The War Years, March 18-June 22, 1940, London: Her Majesty’s Stationary Office, 1956, 729 pp. DJ.

I –Organization of the German Foreign Ministry.

II- List of German files used.

III- Lists of persons.

IV- Glossary of German terms & abbreviations.

V-Analysis of Foreign Ministry Archives.

Abwehr- counter intelligence.

Item 1653

Feis, Herbert, Churchill, Roosevelt, and Stalin, The War They Waged and The Peace They Sought, Princeton, NJ: Princeton University Press, 1957, 692 pp. DJ.

This enormous and highly important study was made possible by a grant from the Rockefeller Foundation. It is the story of the great coalition formed by the U.S. Great Britain and the Soviet Union, to combat the Axis Powers in WWII. The author, as a special consultant to three Secretaries of War, Dr. Feis had access to many sources of information unavailable to other writers.

Item 1654

Fleming, Ian, From Russia with Love, New York: A Signet Book published by the New American Library, 1958, 191 pp. PB.

James Bond and a cipher machine. Ian Fleming was a graduate of Eton and Sandhurst. He served in Naval Intelligence in WWII and later worked as the foreign manager of the London Sunday Times.

Item 1655

Bryant, Arthur, The Turn of the Tide, 1939-1943. A study based on the diaries and autobiographical notes of Field Marshall Viscount Alanbrooke, London: Collins, 1957, 766 pp. DJ.

Lord Alanbrooke was a master strategist in WWII and he kept a daily diary. He was chairman of the Chiefs of Staff Committee, C.I.G.S. and took part in the conferences in Moscow, Casablanca, Washington, and Quebec.

Item 1656

Acts pertaining to espionage and communications, British and U.S.

- a) "Official Secrets Act"-1920 British
- b) "Report of the Committee of Privy Councilors appointed to inquire into the interception of communications," October 1957, British.
- c) "Disclosure of Classified Information," October 1951, U.S.
- d) "Administrative Provisions for Radio Station," from Radio Regulations, International Telecommunications Union, Geneva 1959.
- e) "Federal Statutes on the availability of Information," extracts from the V.S. code, 1960.

Item 1657

d'Albas, Andrieu, Death of a Navy, Japanese Naval Action in WWII, New York: Devin-Adair Company 1957. See author card. First U.S. edit (8/11/75, SB). DJ.

The story of Japan's Imperial Navy from a few days prior to Pearl Harbor to the surrender. It is based on Japanese documents, on conversations with ranking officers of the Imperial Navy, and on reminiscences of Japan seaman. 2 copies. First published in 1954 by Amiot-Durmont, Paris. See **Item 1659**.

Item 1658

Luria, A. R., The Mind of a Mnemonist, a little book about a vast memory, translated from The Russian by Lynn Solotaroff, New York and London: Basic Books Inc. 1968, 160 pp. Foreword by Jerome S. Bruner. DJ.

One of the most striking of WFF's characteristics was his phenomenal memory. This book is a remarkable 30-year record and study of just one man's memory and its effect on the man himself. Gift of J. McConnell Truitt. Study by the renowned Russian psychologist on a patient with a seeming limitless memory. He details not only the obvious strength of S's ability, but his crippling inability to forget, his pattern of acting, passively to life and his handicapped personality.

Item 1659

d'Albas, Andrieu, Death of a Navy, Japanese Sea Power in the Second World War, London: Robert Hale, Ltd. 1957, See **Item 1657**. DJ.

Item 1660

Budd, Louis J., "The Baconians: Madness through Method," The South Atlantic Quarterly, 54, 3 (July, 1955), pp. 359-368.

This short article pokes fun at the Baconians, and stated with aptness. "In Baconianism we see 19th century premises which lured the gullible on to absurdity, and we see a faith in method which led on to intellectual madness. The Baconian theory was an illogical extension of the worship of Shakespeare as a moral philosopher.

Item 1661

Booth, William Stone, Subtle shining secrecies written in the margents of books generally ascribed to William Shakespeare, the actor, and here ascribed to William Shakespeare, the poet, Boston: Walter H. Baker Company 1925, 292 pp.

Additional acrostics based upon the fallacious technique employed by this prolific exponent of Baconian authorship. No. 337 of a limited edition boxed and signed by the author. See text immediately preceding. Slip case.

Item 1662

The Square Pegs, Some Americans who dared to be different, New York: Alfred A. Knopf, 1957, 315 pp.

Chapter VI, entitled "The Lady Who Moved Shakespeare's Bones," devotes pp. 168-222 to Delia Bacon, the American woman, who in 1856, aroused worldwide controversy over the authorship of the plays. Miss Bacon, no kin of Sir Francis, first voiced the theory that Shakespeare was a "syndicate." See Time Magazine review enclosed in the book. This book contains many lessons for the gullible. See **Item 1660**.

Item 1663

Johnson, Gerald W., The Lunatic Fringe, Philadelphia and New York: J.B. Lippencott Company 1957, 148 pp. DJ.

This great historian deals with “wacky” Americans, many of whose ideas became accepted philosophy and practice in later years, and whose ideas did not become accepted was Ignatius Donnelly whose “Great Cryptogram” launched the idea of ciphers in Shakespeare. See pp. 124-138. See also, David Kahn, The Codebreakers, pp. 873ff.

Item 1664

Rayner, D.A. (Commander), Escort: The Battle of the Atlantic, London: William Kimber, 1955, 250 pp., Edited by Captain S.W. Roskill, D.S.C. and R.N. author of The War at Sea, 1939-1945.

A popular and readable book. WFF and ESF knew the Roskill’s after the end of WWII and bought this book in London in 1957 because of Captain Roskill’s association with it. The personal story of an officer who fought with great distinction in the Battle of the Atlantic. Rayner commanded a group of escort vessels.

Item 1665

Barnfield, Richard, The Poems of Richard Barnfield, London: The Fortane Press, n.d., 135 pp. DJ.

No. 212 of 500 copies, Gift of Alfred W. Hesse in 1957 in England and autographed to WFF and ESF after a visit together to the Bodleian Library. The author of these poems is considered to be the rarest and most gifted of all writers of the Elizabethan era other than Shakespeare himself.

Item 1666

Furneaux, Rupert, The Man Behind the Mask, The Real Story of the “Ancient Prisoner,” London: Cassell & Company Ltd. 1954, 182 pp.

See **Item 1692**, Louvois, Lauzun.

Item 1667

One envelope with assorted articles on spies and spying. See Washington News, September 3, 1944: “Mata Haris of this Wave are Unbeautiful and Dumb,” “Girl Spy Hunted in Embassy Theft,” and “Secret Messages in Hairdos.” See article on Donovan suggesting a spy agency: “British spy secrets of Napoleonic Days have narrow escape.” Use this folder for female spy story. Radio spies.

Item 1668

Pieter, H., La Querella Shakesperiana, Ensayo Epistolar seguido de Christopher Marlowe, Esbozo Dramatico, Ciudad Trujillo, Dominican Republic: 1956, 113 pp. PB.

Autographed to WFF and ESF by author. This medical doctor writes on the question of whether Marlowe was the author of the plays.

Item 1669 and 1669.1

Page, Bruce; David Leitch and Phillip Knightley, The Philby Conspiracy, Garden City, New York: Doubleday & Company, Inc. 1968, 300 pp.

A shocker of first proportion. This book was not long published when WFF was a hospital patient in 1968. His roommate was given this volume and after reading it, Mr. Salisbury presented it to WFF “for keeps.” This is a story by three journalists, not only about Philby, but also of Burgess and McLean. All three were “stationed” in Washington, DC: McLean from 1944 to 1948, Philby was sent to Washington in 1949: Burgess arrived in 1950 as First Secretary of the British Embassy, who was “put up” at the Philby house. Philby was recalled to England in 1951 after Burgess and McLean had defected. Philby was under suspicion and investigation until 1963, when he too defected. Burgess died in August 1963. McLean’s wife divorced McLean and married Philby. Melinda McLean was Philby’s fourth wife, if this is true.

Item 1669.1

Review by Tom Barden, In envelope **1670.1**.

Item 1670

Philby, Kim, My Silent War, New York: Grove Press, Inc. 1968, 217 pp. Introduction by Graham Greene. PB.

Greene says a sub-title should appropriately be “The Spy as Craftsman.” Trevor-Roper states that Philby was “the sharpest of observers as he was the neatest of operators.” Allen Dulles said he was “the best spy Russia ever had.” Although Philby’s compatriots and associates in M15 proclaim this to be a true story, each speaking for his own bailiwick of knowledge, the average reader cannot avoid a sense of dishonesty, or at least, of veiled honesty, in spite of the scripts impeccable rings. He conceals nothing—he ranges through the Code and Cipher Section (GCHQ) and counter espionage—who defended it, who derided it. He rings in Sir William Stephenson of R 3606, New York, Hoover and the FBI. There are also revelations of the naiveté of the heads of M15 (see p. 116) who trusted the Soviets, but not “the United States Services.” Philby delineates his feeling upon orders to the USS to work with CIA and FBI. He has had a good deal of quiet fun over the doings of the FBI, and under-the-surface CIA reactions. He defends Judith Coplan with great admiration, and speaks approvingly of Fuchs, Greenglass, the Rosenberg’s et. al. On page 179, he gets into the McLean affairs, which maybe the most truthful part of the whole book. After Burgess was defended by MacMillan, he stayed afloat for seven

years with a good livelihood outside government service and served the Soviet cause all the while. The organization charts at the end of the book are informative.

See **Item 1670.1** for reviews.

Item 1670.1

Reviews of **Item 1670** and **Item 1669**.

Item 1671

Gleason, Andrew M., Elementary Course in Probability, Second Edition, revised by Walter F. Penney and Ronald E. Wyllys, NSA 1951, 13 Chapters, 5 page introduction.

This brilliant young mathematician was selected by Fortune Magazine in the 1950s as one of “The Ten Most Promising Scientists” in the United States less than 40 years of age. Here and there occur references to cryptanalytic applications of a general nature. The item was originally taken by NSA. A copy was returned to the Friedman Collection in June 2011 by the Cryptologic Museum, NSA.

Item 1672

One envelope, Skehan, Rev. Msgr. Patrick W., “About Libraries in Caves,” Catholic University of America Bulletin, 24, 3 (January 1951), pp. 4-9.

Skehan, Professor of Semitic Languages and Literatures, Director of American School of Oriental Research, 1955-1956. Skehan visited caves where the Dead Sea Scrolls were found. He reports on how the 99% of the contents of cave 4 were bought together at the Palestine Archeological Museum.

Item 1673

Dreyfus, Hubert L., Alchemy and Artificial Intelligence, California: Rand Corporation, 1965, paper covered, 86 pp., 4 pages of bibliography.

A very literate author takes an angular look at the modern computer age. Provenance unknown.

Item 1673.1

Dreyfus, Hubert L., “Why Computers Must Have Bodies in Order to be Intelligent,” The Review of Metaphysics, 21, 1, (September 1967), 32 pp. See write up for **Item 1673**.

Fully intelligent behavior would be impossible in principle, for a digital machine.

Item 1674

Pierce, J.R., "The Social Uses of Science," (Bell Laboratories) American Scientist, 42, 4 (October 1954), pp. 646-650. No Card.

Item 1675

Both items together in one envelope, J. R. Pierce, "Orbital Radio Relays," Jet Propulsion, (April 1955), pp. 153-157.

While orbital radio relays probably could not compete with microwave radio for communication over land, they might be useful in transoceanic communication.

Item 1676

Bland, Steve, "Espionage is Big Business," Philadelphia Enquirer Magazine, (July 22, 1956), pages 10-11. Nice photo.

The choice of a WFF in fighting pose to grace this article is somewhat in apropos. However, the article is unusually accurate in detail as such stories go. There is one short paragraph devoted to WFF and mention is made of the monetary award he had just received. Couldn't keep WFF's contributions a secret because the award of \$100,000 needed Congressional legislation. "Some of the intricate decoding machines he invented for the government are too secret to be patented or marketed and it was to compensate him for this, that they gave him the money. For a critical discussion of the case, see David Kahn, The Codebreakers, pp. 390 ff.

Item 1677

Yardley, Herbert O., "Winning at Poker," The Saturday Evening Post, November 9, 1957, pp. 30-31, 140-142.

A master of the game's infinite subtleties tells how to come out ahead in a half dozen of its most widely played variants. Good betting advice. One envelope.

Item 1678

Silver, George, Paradoxes of Defense, 1599, (Shakespeare Assn. Facsimiles No. 6.), London: Oxford University Press, 1933.

This little book is a reproduction—a very beautiful facsimile. A long introduction by the great Shakespearean scholar J. Dover Wilson on the use of weapons in Hamlet. Gift of an anonymous donor.

Item 1679

Childs, J. Rives, "An Unknown Work of Casanova Identified," Papers of the Bibliographical Society of America, 50, 3 (1956), pp. 264-278. Author Card.

Item 1679

Both items in one envelope (**Items 1679 & 1680**), J. Rives Childs, "An Unknown Work of Casanova," Papers of the Bibliographical Society of America, 50 (1956), pp. 264-278, 2 copies. No Card.

In 1918 he was Chief of the Cipher Bureau in the AEF at GHQ. He uses his skills to discover a cipher from L.A.S.D.V. in a letter he then claims was written by Casanova.

Item 1680

Casanova Gleanings, 4 (1961), ed. J. Rives Childs, Jacques Casanova de Seingolt, Cryptologist reiterated above argument. 2 Copies.

Item 1681

Pierce, J. R., Symbols, Signals, and Noise: The Nature and Process of Communication, New York: Harper & Brothers, 1961, 307 pp. DJ.

Dedicated to WFF by the author in laudatory terms. The book deals with Claude E. Shannon's epoch-making paper published in 1948 entitled "A Mathematical Theory of Communication" (**Item 180.3**). In spite of Dr. Pierce's celebrated wit, this is not a single text. It bears references here and there to cryptology. See page 48 that mentions WFF and TSCE (**Item 1691**).

Item 1682

Barnes, Harry Elmer, "The Court Historians versus Revisionism," An examination of Langer and Gleason. The Challenge to Isolation, 1937-1940 and Herbert Feis, The Road to Pearl Harbor, 32 pp. PB.

Book Review:

The Rockefeller Foundation, in its annual report for 1946 (pp. 188-189), announced it was awarding the sum of \$139,000 in order to stem the tide of revisionist history after the war. The Alfred P. Sloan Foundation supplemented the Rockefeller donation with another \$10,000. Langer and Gleason got the grants. The reviewer compares the effort to "Horatius at the Bridge" and claims all they have produced is "a court history." He claims the both held posts in "The Ministry of Truth." Hand written notes included.

Item 1683

Barnes, Harry Elmer, The Struggle Against the Historical Blackout, 87 pp. Pamphlet 87 pages, 9th revised edition.

He is nostalgic for the 'good old days' before 1913 when there was no income tax. He hates Samuel Eliot Morrison, Roosevelt and sees 1984 in the future. "Court Historian."

Item 1684

Neumann, William, The Genesis of Pearl Harbor, Philadelphia: The Pacifist Research Bureau, Series VII, No. 1, April 1945, 50 pp.

This pamphlet was given to WFF by Roger Pineau, with an inscription to the former by R.P. in Japanese. A broadcast by William L. Shirer is enclosed. The “protestations” of 1945 by the objectors to the war were protested by words, not by parades of marching, as of 1966. Blames Pearl Harbor on American Manifest Destiny.

Item 1685

Barnes, Harry Elmer, The Chickens of the Interventionist Liberals Have Come Home to Roost. The Butter Fruits of Globaloney.

This former Smith College history professor became so rabid a “revisionist” that he indulged in numerous vitriolic polemics against all who did not agree with him. Here are three leading examples of his acidulous charges. **Items 1682, 1683, 1685.** Liberalism: From Neutrality and Tolerance to Interventionism and Totalitarianism. “Mendacious machinations of FDR” distinctively non-academic tone. Lots of name calling.

Item 1686

Snow, John Horoland, The Case of Tyler Kent, New York and Chicago: Domestic and Foreign Affairs and Citizen’s Press, 1946, 59 pp.

Tyler Kent was a code clerk in the U.S. Embassy in London who allegedly provided a woman conspirator for the Germans with copies of the Roosevelt-Churchill cables in 1940. Instead of being brought back to the U.S. and given a hearing he was discharged in England and was tried by Britain and served seven years in prison in England.

Item 1687

Sinclair, Andrew, Prohibition: The Era of Excess, Boston: Little, Brown & Company 1962, 480 pp., DJ.

In a separate folder: Book on the Volstead Act of 1920 and Prohibition. The effect of prohibition on crime and on law. He traces the actual legislative and political history in detail. No reference to ESF. Clippings on liquor smuggling. Reviews of Sinclair book. ESF corrects misstatement about I’m Alone Case on pp. 218. Eight pages of handwritten notes by ESF. See Treasury Department.

Item 1688

Trewin, J.C., The Pictorial Story of Shakespeare and Stratford upon Avon, n.d. Foreword by Levi Lox, M.A. F.S.A., Director of Shakespeare's Birthplace Trust. 24 pp. The official story as given to tourists at Stratford.

Item 1689

Willoughby, Malcolm F., Rum War at Sea, Washington, DC: GPO, 1964, 183 pp. Two Copies. No DJ. In alone case 128-130, 139, Friedman, William F, page 108, and Friedman, Elizabeth S. 108, 113.

Officially produced history. Their help was sought by Lt. Frank M. Meals and Robert T. Brown in producing the Coast Guard's first official code book.

Item 1690

Friedman, William F., News and articles re monetary award voted by Congress in May 1956. Long article in Time (only interview given by order of DOD).

News clippings and articles, also one editorial, from three Washington newspapers-from New York Times and Boston Globe.

One envelope, Article in Time Magazine, Volume 67, No 20, May 14, 1956, Marilyn Monroe on cover, pp. 33, article on WFF with picture of WFF & ESF. Copy of a letter from CIA Director Allen Dulles congratulating WFF on HR 2068 being passed. Editorial from Boston Daily Globe, Saturday May 5, 1956.

New York Times article May 1, 1956 on \$100,000. Friedman testified that Sadtler told him copies of messages had been ordered by Marshall. Sadtler testified he was told this by General Spaulding. Spaulding testified that Co. John T. Bissell "deemed it necessary" to destroy messages that were derogatory to the War Department. Bissell testified he never said any such thing. Letter to the editor of the Times, by Alfred MacCormick, May 10, 1956, defending WFF's award. Letter to New York Times by David Kahn, Wednesday, May 9, 1956, implies he was rewarded money for lives saved. MacCormick points out it was for machines invented. Clippings from Washington Star with WFF's picture. Clippings from Washington Post, Times Herald, May 2, 1956. Clipping from New York World Telegram, New York Times, May 1, 1956, article by Anthony Lewis. WFF wrote to Time about their article and they printed his letter.

Item 1691 & 1691.1-6

Part IV, Friedman, William F. & Elizebeth Smith, The Shakespearean Ciphers Examined, Cambridge: CUP 1957, 303 pp.

This book was the illumination of an intention formed about 1920—namely, that the Friedmans' resolved upon the death of Mrs. Elizabeth Wells Gallup to write a book about her “discovery” of a cipher proving, according to her devotees and converts, that Bacon wrote Shakespeare. WFF & ESF left Riverbank Laboratories, Geneva Illinois. In December 1920, Mrs. Gallup was still there and her patron, George Fabyan, was prepared to continue his strange attempts to have her theory of Baconian authorship accepted—in spite of the fact that he had lured us back to Riverbank by the solemn promise that he would permit any efforts of out whether to prove or disprove the Biliteral Cipher as Mrs. Gallup had “deciphered” it from Elizabethan books. Both WFF and ESF, on June 21, 1921, reported for and became very much involved in government work. Over the years, however, the collected examples of cipher follies by people with pet theories on pet authors. For more than 20 years, the volume of such material grew. After ESF ceased her government work and international connections in 1946, she began to spend her entire time in collecting and examining the “evidence” in the case against Shakespeare as author. There grew out of this account of the great assembly of nominees and claims about one thousand pages. In manuscript form, with no time for revision, it was entered into the Folger Shakespeare Library Competition of 1955; two prizes were to be given: one for a book on Elizabethan History and Politics; and one for a book on Elizabethan Literature. The Friedman manuscript under the title: The Cryptologist Looks at Shakespeare won \$1000.00. The winning prize won considerable acclaim. Within days we had requests from publishers. The Friedmans felt honor bound to grant publishing rights to the first—Cambridge University Press. The Ms. was worked on by ESF, under direction of and with verbal help from WFF, who was practically excluded from active work of any kind due to a series of coronary occlusions. The revised version of the book was still too long, said CUP. ESF in 1956, tried conscientiously to still reduce the revised Ms. In the meantime, since April 3, 1955, the date when the Folger Prize was announced on the front page of the Washington newspaper, WFF was stricken before 9:00 am and taken by ambulance to the hospital. His long fight with cardiac failure began; WFF's complete incapacity to do nothing had produced a number of ideas. The third and final revision of the Ms was completed during the actual setting in type. Two young men, newcomers to CUP, London, were assigned to read the Ms. cold and to cut, cut, cut. The Ms. was sent chapter by chapter by airmail across the Atlantic: they read and agreed or objected, as the case might be, and returned the chapters by airmail. Hence the book made the publication date set: October 4, 1957. WFF was well enough to go to Europe in late summer of 1957 and was in England for the campaign of advertising on the book. We turned down appearances on radio and television, but attended small luncheons for book announcements. Hence, it was a British edition that was the first impression. The title TSCE (Item 1691) was a title WFF & ESF abhorred, but finally settled for, because Cambridge University Press objected that The Cryptologist Looks at Shakespeare was out of character for CUP. They objected fiercely to their title because TSCE implies that there are ciphers which they vociferously disproved in the book. But CUP won (RMS –surprise!). We carried home a copy of the British edition. The American edition has a

black hardback cover, whereas the British edition has an orange hardback cover. The jacket for both editions (on the back fold) the Key to the Bilateral Cipher of Sir Francis Bacon.

Item 1691

Friedman, William F. & Friedman, Elizebeth S., The Shakespearean Ciphers Examined, Cambridge: Cambridge University Press, 1957, 303 pp. DJ.

Analysis of cryptographic systems used as evidence that some author other than Shakespeare wrote the plays commonly attributed to him. American Edition. The book is dedicated to the late Joseph S. Galland, Professor of Romance Languages at Northwestern University. His unpublished work, Digesta Anti-Shakespeareana was an historical and analytical bibliography of the Shakespeare authorship and identity controversies. It was given to WFF. See **Item 1691**. Puts to death the Baconians.

Item 1691.1

Uncorrected proof copy of TSCE.

Item 1691.2

TSCE, British edition, 303 pp. Separate folder contains letter to Messrs, Black, & Becker thanking them for help on TSCE. Clippings on Shakespeare question. PB.

Item 1691.3

No Card, no item. Retained by ESF. See shelf list card.

Item 1691.4

Friedman, William F. & Elizebeth S., The Shakespeare Ciphers Examined, Interleaved copies, Cambridge: Cambridge University Press, 1957, 303 pp. Removed from collection for family. No card. See shelf list card.

Item 1691.5

Friedman, William F. & Elizebeth S., The Shakespeare Ciphers Examined, The Readers Subscription Edition, Cambridge: The University Press, 1957, 303 pp. No card. No item.

Item 1691.6

Friedman, William F. & Elizebeth S. Friedman, TSCE, Interleaved copy for purpose of inserting or removing etc. for a revised edition. Also second impression-1957. DJ.

Item 1691.7

Friedman, William F., Correspondence with Bill Gold re article on Shakespeare in Washington Post, 1958.

WFF's sense of fun led him to develop a cipher message in the Biliteral cipher of Francis Bacon for Bill Gold of the Washington Post, who had done one or two nice stories re our book TSCE published in late 1957.

Item 1691.8

Heckscher, William S., "Shakespeare and His Nest of Clay," Utrecht, 1965, 4 pp.

A privately published paper by a Dutch Professor at the University of Utrecht, which is most amusing. He deals chiefly with "the long word" and the second best bed. WFF and ESF mentioned in footnote.

Item 1691.9

Peck, Andrew S., "Francis Bacon Equals William Shakespeare," reproduced by Hayden Photocopy, Schenectady, New York: 1961, 12 pp.

This 1958 article "published" in this form in 1961 merely proves that there are still alive persons who go astray on this subject. Copyright #367027, 1958. Copyright 1961, Andrew S. Peck.

Item 1692

Letters written to Lauzun by Louvois. BM Mss 32499, 217, 219, 224, 228, 230, 231, 233, 237, 240. Letters in reference to the foregoing. Nottingham to Wallis, BM MSS 32499, 216; 32499, 243. (British Museum).

Correspondence to T.H. Edwards, Bank of Montreal, asking him to get microfilm of the above letters. WFF procured these because in Rupert Furneaux's book The Man Behind the Mask on pp. 164, he refers to some letters written in code by the Marquis de Louvois. One of the letters is produced in full on pages 174 and 175. Print outs of letters. No work sheets. In French.

Item 1693

Singer, Charles, The Herbal in Antiquity, Reprinted from the Journal of Hellenic Studies 47(1927), p. 1.

A work useful in comparison to the Voynich Ms. that also contains herbal elements.

Item 1694

Coleridge, Samuel T., The Notebooks of Samuel Taylor Coleridge, Bollinger Series L, New York: Pantheon Books, 1961. See appendix C, Coleridge's Cryptogram page 412. 2 volumes with slip covers. DJ.

Item 1694.1

Coburn, Kathleen, Correspondence with, regarding Samuel T. Coleridge ciphers.

WFF's work sheets. It took WFF no time to break the cipher. We know Coleridge used various systems of concealment beginning with transliteration into Greek characters. In his second state he used numerals for letters of the alphabet (substitution cipher). The author considers it a sign of the "deterioration of his mental health" that he should feel the need of inventing complicated systems for secrecy. Evidently none of the ciphers reveal anything dire or dreadful. The cipher described originated in 1807. It is clear he constructed his cipher without any exact cryptographic counsel. WFF helped work out the system and he is cited on page 415.

Item 1695 & 1695.1

(In Friedman Room File Cabinet), Barnfield, Richard, The Praise of Money, See author card. Photostat positive; Bodleian Library, Oxford. The Encomion of Lady Pecunia: The Praise of Money, London: John Jaggard, 1598. Four Copies.

Photostat of cipher text version of Lady Pecunia. WFF notes.

Item 1696

Voynich, Wilfrid M., A preliminary sketch of the history of The Roger Bacon Cipher Manuscript.

Reprinted from the transactions of the College of Physicians of Philadelphia, 1921.
Marked "missing" on SLC.

Item 1697

William, Romaine Newbold, The Voynich Manuscript of Roger Bacon, reprinted from: Transactions of the College of Physicians of Philadelphia, 1921. The Mary Scott Newbold Lecture, Lecture V, Photostat positive.

Item 1698

Bundovets, A., The Enciphered Letter; A Criticism of the Cipher Systems in Use Among Us,

A publication of the Universal Jewish Worker's Association in Lithuania, Poland, and Russia, Geneva. April 1904 (original Russian book also in this envelope.)

Provenance now forgotten. Only the first few pages of this document have been translated (by G-2) from the Russian. This document itself is extremely interesting, for it goes back to the plots and counter plots in the days of the Czar's rule, and describes and prescribes cipher systems

judged to be good and/or bad. This is probably a rare document and is certainly of considerable historical interest. (On top “Workers of the World Unite”). Cf. Galland p. 32.

This should be published in English, but RMS has had no luck finding a translator.

Items 1699

Dawson, Giles E., The Life of William Shakespeare, Washington, DC: 8/11/75 (SB) The Folger Shakespeare Library, 1958, 34 pp. pamphlet. Inscribed to WFF by author in its own envelope within brown envelope.

Item 1700

Levine, Jack, “Variable Matrix Substitution in Algebraic Cryptography,” Reprinted from the American Mathematical Monthly, Volume 65, 3, (March 1958), pp. 170-179.

Reprint autographed by the author to WFF. Professor Levine, of Mathematics at North Carolina State College, extends the “algebraic cryptography” theories of Lester Hill, also a professor of Mathematics, some of whose work was adapted for use in at least one service during WWII. Levine was in this field of work, though not in the above named branch in Washington, DC during WWII. 2 copies.

Item 1700.1

Levine, Jack, “Some Further Methods in Algebraic Cryptography,” reprinted from Journal of the Mitchell Scientific Society, 74, 3 (November 1958), pp 110-113.

Item 1700.2

Levine, Jack, “Some Elementary Cryptanalysis of Algebraic Cryptography,” Reprinted from the American Mathematical Monthly, 68, 5, (May 1961), pp. 411-418. Letter enclosed.

Item 1700.3

Levine, Jack, “Some Applications of High Speed Computers to the Case $n=2$ of Algebraic Cryptography,” Reprinted from Mathematics of Computation, 15, 75, (July 1961), pp. 254-260.

WFF knew Jack Levine during WWII as a colleague without striking talents in cryptanalysis. His papers represented contributions of limited utility in cryptanalysis at the time (1965). They were prepared, but now the applications of mathematics and statistics play an important role in the use of high speed digital computer.

Item 1701

Levine, Jack, A List of Words Containing No Repeated Letters (non-pattern words), Copyright 1957, 115 pp.

A cryptanalytic aid which would be of more assistance in the world of outlandish crossword puzzles than in the realm of official cryptograms. Spiral binder, cardboard covers.

Item 1702

Bates, J. Leonard, "The Teapot Dome Scandal and the Election of 1924," American Historical Review, 60, 2, (January 1955). Photostatic copy as well as a reprint autographed to WFF.

Although J. Leonard Bates came to see WFF in 1961, two years before his book was published, he either did not understand, or did not care to add details of cryptographic drama to his volume. Manila folder cover. Cf **Item 1798**.

Item 1703

Morgan, Glenn G., Soviet Administrative Legality, The Role of the Attorney General's Office, California: Stanford University Press, 1962, 281 pp. Index and Bibliography. DJ.

The author, a Russian specialist, is Assistant Professor of Political Science at San Jose State College, California. The author at one time worked at NSA. However, having had no personal contact there with WFF, he later came to visit WFF and became a friend. The two had great fun at their few meetings and in correspondence (**Item 1931**) for more than two years. This volume was a gift from the author. Autographed to WFF. About the Soviet Procuracy.

Item 1704

Trefousse, Hans Louis, What Happened at Pearl Harbor, New York: Twayne Publishers, 1958.

Trefousse taught history at Brooklyn College. He was a major in the United States Army Intelligence Reserve. These are documents pertaining to the Japanese attack on December 7, 1941. There is an introduction by Trefousse. Selected bibliography & index.

Item 1705

Gramont, Sanche de, The Secret War: The story of international espionage since World War II, New York: G.P. Putman and Sons, 1962, 516 pp. DJ.

A Putnam Award book. The author was also a Pulitzer Prize winner. Chapter VII is entitled "American and Russian Magic," however, "Magic" as it is used in the expertise is not discussed or even mentioned. The book is literally a "story of espionage." The author mentions the NSA quite openly, calling it the CIA's silent partner. He also describes many particulars of the CIA's

international finagling. This book is far superior to Ladislas Farago's, Burn After Reading of 1961, but Gramont, too, has many inaccuracies and mistatements.

Item 1706

One large yellow manila folder, legal size, contains English translation of M. de Vries, Kwantificering in Taah en Crypto-Analyse, translated from the Dutch by Hendrik J. Van't Veld (NSA Translator). Typescript of 28 pp. Four reprint editions, pp. 233-256, deVries worked for A.C. Nielsen Company, Ltd.

Item 1707

Kahn, David, SIHT DNIK FO IP SEKAM ESNES, American Printer, September 1954, pp. 24-25, 58. Autographed to WFF & ESF.

About cryptographers and Printers. Vigenère Tableau, Bacon's Biliteral Cipher, Cipher of Poe's Gold Bug, and Balzac's fake cipher.

Inside magazine:

- C-1 List of Cryptologic terms from Webster's Dictionary, 2 copies, carbon.
- D Plain text in the New Unabridged, 10 pp., carbon, 3 copies.
David Kahn alphabetical antics, Newsday n.d.
- F What others do. Other unabridged dictionaries.
- G David Kahn, "Secret Writings," Selected works on Modern Cryptology, Bulletin of the New York Public Library, May 1969, pp. 315, original. Reprint copy also.
- H Encyclopedia Americana entry "Cryptology" by David Kahn.

A post war bibliography of Cryptology, 1945-1953, by David Kahn: ISHCABIBEL carbon, corrected.

Item 1708

Poley, Robert, Robert Poley Ciphers, Public Records Office.

Notes taken in the 1920s by Dr. Ethel R. Seaton and presented to WFF as a gift when he visited her in Oxford in 1953 or 1954. Poley used a self made "code-syllabary" for names, each code symbol being a symbol or character. Dr. Seaton, in this item, records most of the characters he employed. Poley called it his cipher. 2 booklets.

Item 1709

Tuchman, Barbara W., The Zimmermann Telegram, See also **Items 346, 546, 1009** etc. No comment by WFF on this work (card missing). No mention of Mendelsohn & Friedman in index. DJ.

Item 1709.1

File with clippings, Review by Robert Blake in The Sunday Times, March 22, 1959. Ferdinand Kuhn-Saturday Review, Charles Poore, New York Times, William Harlan Hale, The Reporter.

Letter to NYCS members from David Kahn. Tuchman addresses the New York Cipher Society, 18 members showed up. Note: WFF wanted to publish a volume of cryptographic articles written by him and published in The Signal Corps Bulletin in the 1930s but could not because the government would not declassify them. Handwritten note from WFF: "For additional information, see my personal file of letters exchanged with Commander A.J. Denniston.

Item 1710

Barbara Tuchman, The Zimmermann Telegram, London: Constable, 1958, 244 pp. British edition, DJ.

See also **Items 346, 564**, Volume III, & **Item 1709**.

Item 1711

Ind, Allison (Col.), Allied Intelligence Bureau, Our Secret Weapon in the War against Japan, New York: David McKay Company, Inc., 1950, 385 pp. DD.

General MacArthur's Intelligence Operations in the Pacific, as reported by a journalist, devoted to "soldiering." "Refused clearance for years by the Pentagon for security reasons....." Plus folder with one review & one advertisement. Col. Ind, (a journalist) was a career officer assigned to Fort Holabird, MD, was Deputy Controller of the Allied Intelligence Bureau. He was a personal participant in some of its operations and nearly all of its planning.

Item 1712

Ransom, Harry Howe, Central Intelligence and National Security, MA: Harvard University Press, 1958, 287 pp. DJ.

Professor Ransom, a political scientist and research associate in the Defense Program at Harvard University, expresses his conception of what intelligence should be and addresses U.S. agencies whose purpose is to gather it. All his information was obtained from open sources.

Item 1713

MacDougall, Curtis D., Hoaxes, New York: Dover Publications, Inc., 1958, 338 pp. PB.

This book, as is true of other items in the FC, has lessons for the gullible. Some of the hoaxes, especially those in Chapter XIX devoted to “hoaxes of exposure,” are of interest to the cryptanalyst because of the absurdly simple method used to disguise the names, in many cases of authors, of specific hoaxes. See page 280, middle paragraph, where a Rhode Island legislator introduced a bill to pay a bonus to Sgt. Eval O. W. Tresba, which, of course is so simple as to be ludicrous, for even a child would see almost at once that the “sergeants” name is reversed writing. See Page 212, Forgeries of Shakespeare. Kensington Stone page 192.

Item 1713.1

Anonymous, “Manti Hoax,” correspondence between Dr. Lambros D. Callimahos and Dr. Jesse D. Jennings, Professor of Anthropology, University of Utah, 1969.

Manti slabs found in Utah with an inscription. Purports to be a “lost language” or is it a cipher? Paul Voorhis, a linguist at the Smithsonian, says it is no alphabet he knows. They were found in caves South of Manti. They were not *in situ* in the cave. There were metal pieces in the grooves (from a chisel?). 8x10 glossy photo of stone. No answer.

Item 1714

O’Neal, Cothburn, The Dark Lady, New York: Crown Publishers, 1954, 313 pp. DJ.

A novel created upon the author’s theory that “The Dark Lady of the Sonnets” wrote the S plays. In Burbage’s company of actors when William Shakespeare was part of it, there was a lovely black-haired girl who masqueraded as a boy to defy the ban on actresses. She was Rosaline, the unacknowledged daughter of Edward de Vere, Earl of Oxford, and the plays she came to unite and the sonnets she composed and inspired were produced and published under the name WS.

Item 1715, 1715.1, 1715.2

Chadwick, John, The Decipherment of Linear B, Cambridge: CUP, 1958, 146 pp. DJ.

Mr. Cambridge, lecturer in classics in the University of Cambridge, makes an attempt to simplify the account of the Ventris-Chadwick decipherment and carries the story forward. There has been some discussion in the press as to the validity of the solution by Ventris and Chadwick, but I think authorities have now agreed that it is for the most part valid. The Mycenaean Greek had for centuries been a lost language, considered the oldest language but one (Chinese). See **Item 1207**. Also **Items 1715.1** and **1715.2** with revealing correspondence and a reply to critics by Dr. Chadwick. Articles by George Mylive. A.J. Beattie was the major critic.

Item 1715.1

Folder with reviews of the Chadwick book.

Cyrus Gordon claims he had deciphered Linear A! Beattie accused Ventris of perpetrating a hoax. Dr. Diringer's alphabet museum. Correspondence with John Chadwick getting article on Beattie from Edinburgh.

Item 1715.3

Gordon, Cyrus H., "The Decipherment of Minoan," Natural History 72, 9 (November 1963), pp. 22-31.

The story of the decipherment of the Minoan Script, first encountered with Sir Arthur Evans' discovery in about 1900 of the Minoan Civilization. A young British architect, Michael Ventris, who spent several years working on the theory that the Minoan script was related to the Etruscan, when he gave up that theory and began to work anew with the theory of the language being Greek. With complete acceptance of the Ventris decipherment, author Gordon calls for a reevaluation and revision of the early history of the European continent.

Item 1716

Jacobs, Noah Jonathan, Naming-Day in Eden: The Creation and Recreation of Language, New York: The Macmillan Company, 1958, 159 pp. DJ.

"Dr. Jacobs writes with tongue in cheek and the mildest of acids in his pen." Anyone who has to deal with the make-up of words and with mechanics of language will find delight and enjoyment in these pages. Adam names the animals.

Item 1717

One envelope, contains one page. Beauregard's Cipher decoded Corinth, April 3, 1862.

The message was found in the telegraph office at Huntsville, Alabama at the time of the occupation by General Mitchell. It is a simple and easy cipher which required Gen. Mitchell and his aides about 20 minutes to translate. The dispatch reached Richmond in a northern newspaper.

Item 1718

U.S. Government, Department of the Army Field Manual FM 45-25; Department of the Navy OPNAV Instruction 5530.5, Department of the Air Force manual AFM 190-5, Field Press Censorship, August 1954.

Once something is published (even by mistake) it is an open source and remains so. To publish information is to hand it directly to enemy intelligence.

Item 1719

Roosevelt, Theodore, Code-cablegram to Admiral Dewey, Manila via American Consul in Hong Kong.

Acting Secretary of the Navy, Theodore Roosevelt, sent a coded cablegram via the American Consul in Hong Kong, to Admiral Dewey in Manila. Re Spanish American War. About what?

Code & signal Section Library

B-107A

Register No. 55

U.S. Navy Secret Code

B-107B December 1887

Keywords

Item in The Washington Post, October 20, 1958. "Cryptologist Tackles 1898 Mystery Code." "The dean of the nation's cryptologists has gone to work on the 60 year old coded cable that has become one of history's puzzling footnotes. The coded message went on display at the National Archives for the first time. It is believed to be the famous order relayed to Admiral Dewey from Theodore Roosevelt in 1898 on the eve of the Spanish American War. There is a decoded copy in the archives, but the two messages cannot be positively matched because the old code books aren't available.

Determined that the Navy should not get caught napping, he ordered Dewey to keep his squadron ready for action. If war came, Dewey was to bottle up the Spanish ships on the Asiatic Coast and then prepare for operations in the Philippines. Long, R superior, complained that R went at things like a bull in a China shop. The message has been credited with making possible the Great Dewey victory later at Manila Bay. WFF broke the code: "Order the squadron, except Monocacy, to Hong Kong. Keep full of coal. In the event of declaration of war Spain, your duty will be to see that the Spanish Squadron does not leave the Asiatic coast and then offensive operations in Philippine Islands. Keep Olympia until further orders. Roosevelt. Photo (8x10) of Friedman at Archives looking at original cable.

Item 1720

Fishel, Edwin, Correspondence with re Civil War Codes and Ciphers, examples, worksheets. See Ms Coll, numbered series 1720. Photos of: Beards Magneto-Electric Telegraph, 1862-1863. Transcription of telegrams, Photostats of telegrams.

Item 1721

Church, Dr. Benjamin, A Letter in Cipher of Dr. Church. Also plain language LC photostats and microfilm made from copies "Presidential Papers: George Washington." A voluminous file.

The cipher was a very simple one. It is believed it was solved immediately upon interception. Dr. Benjamin Church was General Washington's Chief of Hospital Services; the message revealed that he was actually a British spy. Copied from LC Ms Div. Cf. David Kahn, The Codebreakers, pp. 175-176.

Item 1722

Hutton, V. Bernard, School for Spies, The ABC of How Russia's Secret Service Operates, New York: Coward-McCann, Inc. 1962, 222 pp. DJ.

A former Russian spy and communist, trained for four years in Moscow, elucidates what that country's spies are doing in the U.S. See jacket information and enclosed review. Gordon Lonsdale, Rudolph Abel. In 1938 Hutton was a journalist in Prague (Czech Communist paper). He was forced to leave in 1938 by Nazi's.

Item 1723

Paleologue, Maurice, My Secret Diary of the Dreyfus Case, London: Secher & Warburg, 1957. DJ. No Card.

Account of one of the world's most famous miscarriages of justice. Translated from the French by Eric Mosbacher. Maurice Paleologue kept a private diary throughout the Dreyfus Case. He worked at the Quai P'Orsay. He was responsible for a secret department of the Foreign Ministry and maintained a liaison with the intelligence section of the General Staff where the Dreyfus case originated. His diary was published five years after his death. Cf. David Kahn, The Codebreakers, pp. 254ff.

Item 1724

Pares, Martin, A Pioneer, In memory of Delia Bacon, February 2, 1811 to September 2, 1859, London: Francis Bacon Society, Inc. 1958, 60 pp. Autographed from Bill & Vera Filby to WFF & ESF, September 1959. DJ.

Item 1725

Lewis, C.S., Studies in Words, London: CUP, 1967, 2nd edition, 343 pp. Indexed –softbound. PB.

WFF and ESF have always been fascinated by WORDS, even before we had need of them as “tools of our trade.” Original, provocative, even amusing, yet crammed with common sense knowledge, and information.

Item 1726

Knebel, Fletcher and Charles W. Bailey, II, No High Ground, New York: Harper Brothers, 1960, 272 pp. DJ.

Two journalists, claiming to have had access to top-secret documents, outline the background of the decision to use the bomb on Hiroshima.

Item 1727

Bowers, Fredson, On Editing Shakespeare and the Elizabethan Dramatists, University of Pennsylvania, 1955, 131 pp. DJ.

This item received as a kind of dividend from the Shakespeare Association of America. Does not contain any matter concerning the authorship controversy. These are the A.A.W. Rosenbach lectures in bibliography for 1954.

Item 1728

Ellis, Kenneth L., The Post Office in the Eighteenth Century; A study in Administrative History, London: Oxford University Press, 1958, 176 pp. DJ.

This volume WFF considers one of the very most important items in the collection. Professor Ellis (History, University of Durham) performed a thorough, completely documented, and incontestable piece of research, in a field never before uncovered. The British Post Office “besides transmitting mail... provided a variety of public, political and secret services in the spheres of revenue, propaganda, and intelligence.” An important part of its function was to act as the “mouthpiece, eyes and ears of the government.” The most important parts of this amazing volume are contained in Chapter 6, which deals with “Intelligence” and Appendix 1, “the Deciphering Branch.” As to the former, the author states: “During the 18th Century, the Post Office transmitted, collected and created intelligence.....the transmission of intelligence formed the centre of the government.” As to the Deciphering Branch, this section gives information of special significance to the FC. It is impossible to conceive how this highly important secret branch of the British Post Office was able to achieve its successes. It includes stories about the various heads of the branch, including the achievements of Dr. John Wallis, “a famous mathematician hailed as the father of British cryptography.” The secret work of The British Post Office, including that of the Deciphering Branch, became of the utmost importance to the Crown. However, in June 1844, the British Government stopped the interception of diplomatic correspondence, and in the following October it abolished the deciphering Branch of the Post Office. (Work was not resumed in cryptanalysis, it appears, until just before WWII, and at that time it was headed by Naval Intelligence). See also **Items 952** and **1728.1**. Cf EAW on “Postal Services.”

Item 1728.1

Ellis, Kenneth L., "British Communications and Diplomacy in the Eighteenth Century," Bulletin of the Institute of Historical Research, 21, 84, (November 1958), pp. 159-167, University of London, Athlone Press.

This little item bears on its front cover the inscription "To LTC. WFF, with best wishes from K. L. Ellis." The statements made in this article are fully documented—a fact which is indicative of Professor Ellis' thorough scholarship, and that he had done a great deal of "homework." See in this context **Items 952** and **1728**. Three copies, one autographed. Negatives for photo stat copy.

Item 1729

German Government, German report on the solution of the Transatlantic Telephone Scrambler System between the U.S. and England in 1942. Photostatic negative, Berlin, March 1942. Taken from German government archives and sent in 1962 by David Kahn.

Item 1730

Butow, Robert J. C., Tojo and the Coming of the War, Princeton: Princeton University Press, 1961, pp 584. DJ.

The author, having written of Japan's decision to surrender, published in 1954, having to do with the ending of WWII, now in 1961 produces a book about the war's beginning, of which he himself states in "Note to the reader" the unifying theme throughout the book is the role of the Japanese Army in affairs of state as seen through the career of General Tojo." The author, who is neither cryptographer nor cryptanalyst, challenges here and there throughout the book, the accuracy of the translations of "Magic" messages. Notes enclosed record page numbers of significant as well as unfounded statements. Page 357, 365-368, 372, 382, 402. Marked passages but no notes by WFF. David Kahn, The Codebreakers, pp. 1-67.

Item 1730.1

Butow, Robert J., "Yesterday, December 7, 1941," University, a Princeton magazine no. 13, (Summer, 1962), pp. 24-29. Adapted from a chapter in his book. See **Item 1730**. 2 copies.

Item 1731

Thompson, George Raynor, Dixie R. Harris, Pauline M. Oakes, and Terrett Dulany, United States Army in World War II, The Technical Services, The Signal Corps, The Test (December 1941 to July 1943), Washington: Office of the Chief of Military History, Department of the Army, 1957, 621 pp.

The Signal Corps was the branch of the Army responsible for cryptography and cryptanalysis. This volume, although prepared by official historians, was held up for alleged security reasons,

for four years. See Index under signal Intelligence for pertinent information. Autographed to WFF and dedicated in cipher, signed by Dr. Thompson and Dixie Harris.

Volume I: The Signal Corps: The Emergency.

Volume II: The Signal Corps: The Test.

Volume III: The Signal Corps: The Outcome.

Signal Intelligence School 31-34, 330-331.

Signal Intelligence Service 21, 28, 69, 79, 297, 330-337, 338-339, 347.

Signal Security Agency 313, 314, 333-334, 338-339, 45-46.

Col. WFF, Volume 3: 329-332, 336-337, 344.

Item 1732

Wedemeyer, Albert C. (General), Wedemeyer Reports, New York: Henry Holt & Company, 1958, 497 pp. DJ.

Many reviewers enclosed, with few compliments to this author. He makes many wildly unfounded statements, as for example, (p 430) when he writes of solution of Japanese communications, which is so far away from the facts that it is laughable. Similarly he speaks of combat with authority, but he never commanded troops. He delivers an indictment of the Grand Strategy of WWII. He's a "strategist." One review, Washington Post, November 16, 1958, by Herbert Feis. Wedemeyer was a major in the War Plans Division of the War Department in 1941 to Commander General in the China Theater.

Item 1733

Childs, J. Rives, An Annotated World Bibliography of Jacques Casanova de Seingalt and of Works Concerning Him, Austria: Christian M. Nebehay, 1956, 396 pp. No DJ.

This former WWI colleague of WFF, who afterwards went into U.S. Foreign Service and was Ambassador to Saudi Arabia when he retired, has occupied much of his time in late years with Casanoviana. He found a one copy, a year journal called Casanoviana published usually in French. In 1960, WFF at Mr. Child's request, prepared an article for the journal, which was published in 1961, called "Jacques Casanova, de Seingalt, Cryptologist," in which WFF proved that Casanova had responded to a challenge and had deciphered a document based upon a Vigenère Square—a feat of cipher solution hitherto attributed to Kasiski, a German Army Officer; but Casanova had solved such a poly-alphabetic system a hundred and six years before Kasiski. Cf. David Kahn, The Codebreakers, pp. 207-213.

Item 1734 and 1734.1

Childs, J. Rives, Casanova, a Biography based on new documents, London: George Allen and Univen, Ltd. 1961, 323 pp. DJ.

The French edition, 1962, translated by Francis L. Mars, published in Paris by Chez Jean Jacques Pauvert. Ambassador Childs, while pouring over the published data re Casanova, came to realize that the last biography about this famous and versatile genius, was very much out of date. He spent 7 years collecting the hitherto unpublished data then produced what is to date the definitive biography of Casanova. See jacket for detailed information. English Edition . First full length bio of C since 1929.

Item 1735

Casanova, Jacques de Seingalt, L'Evascion des Plombs, par Jacques Casanova de Seingalt, Henry Holt & Company 1933. Introduction and annotations by Morris Bishop, 178 pp. plus vocabulary. No DJ.

Gift of Morris Bishop, classmate of WFF, former professor, now of French and other Romance Languages at Cornell University. Autographed to WFF "To Old Bill Friedman, from whom no secrets are hid, November 22, 1961." This volume was used as a text book by Professor Bishop. It is an extract from the Casanova Memoirs, describing Casanova's escape from the prison called "The Leads." One of the most detailed and dramatic narrations of a prison escape ever written.

Items 1736

Casanova, Giacomo, Memoiren, Nach der Übersetzung von Franz Hessel und Ignaz Jezower bearbeitet von Walter Hess mit einem Essay zum verstandnis des Werkes von J. Rives Childs ausgewählt und herausgegeben von Ernesto Grassi, Hamburg: Rowohlt, 1959, 321 pp.

Note the essay by J. Rives Childs, pp. 306-321, "Entstehung und Glaubwürdigkeit der Memoiren." PB.

Item 1737

Childs, J. Rives, Giacomo Casanova de Seingalt in Selbstzeugnissen und Bilddokumenten, Selected by J. Rives Childs. Hamburg: Rowohlt, 178 pp. PB illustrated.

More extracts from the Casanova Memoirs in German. Many Photographs of paintings by contemporary artists. After Ambassador Childs aroused great interest in Casanova as a man who in his Memoirs reflected the people, notions and times as no one else of his century had done. The German publishing house Brockhaus, who owned the original manuscript of the Memoirs, determined to issue a definitive edition. From this one and only original, as "indispensable for students of the 18th century," as earlier editions of the Casanova Memoirs had all been pirated, for the history of the various editions, see the foreword to **Item 1733**, the Childs Bibliography of Casanova.

Item 1738

Cenradus, David Arnold, The Art of Decyphering, ACMG 182/8. Gift to WFF from Brigadier Tiltman in 1958 (see note inside front cover).

A UNIQUE item. An entirely hand written selection of contents of Cryptographia Denudata. Provenance on first page in red ink shows its connection with the Duke of Wellington. "The following pages are copied from a manuscript book belonging to Sir George Scovell who was Q.M.G. with the Duke of Wellington, and who found out a great many of the French intercepted cyper dispatches, the originals of which, as well as, of this book are in the possession of Cryptographia Denudata. George Scovell Esq. 25 Grosvenor Place, by whom they were lent to the Intelligence Department through Captain George Scovell late 79th H.(S) J.S. Ardagh, Adair House, April 1880, major R. E. D. A. Q.M.G. Card 2: "Cryptographia denu-data.the art of deciphering deduced from principles and explained by examples in the German, Dutch, Latin, English, French, Italian, and Greek languages. Note: This holographic copy of the series described above was made by Sir George Scovell.

Item 1739

Ruge, Friedrich, The German Navy's Story 1939-1945, Der Seekrieg, Annapolis: United States Naval Institute, 1957, 440 pp. SLC marked missing.

Item 1740

Bergier, Jacques, "Codes Secrets," Constellation, No. 151, November 1960, pp. 155-162. Vernon F. Mitchell-NSA, William H. Martin-NSA

Bergier, Jacques, Traitrés et fous des Codes Secrets, in: Constellation, le monde vu en français, No. 151, November 1960, pp. 155-160.

Item 1741

Vorstelman, Carel, Geheimschriften, De Aventuren Van Dr. Malvero, Cryptograaf Met tal van geheime codes, puzzles en problem en on zelf te ontcijferen, Amsterdam: H.J.W. Becht, n.d.

Dutch book on code, puzzles, etc. 2 Copies. No DJ.

Item 1742

No Card, no item

Item 1742.1

Guilliermo Lohmann Villena, Cifras y claves Indianas, Capítulos provisconales de un estudio cryptografia Indiana, Anuario de Estudios Americanos, Tomo XI, Sevilla 1954, pp. 285-380 plus plates.

Item 1742.2

Guilleirimo Lomann Villena, Cifras y Claves Indianas, Anuario de Estudio's Americanos, Tomo XIV, pp. 351-359. PB. No Card.

Item 1743

Donovan, Robert J. and the staff of the *Los Angeles Times*, Israel's Fight for Survival, June 5-10, 1967, New York: Signet Books, New American Library, 1967, 160 pp. Soft bound with 31 photographs.

When the U.S.S. Liberty was shelled on June 8, 1967, WFF was shocked and appalled at the implications of (once again) the failure of U.S. Communications Intelligence. This book, published at practically that very moment, was of course, a must. It, however, gave no background information that would answer the question of why the Liberty was where it was, at that time, although the book was rushed to publication. 34 were killed in the attack. One of the dead was Allen M. Blue of Silver Spring, Maryland and an employee of NSA. There was no reason for the Liberty to be operating that close. Israel had not been told they were there. It was committing electronic espionage. See U.S.S. Liberty Incident entry in Wikipedia.

Item 1744

Searle, G.F.C., Experimental Elasticity, A Manual for the Laboratory, Cambridge University Press, 1933, 2nd Edition, 189 pp. First published in 1908. No DJ.

On page 2, there is an anagram which applies to Hook's Law—the relation between small forces and the changes to form due to them. In 1676, Hook published the whole "Law" but in the form of an anagram, to which he gave the key years later. Thus, just as Galileo and Huygens both recorded scientific discoveries by means of anagrams to establish priority of discovery (see pages 16 & 17 in TSCE, See **Item 1691**). Here we see a third example of the value which scientists attach to the priority of discovery. The case of Hook's anagram (the same type as that of Huygens) was revealed to WFF and ESF in Cambridge in 1959 by Sir George Thomson, then Master of Corpus Christi College. The book is a gift from Sir George. Then out-of-print he had succeeded in finding a copy, which in its past, owners show at least one great name.

Item 1745

Bennett, H.S., Chaucer and the Fifteenth Century, Oxford History of English Literature, edited by F.F. Wilson and Bomany Dobree, Volume II, Part I, New York: Oxford University Press, 1947, 326 pp. Indexed. DJ.

WFF and ESF met Dr. H.S. Bennett when in England at the time of the publication of our book TSCE (See **Item 1691**). Dr. Bennett was a Syndic of the CUP, our publisher. Although Dr.

Bennett was a lecturer of Emmanuel College, Cambridge, he had been requested to contribute to The Oxford History of English Literature published by Oxford University Press. It was that autumn of 1957 when another Dr. Bennett (J.A.W.), editor of Mediu Aevum, requested WFF and ESF to look into Dr. Ethel Seaton's "Findings" in cipher in Chaucer's Parlement of Faules and in three medieval French Poets. We purchased this book as one of our reference items in the preparations of the requested Seaton study. Dr. Bennett was disappointing however; for he gave the long-standing dispute concerning whom were the real-life characters meant by Chaucer and also little shrift to the date of this long-term poem of Chaucer. For what there is, see page J.

Note: A serious omission in the index to Dr. Bennett's book is an entry for The Parlement of Foules.

Item 1746

Jordan, William, Elizabeth's Immortal Son, His Autobiography. Discovered and presented by William Jordan, Part III, Brighton: The Southern Publishing Company, 1960, 188 pp. PB.

This item has no cryptography. It is in the FC because it is the most extreme of all the beliefs held by anyone about who "S" was. According to this author, twin sons were born to Queen Elizabeth and Robert Dudley, Earl of Leicester; the other being Christopher Marlowe. The Queen persuaded John Shakespeare to adopt one, thus "William Shakespeare" came into existence. Then when William Shakespeare was a young man he went to London and there after wrote whatever the Queen commanded, and used whatever name at the time she dictated, such as Edmund Spenser and Thomas Kyd.

Item 1747

Turing, Sara, Alan M. Turing, Cambridge: W. Heffer & Sons, Ltd., 1959, 157 pp. DJ.

Alan Turing was one of the most brilliant and gifted young mathematicians and inventors in WWII and served at GC & CS. His work with computers and machines to solve cryptographic messages began even before Germany attacked Great Britain. WFF holds the opinion that without Turing, the British might never have defeated Germany. He returned to civil life after, but died in his early 40's.

Item 1747

Safford, Laurance F., House of Representatives, Report No. 1896, 85th Congress, June 18, 1958.

Report:

Bill to give L.F. Safford \$100,000 for the invention of an electric cipher machine, considered by many to be the most important cryptographic apparatus even invented and regarded as the

father of all subsequent electric cipher machines. He was given the Legion of Merit, February 1946, by James Forrestal, Secretary of the Navy. WFF says he invented nothing.

Item 1748

Swift, Jonathan, Gulliver's Travels, New York: The Book League of America, 1932, 313 pp. No DJ.

This celebrated classic is full of made-up words, which Swift used for ridicule and satire of the educational methods of the day. These terms are cryptographic—they had meaning to Swift, but nobody has deciphered them. One of Swift's invented words has become common (yahoo). Separate folder with review of Jonathan Swift. A critical biography by Edward W. Said, "Tiger of English Literature," Washington Post, Sunday, July 30, 1967.

Item 1749

Carse, Robert, Rum Row, New York: Rhinehart & Company, Inc. 1959, August 11, 1975, (SB). DJ. See author card.

He writes of pirates, bootleggers, prohibition and the Coast Guard. No Index.

Item 1750

Tully, Andrew, Treasury Agent, The Inside Story with a foreword by Robert B. Anderson, Secretary of the Treasury, New York: Simon and Schuster, 1958, 338 pp. DJ.

There are six law enforcement bureaux in the Treasury Department. Each has many "Agents." Many key persons who sit at desks and whose weapons are pencil and paper and not guns and "tailing" have deserved great credit over the years. These latter are hardly mentioned by Tully. ESF served as the Head of the Cryptanalytic Unit (Offices located in Coast Guard Headquarters) serving the whole of the six law enforcement bureaux, especially in combating smuggling up to the attack on Pearl Harbor. Her staff and she were thereafter taken over by the Navy Department, the wartime head of the Coast Guard. Previous to Pearl Harbor, the Treasury Bureaux fought a gigantic war against smuggling and crime within the country—the "moonshine" still operators, the money counterfeiters, even some big named criminals such as Al Capone, who eluded for many years, local and federal FBI (Department of Justice) agents, but who finally were brought to justice by the Treasury's Secret Service, and for which crime, Albert Fall, then Secretary of the Interior, went to prison. On page 233, chapter 27, begins a recitation of a sizeable number of Treasury officials who themselves were brought to justice. Most offenders in the category were political appointees, collectors and Commissioner of Customs, their crimes being bribery or evasion of income taxes. Tully's story of the Treasury is over weighted with the episodes concerning IRS and Social Security, specifically counterfeiting. Tully was given a desk in IRS

during the writing of the book, and Treasury Agents sometimes appear like errand boys, carrying his stories to him.

Item 1751

Yoshikawa, Takeo (with LTC Norman Stanford, USMC), "Top Secret Assignment," U.S. Naval Institute Proceedings, 86, 12 (December 1960), pp. 27-39. 2 copies.

Also correspondence pertaining to Yoshikawa story.

The story of the Japanese spy who reported from Hawaii to Tokyo all U.S. ship movements for approximately eight months before the attack on Pearl Harbor. Yoshikawa sank into oblivion after the war; hence perhaps he decided he had been too much ignored by his government and the press. (Note-the newspaper advertisement of December 3, 1961-Yoshikawa on television.) Yoshikawa's statement of having heard the message "East Wind Rain" on Japan radio of Sunday morning, December 7, in Honolulu at 8:00 a.m. Honolulu time is "NUTS" (WFF's handwritten comment). Yoshikawa was completely confused. If he ever did hear those words spoken on Japanese broadcast it would have been at an earlier date, when Tokyo was "setting forth" instructions as to how the imperial Navy would inform the entire Navy of their "battle plan." See the Tateno interview wherein he flatly contradicts Yoshikawa. Mario Tateno was the radio operator who broadcast the messages from Tokyo. See Committee Hearings, translations from Japanese by Clarke Kawagami. Here are many copies of the Tateno statement; many letters between J.N. Wenger and Admiral Rufus Taylor; also a news feature story. Real message was West Wind Clear.

Item 1752

Bakeless, John, Turncoats, Traitors, and Heroes, Philadelphia and New York: J.P. Lippincott & Company, 1959, 400 pp. DJ.

A fascinating book about the American Revolutionary period. Much information about secret inks, cipher messages and methods, codes, "dumbbell" paper masks, British secret agents, and other types of revelations. The story of the Benedict Arnold treason case, the author relates the exact methods of concealment Andre used in detail. A volume absolutely crammed solid with information (see considerable mass of correspondence between WFF and Col. Bakeless in correspondence file.) This item in the FC is autographed to WFF by the author: "To Col. WFF—the man General Washington really needed." WFF admires the cool detached manner of writing, unexpected when treating of spies and intelligence. A most valuable item—indeed an indispensable one—for every collection dealing with cryptology. Much material procured at the Clements Library in Ann Arbor, among the Clinton papers. Col. Bakeless, a prolific writer, (See who's who) spent approximately 25 years collecting material reported in this book. He states in his preface that he had so much material he had to condense it five times. Fully Indexed. Secret communications 128, 148-153, 228-233, 247, 268-269, 352-353.

Item 1753

Mirsky, Jeanette and Allan Hevins, The World of Eli Whitney, New York: The MacMillan Company, 1952, 346 pp. DJ.

Eli Whitney, an inventor himself, as well as arms manufacturer, has a niche in the ladder of cryptology because he made at his factory in Connecticut, the exquisite model of the cipher device invented by Decius Wadsworth, who was the first Chief of Ordnance of the U.S. after the formation of this nation, the model itself now being lodged in the Eli Whitney room of the New Haven Historical Museum in Connecticut. This cylindrical device of two eccentric disks, the one revolving upon the other, originated a principle and even a design which, Decius Wadsworth having failed to persuade the new government to adopt it, was brought to the attention of the world when invented independently by Sir Charles Wheatstone in England in 1879 nearly a century after Decius Wadsworth. The priority is clearly proved by the model on view in the Eli Whitney Museum for full name and date are engraved in gold upon the face of the device itself. Wadsworth produced his design in 178? This item of manufacture by Eli Whitey is unfortunately not mentioned in **Item 1753**, although Decius Wadsworth the man and chief of Ordnance, has numerous entries. References to him, not cipher device. F. David Kahn, The Codebreakers, pp. 195-196.

Item 1754

Atkinson, Donald, "The Cirencester Word-Square," from the Transactions of the Bristol and Gloucester Archaeological Society, 76, (1957), pp. 21-34. Off print.

This famous old word square was used in the early days of Christianity and before (See page 31) where it is stated the word square was invented before 65 A.D.. Its ingenious palindromic nature was supposed to hold magic powers. The palindrome is ancient history and is treated in the TSCE, pp. 93-94 (**Item 1691**). Two examples of the square were exhumed at Pompeii. A Gift of Arnold Duney, a WWII Colleague. Cf. Sheldon, EAW & Cryptologia 27, 3 (July, 2003), pp. 233-287.

Item 1755

Buttle, Myra, (Victor Purcell), The Sweeniad, New York: Sagamore Press, 1957, 66 pp. DJ.

This book was privately printed and circulated to 250 leading literary figures in England and America. It created an immediate uproar, and this lead to the published edition represented by this book in the FC. Myra Buttle (my rebuttle) has been accused of being Robert Graves, Richard Aldington, Victor Purcell and C. Day Lewis. It is an attack (critique) of T.S. Eliot who sometimes called himself "Sweeney" in his own verse. It apes the meter and content of the opening lines of The Waste Land. She claims that the "mainstream" of English poetry was

diverted in 1922 to join The Styx. Much pertinent information on the flap. It is a satire on a high plane.

Item 1756

Burtness, Paul S. and Warren V. Ober (eds.), The Puzzle of Pearl Harbor, Illinois and New York: Ran Peterson and Company, 1962, 244 pp. PB.

Quotations abstracted from “The Pearl Harbor Report,” all 39 volumes of it and possibly from a very few other resources. These professors at Northern Illinois University have assembled there items which to their minds, seem contradictory, perhaps, or inconclusive, hence the puzzle. There is no foreword, no preface, no introduction, no conclusion, and no index. Every word in the 244 pages is in direct quotation. The Puzzle of Pearl Harbor is a puzzle itself. Why was it ever published? Perhaps a textbook for students from the study of which they could draw their own conclusions.

Item 1757

Sukert, Lancelot, “Folger, Monograph of the Shakespeare Library,” Reprinted from American Architect, (September 1932), pp. 4-26. Gift of D.W. Filby, January 1, 1958.

Architectural study of the Folgers.

Items 1757.1

U. S. Government, “Uses of Polygraphs as “Lie Detectors” by the Federal Government (Part 4-Testimony of Post Office Department Witnesses).” Hearings before a Sub-committee of the Committee on Government Operations, House of Representatives, May 13, 1964, pp. 467-511.

1757.2

“Use of Polygraphs as “Lie Detectors” by the Federal Government,” Tenth Report by the Committee on Government Operations, March 22, 1965, pp. 1-45.

The Committee on Government Operations became aroused over reports that the polygraphs were being used to extract irrelevant information concerning the personal lives of the questioned. Secondly, the report that the personnel administering the tests were unqualified to give the tests. The 1965 edition has five pages of impressive bibliographical items on this subject.

Item 1758

Moore, Dan Tyler and Martha Waller, Cloak and Cipher, Indianapolis and New York: Bobbs Merrill, 1962, 256 pp. DJ.

This book may be readable, even interesting to an average popular reader, but it is full of hoakum, and therefore, for the most part, untrustworthy. (See two reviews enclosed in the book.) There is hardly a page on which one or two errors cannot be found by those who are really knowledgeable. Covers subject from Julius Caesar to 1960. Undocumented and wrong. WFF & ESF never heard of the authors before the book appeared. Page 139-The Friedmans and the Wheatstone cryptograph. Did WFF really have a solid gold Wheatstone cryptograph? WFF's notes pages 139-143. F. David Kahn, The Codebreakers, pp. 195-196.

Item 1759

Ogburn, Dorothy and Charlton Ogburn, Jr., Shakespeare, The Real Man Behind the Name, New York: William Morrow & Company, 1962. DJ.

Mrs. Charlton Ogburn (Dorothy), co-author with her husband in **Items 1335** (This Star of England) and **1351** (The Renaissance Man of England), here in **Item 1759** co-author with her son, produces what to them seems conclusive proof that Shakespeare was in reality the Earl of Oxford. Thus from 1947 to 1962 the three Osborn's presented a united front on the subject of anti-Stratfordians as personified by Edward De Vere and "The Oxfordian Theory." No ciphers in this one. See long review enclosed in the volume. Gift of P.W. and Vera Filby with a knowledgeable autograph by them.

Item 1760

Tully, Andrew, CIA-The Inside Story, New York: William Morrow and Company, 1962, 276 pp. DJ.

After authoring Treasury Agent, published in 1958, Andrew Tully studied the CIA for some years and this "Inside Story" is the result. This is no pot boiler. In the case of this volume, the author throughout his wide travels as a foreign correspondent, and stationed in Washington, seemingly instantly began keeping a bulls eye record or score sheet of CIA's activities, as he patiently had done of CIA's predecessors. This is no popular narration of derring-do episodes. It is a serious analysis of United States and its intelligence and destructive qualities on the foreign policy (and resultant activities) of the United States. Mr. Tully emits very few complimentary ratings to either the CIA or the State Department. The 'messes' he reports in an analytical manner, demonstrates a wide knowledge.

The book has many references to codes and ciphers, mostly to which are cited by page number on the inside front cover. Tully has no revelations in the field, neither commendation nor condemnation. He mentions the codes or ciphers in several cases and countries, in a manner as unemotional as if he were citing bags of flour, which attitude proves (to ESF) that Tully was indeed familiar with this subject and took them calmly as "tools of the trade" instead of flaming

excitement as is produced in most news gatherers by the magic words “code and cipher.” Page 234-micro messages. Pages 63-64 Guatemala cryptogram.

Item 1760.1

Cook, Fred J., “The CIA,” The Nation, Special Issue, (June 24, 1961), 43 pp.

This special issue in nine parts covers not only the Bay of Pigs “fiasco” (the Nations term) but carries through a fairly detailed analysis of the CIA’s operations and of Allen and John Foster Dulles, then ends with urging a thorough investigation covering all aspects of the CIA. Sherman Kent: Intelligence getting too close to policy. Dulles and the SS. Food on the Shah and his corruption.

Item 1761

Shipley, Joseph T., Playing with Words, New Jersey: Prentice Hall, Inc. 1960, 186 pp. DJ.

The author of this item is also the author of Dictionary of Word Origins. He is a word detective by profession, and traces origins, meanings and variation of words. In this item he deals with word games of amazing variety: anagrams, scramble games, puns, riddles, etc. Here, again, we find a reference to lipograms and the famous Cervantes five novels in each one of which one particular vowel was omitted throughout each volume. (For a striking example of Lipography, see **Item 1050** Gadsby, a romantic novel of 50,000 words without the letter E.

Items 1762

Tuleja, Thaddeus V. (Commander, USNR), Climax at Midway, New York: W.W. Norton and Company Inc. 1960, 248 pp. DJ.

The author, a professor of history at St. Peter’s College, did not himself participate in the Battle of Midway. This book is the result of research in general and by interviews of correspondence with many who were present at Midway. Nevertheless, he comes “to some conclusions which are not in full agreement with the generally accepted version of the battle.” The author was 1) not told anything about the part cryptography played in respect to Midway; or 2) the manuscript was extremely carefully screened and all such references eliminated. However, the author attempts to give a careful documentation, occupying 13 pages: a chronology, a bibliography, and notes preceding the index. No crypto in index.

Item 1763 and 1763.1

Gordon, Alex, The Cipher, New York: Simon & Schuster, 1961, 252 pages. DJ. PB edition.

A suspense novel which employs cipher in espionage. The author was a Japanese language officer serving in the Pacific during the aftermath of WWII in the examination of captured

prisoners and documents. Archaeologists, have for eight years, been trying to decipher the uniform script of a Middle Eastern civilization that flourished 4,000 years ago near Khev-Az-Dehn. Instead, he is teaching ancient history at a University Extension School and hating it.

Item 1764

Moore, John, You English Words, Philadelphia and New York: J.B. Lippincott Company, 1962, 254 pp. DJ.

The professional cryptologist has a deep interest in the origin of language and of words. This book is about English words. Scholarly in content and exposition. A review in Newsweek magazine for July 16, 1962 begins: "This is a love letter to the English language, a splendid salute to the 414, and 825 words in the Oxford English Dictionary." It is a lengthy review for a book of this type. The exceptional character of the volume is most deserving. The last sentence in the review is "The book is full of the gorgeous tongue." See DJ. Review not included.

Item 1765

Childs, Marquis, Eisenhower, Captive Hero, a Critical Study of the General and the President, New York: Harcourt, Brace and Company, 1958, 310 pp. DJ.

One of the most competent and celebrated members of the press in Washington, D.C. makes an assessment, as a military man and as a President of DDE. On pages 55-56 are the authors statements concerning General Marshall's opinion, as Chief of Staff of DDE and CIC; and also relates the successive attempts of General Marshall to persuade Eisenhower (as he would have any military man) not to run for President. These statements are made as a result of the author's interview with General Marshall himself. The index contains many references to General Marshall.

Item 1766

Alsop, Joseph and Stewart, The Reporter's Trade, New York: Reynal and Company, 1958, 377 pp. DJ.

This book is distinguished for its book long argument against "Secrecy about deep matters" and against "classification" as a government policy. The authors are no ordinary journalists by some ratings they are placed just below Walter Lippman; they are high born, Harvard and Yale educated. They analyze the 12 cold war year's from 1945-1957 with relentless thorough mess, sparing no one from President to Prime Minister to the most insignificant bureaucrat. Their rejoicings are few their warnings many. Their annoyance at government secrecy and classification goes far: "The only paper that is not classified in government is the toilet paper." (pp. 30-31). Book reviews are enclosed. Ten years have passed since the publication of this book. The virulence of the "Classification Disease" had increased especially in the field of

cryptology. Subtitled: The Inside Story on how they got the news, an all out plea for governmental candor and a stirring record of the last twelve crucial years.

Item 1767

Shipley, Joseph T., Dictionary of Word Origins, New York: The Philosophical Library, Inc. 2nd Edition, 1945, 430 pp. DJ.

This prolific scholar, author, and writer, in three languages, professor, critic, editor, had, like John Moore, “a life- long love affair with words.” He has written also a Dictionary of Forgotten Words. This dictionary of word origins has many startling revelations which make an attractive appeal to the cryptologist. See marked pages. Abracadbra.

Item 1768

Droescher, Ernest, Ph.D., Die Methoden der Geheimschriften, (Ziffer Schriften) unter Berücksichtigung ihrer geschichtlichen entwicklung, von Dr. Phil Ernst Droescher. Leipzig: K.F. Koehler, 1921; Frankfurter Historische Forchungen. No DJ.

Gift to WFF by a Mr. Kane, a member of the American Cryptogram Association. It was bound by Commander Mindte. This small treatise deals only with simple ciphers and their solution; the impressive title, so typical of the German, not withstanding. Misprint on front cover: Geheimschriften, misreading of Gothic F for S.

Item 1769

Davy, Reverend Charles, Conjectural Observations on the Origin and Progress of Alphabetic Writing, London: Printed by T. Wright, 1772, 127 pp.

A gift to WFF in 1960 from the late Father Petersen and autographed to him “To Col. Wm. F. Friedman with gratitude and affection. Theodore C. Petersen, September 18, 1960.” A very early attempt to explain something of the origin of alphabetic writing. Probably a rare item. Needs a box.

Item 1770

Bowers, William Maxwell, Practical Cryptanalysis, Volume I, Diagraphic Substitution, 47 pp. The BIFID Cipher, Volume II, 48 pp., The TRIFID Cipher, Volume III, 54 pp., Published by The American Cryptogram Association, 1960 and 1961. Pamphlets reproduced by offset mimeograph. PB.

All three pamphlets are autographed by the author. Volume I to WFF and ESF with a humorous turn. Volume II to WFF “In appreciation.” Volume III with assertions in regard to Delastelle, a French cryptographer about whose identity there is some question. This writer, a

Civil Engineer in occupation, has had a life-long interest in cryptography. These three little volumes are superb examples of what a gifted amateur can do if really interested in this field. Cf. David Kahn, The Codebreakers, pp. 242ff

Item 1771

Peck, Lyman C., Secret Codes, Remainder Arithmetic and Matrices, Washington. DC: National Council of Teachers of Mathematics, 1961, 54 pp. PB.

The author, a professor at Ohio Wesleyan University, was the first person to publish a pamphlet and demonstrate the “mathematics” by means of codes and ciphers. He calls this treatment a “gimmick.” The conclusion states: “We have tried...to introduce you to some ideas that are found in modern mathematics, our “gimmick” was coding and decoding secret messages.” The little booklet is directed to junior and senior high school students of mathematics.

Item 1772

Sawndars, Mary F., Lauzun: Courtier and Adventures, The Life of a Friend of Louis XIV, London: Hutchinson and Company, 1908, 2 volumes. No DJ.

This two volume biography of the man of the identity of “The Man in the Iron Mask.” See **Item 241**, Bazeries et Burgaud: *Le Masque de Fer*. Letters to “The Man in the Iron Mask” from the Great John Wallis and a cryptogram in a syllabary. A gift of Mr. T.H. Edwards of Canada, who believed that Lauzun was “the man in the iron mask,” pp. 552-558. Brit. Mus. Mss. 32499, 217, 219, 224, 228, 230, 231, 233, 237, 240. Cf **Item 241**.

Item 1773

Ribeiro, Leonel, Historia das Letras e dos Algarismos, Lisboa: Edição do Autor, 1959, 421 pp.

See author card. Autographed to David Diringer by the author. D. passed it on to WFF. Segredos Milenarias Finalmente Conhecidos. Resumo Do I volume das Inscricoes, Lusitanas, Letras e Algarismos. Marked 1 copy.

Item 1774

Morison, Samuel Eliot, “The Lessons of Pearl Harbor,” The Saturday Evening Post, October 28, 1961, pp. 19-27.

Professor Morison, the distinguished Harvard University historian, was commissioned an Admiral in the U.S. Naval Reserve during WWII, to write a detailed history of naval operations in the Pacific. The last and 16th volume of this history appeared in? Admiral Morison was

requested by the Saturday Evening Post to prepare this article for the 20th anniversary of Pearl Harbor. In this article, Admiral Morison contends that “a Pearl Harbor” could happen again, due to the failure to correct intelligence-gathering practices and other faulty practices of the armed services. Correspondence re articles on Pearl Harbor being inaccurate. Correspondence with Morison. Autographed photo of Morison. Original Post article.

Item 1775

Wohlsetter, Roberta, Pearl Harbor, Warning and Decision, Stanford: Stanford University Press, 1962, 426 pp. DJ.

This is an account of the reasons behind the Pearl Harbor disaster, written by a very able historian when she was a member of the staff of the Rand Corporation, Santa Monica. On the fly leaf is an inscription reading, “For Bill, a principal factor in the story, and in the story of the story. From Roberta, August 10, 1962, Santa Monica.” Mrs. Wohlsetter was never employed in any government intelligence agency (but she’s a member of AFIO) and she never had any access to classified documents. All of her information was obtained from open sources, including the Report of the Joint Congressional Investigation of the Attack on Pearl Harbor, from which most of her information was obtained and analyzed. Professor Samuel Eliot Morison has said: “The best book by far on the question of why we were surprised at Pearl Harbor....Her book ought finally to dispose of some of the nonsense about Pearl Harbor that has been written.” (See Jacket). The last sentence of her book is as follows, “If the study of Pearl Harbor has anything to offer for the future it is this: We have to accept the fact of uncertainty and learn to live with it. No Magic, in code or otherwise, will provide certainty. Our plans must work without it.” WFF regrets that he cannot agree wholly with this conclusion. The fault lay not with the information revealed by the so called magic, but with the interpretation and distribution by the persons responsible for those, and usage of such information.

Item 1775.1

Wohlsetter, Roberta

Reviews of and some correspondence relating to **Item 1775** above. Unfortunately in spite of the scholarly Wohlsetter book, there will be many more books, pro and con, published in the years to come. A brief review of this important book is impossible. Wohlsetter article: “Cuba and Pearl Harbor: Hindsight and Foresight,” Foreign Affairs, July 1965, pages 693-707, autographed by author to WFF. Friedman was consulted before the book was published because of intelligence content. He ok’d it.

Item 1775.2

Wohlsetter, Roberta, Cuba and Pearl Harbor, Hindsight and Foresight. Reprinted from Foreign Affairs, July 1965.

Item 1776

Ito, Masanori, The End of the Imperial Japanese Navy, A Japanese Account of the Rise and Fall of Japan's Sea Power, with emphasis on WWII, New York: W.W. Norton & Company, Inc., 240 pp. Translated by Andrew Y. Kuroda and Roger Pineau. DJ.

The author was never in the Imperial Japanese Navy; he has been one of Japan's leading commentators in the military field. The American Roger Pineau, not only helped in the translation, but is credited on the title page with aiding in the writing. This item is highly readable as a candid analysis of the minds and motives of individual Japanese Commanders. See the first paragraph on page 61, where it is stated in unmistakable terms: "United States awareness of the Midway operation was the result of brilliant intelligence work and the amazing success of American experts in breaking Japanese communication codes. It was the same remarkable success that six months earlier had given indication that Japan was about to go to war, and then in months to come would account for the death of Admiral Yamamoto." The same paragraph on page 61 ends with a sentence which is not true. It was not "a relaxation of security that informed the American High Command," but in intelligence in keeping Japan from realizing that her communications were being read. A short review by Stanley Falk is enclosed. An important item of great interest to laymen and professionals alike.

Item 1777

Brodie, Bernard, Strategy in the Missile Age, Santa Monica, CA: The Rand Corporation: Published by Princeton University Press, 1959, 423 pp.

The book is a gift from the author and is dedicated "To Col. William F. Friedman-admirably from a devout Stratfordian." Not even a single decade has passed since this book was published, but so rapid had been the development of missile and anti-missile systems that it is extremely difficult for one who can claim no professionalism in the field of military strategy, to say whether the book is of any value today. The book contains considerable information concerning the surprise element of the Pearl Harbor attack, which was the astonishing main factor in the success of the Japanese in that incident (see pages 186-187 about Magic and Security). The final paragraph of the book is most disturbing to any thoughtful person and recent developments make it even more so; 1) The world is over populating and 2) nuclear threat.

Item 1778

Davidson, Professor Israel, "Eccentric Forms of Hebrew Verse," in Student's Annual, Jewish Theological Seminary of America, May 1914, pp. 81-94. No DJ.

On reverse of one fly leaf is the following dedication: "To President Solomon Schechter, our teacher and leader, this first volume of our annual is reverently dedicated," just as this was the

very first issue of this student annual, it is believed to be the very first extensive revelation of Hebrew “eccentric” verse. The author attributes these aspects of Hebrew poetry to the influence of Arabic, stating: “the Arabs set the fashion for poets to indulge in strange devices....apart from their content of rhythmic beauty.” The author categorizes 14 main divisions of these “strange devices”: acrostics and lipograms; pictorial whimsies; echo verses; macaronics (the mixture of different languages in the same poem.) Typographical and hieroglyphic eccentricities; chain verses; mnemonic verses. The author concludes: “...These eccentricities tend to make these compositions clumsy and cumbersome and very rarely add to the intrinsic value of the poem. But the student of literature has to take account of every literary phenomenon.” In the winter of 1959-1960, which ESF and WFF spent in Cambridge, England, they met and came to know Professor Shalom Spiegel, an American scholar who was on sabbatical leave, studying the phenomenon of acrostics in Hebrew poetry. He was engaged in an extremely arduous task at the University Library in Cambridge; namely assembling fragments of ancient manuscripts, using them as a guide to piece together each individual poem, by means of the acrostic woven by the poet into his line of verse. The tool used by Dr. Spiegel was in each case, the name, already known to him, of one or another Hebrew poet, each of whom created his prayer-verse, hiding his anonymity behind an acrostic. In the ninth and tenth centuries, the Rabbinate, fearful that the Hebrew prayers, if recited in precisely the same form daily, would begin to assume the form of incantation or magic, as in the case of Roman Catholic prayers (or Buddhist chants?) in the minds of its devotees. The Rabbinate therefore directed the Hebrew poets to compose many prayers so that the worshippers would utilize a new prayer each day, but the Rabbinate directed the poets to remain anonymous, where upon the latter resorted to the device of acrostics, authentic signatures composed of initial letters of the poets’ name to proclaim their identity. The University Library so valued the large box of fragments with which Dr. Spiegel worked, that he worked within a room in the University Library and kept the door locked at all times, and his constant companion within the room while he worked was the guard with the key to the room. Since the examples of the above mentioned “whimsies” are in Hebrew, only a scholar thoroughly versed in that language can have a complete appreciation of them. Correspondence with Dr. Spiegel is enclosed in the book. Mold on spine.

Item 1778.1

Separate envelope-photo stat copy of article alone. Notes on Professor Shalom Spiegel-“On Medieval Hebrew Poetry.”

Item 1779

Wolfe, J.M., A First Course in Cryptanalysis. Volumes I, II, III and corrections. Mimeograph, Brooklyn, New York: Brooklyn College Press, 1943.

Volume I 57 pages.

Volume II 44 pages.

Volume III 32 pages.

Corrections (unbound) 32 pages

This course in cryptanalysis by a member of the Department of Mathematics of Brooklyn College was in the curriculum of Brooklyn College for a number of years.

Item 1780

Dugan, James and Carroll Stewart, Ploesti, The Great Ground-Air Battle of August 1, 1943, New York: Random House, 1962, 407 pp. DJ.

This book makes it appear as though there was just one great air battle for the control-or destruction of the great ground-air battle of Ploesti on August 1, 1943. As a matter of fact, there were many attempts to destroy the oil fields and refineries at Ploesti, but there were great losses sustained by the allies in these attempts. These devastating losses of planes and men were attributable to the failure of the allies to realize that the Germans used electronic intelligence which tipped them off to the coming of attacking bombers. Thus it took 23 bombing raids, in which 13,709 tons of bombs were dropped, to reduce the German productivity to 2020 capacity. The Americans, who manned most of the planes in that series of raids, suffered extremely heavy losses. A valuable review of the book, from the May 1962 issue of the U.S. Naval Institute Proceedings, is enclosed. It states: "This book, in my opinion, is the best non-fiction work so far produced in the field of WWII literature. It is one that historians will still be using a century hence, when the official histories are forgotten and buried under layers of dust."

Item 1781

Tuchman, Barbara W., The Guns of August, New York: MacMillan Company, 1962, 511 pp. DJ.

Although this volume contains much interesting information for the average reader about the early part of World War I, the most interesting part for the cryptologist will be found in Chapter 16, dealing with the Battle of Tannenberg, beginning August 25, 1914, and ending a few days thereafter. Although the German and Austrian forces were greatly outnumbered by the Russian forces, the latter lost the battle. The reasons, kept secret for several years, finally became known. The Russians were using radio for the transmission of orders, plans, and reports. Intercepted by the Germans and those in cipher were solved by the Austrian Intelligence Service. Although the Russians may have understood the dangers in the use of radio, they were disorganized and their cipher clerks so poorly trained that they committed every error in the catalogue of cryptographic follies. Mrs. Tuchman pays less attention to this phase of military communications and operations than it deserves. For a fuller and detailed account of poor Russian cryptography and of excellent German-Austrian cryptanalysis, see **Item I** of the Friedman Collection, the very title of which is highly illuminating: Secret Causes of German Successes on the Eastern Front. The author A. M. Nikolaieff was a colonel in the Imperial Russian Army, and thoroughly

knowledgeable in this field of secret communication. Cf. **Items 1, 35, 59, 460** and David Kahn, The Codebreakers, chapter 18.

Item 1782

U. S. Government, Freedom of Communications, Final Report of the Committee on Commerce, United States Senate, Prepared by its subcommittee of the subcommittee on communications. Part V. Hearing before the Freedom of Communications Subcommittee, March 27, 28, and 29, 1961. GPO, Washington, D.C. January 9, 1962, 627 pp. PB.

One of the main concerns to WFF during these last ten to fifteen years was that freedom of communication should be maintained. The Senate Inquiry of 1961 was an attempt to formulate principles in this important field. Newton Minow was chairman of the FCC.

Item 1783

Catalogue 100, Thirty five manuscripts including the St. Blasien Psalter, the Llangattock Hours, the Gotha Missal, and the Roger Bacon (Voynich) Manuscript, New York: H.P. Kraus, n.d., No price listed on the Voynich. c. 1962.

A detailed description of the Voynich ms. and all that is known about it. With bibliography and lists documents which conveyed with the ms.

Item 1784

Poe, Edgar Allan, The Best Known Works of Edgar Allan Poe in One Volume, Special biographical introduction by Harvey Allen, New York: Blue Ribbon Books, 1927. No DJ.

This book occupies a deserved place in any collection on cryptography, for the story, “The Gold Bug,” in the telling of which Poe has never been surpassed or even equaled. This story is mentioned in practically every article or book on cryptography since it first appeared. For Poe’s interest in cryptography and performance in that field, see in this connection WFF’s treatment of Poe and cryptography in **Items 393, 393.1, and 393.2** and see bibliography, Poe. Under previous entries. See especially **148.1**.

Item 1785

Voltaire, The Best Known Works of Voltaire, eight volumes in one, New York: Blue Ribbon Books, 1927, 504 pp. No DJ.

The first page of the “Introduction” reads: “Francis Marie Arouet, called Voltaire, was born in Paris, 1694. He was imprisoned for his satirization of nobility and upon his release, Francis Arouet became Voltaire, one of the connections of his family and now accepted by the world as his own.” Actually the reason for this volume being included in the FC is that the name Voltaire

is one of the most famous anagrams in all literature. Using the name Arouet, Lejeune, he anagrammed the letters using V.L.J. (interchangeable with I as was U with V in the 17th century) and made the name Voltaire. Thus Arouet, L. J. became Voltaire.

AROUET, L.J.
572184 3 6

VOLTAIRE
U J

It will be noted, therefore, that the author of the Introduction was not aware that there was no family “connection” of that name, and was also unaware, therefore, of the anagram. It was known to some, however, during Voltaire’s lifetime; notably to Casanova, who cited “Voltaire” as an example when he (Casanova) was taken into court for having illegally, so it was charged, taken a name (Chevalier de Seingalt) which was not his by birth.

Item 1786

Frazer, Sir James George, The New Golden Bough, A New Abridgement of Sir James George Frazer’s Classic Work. Edited and with notes and foreword by Theodore H. Gaster, New York: Criterion Books, 1959. DJ.

The Golden Bough consisted originally of twelve volumes. It was a profound and exhaustive history of ideas, anthropology, and to folklore, even magic and primitive religions. Although challenged in some detail, Sir James’ The Golden Bough, is still an unmatched fountainhead of knowledge. An indispensable reference work. It is autographed: “To our beloved father and father-in-law Roberta and John.” Not mentioned by ESF.

Item 1787

Reinke, Edgar C., “Classical Cryptography,” The Classical Journal, 58, 3, (December 1962), pp. 113-121.

This unsolicited and sender-anonymous item, the author of which would seem to be either a graduate student or an instructor, in classical languages at Valparaiso University, is an attempt to transplant a very simple treatise on cryptography to actual characters in ancient history. The writer, who perhaps had some connection with the field of cryptography in WWII, uses the terms and nomenclature, which are in the main, but not always, correctly applied. The article is not valuable except as an amusing assumption of what historical characters Cicero or Leutulees for example, would have done about solution of cryptographic methods in their day. He suggests this “game” as an intriguing past time for classical students. The author goes back only to the Greeks and Romans. In most books describing the “*scytale*” cipher device, only the Greeks manner of using the device is described. Reinke explains a second method which he ascribes to the Romans. ON NO EVIDENCE. Cf. On the true antiquity and use of cryptograph, See Drioton.

Items 866.1 and 867.1. Neither of these systems was used. Compares Plutarch to Gellius. Cf. Sheldon, EAW

Item 1788

Garro, Hercules Maathans, Tratado de Criptografía, Comunicaciones Secretas, Editors: Libreria Studium, Lima, Peru: 1958, 1st Edition, 230 pp., plus bibliography and index. Copy 1, PB, 230 pages with index and bibliography, Copy 2, inscribed to WFF and ESF by David Kahn.

Garro is described on the title page as a sub-inspector of investigations and a professor in the National School of Police Investigations. On the back of the title page is the official authorization for the book's publication, dated July 8, 1957. It is interesting to note the official authorization by a national government in a so-called under developed country; which seemingly believes in the dissemination of knowledge. The author is knowledgeable and has done convincing studying of open sources. No Item.

Item 1788.1

Garro, Hercules Maathans, Tratado de Criptografía; Comunicaciones Secretas, Editors: Libreria Studium, Lima, Peru, 1958, 2nd edition. Enlarged edition of **Item 1788**, 267 pp. and bibliography. Preface to 1st edition as well as preface to 2nd edition, photographs and/or reproductions of cipher devices and cipher machines. No Item.

Item 1789 and 1789.1

Daniel, Clifton, A Footnote to History, The Press and National Security, An address by Clifton Daniel, Managing Editor of the New York Times, at the World Press Institute, Macalester College, St. Paul, Minnesota, June 1, 1966. Nathan, Major Albert S., Aus-Ret "Turning Point" reviews of book Midway by V. Adm. William Ward Smith, USN-Ret. The Retired Officer, August-September, 1966.

Review sent by Admiral Wenger-his handwritten note thereon. "Of outstanding significance was the breaking of the Japanese cipher before the Midway engagement. This helped to thwart the Japanese plan. It led to Yamamoto's defeat on the high seas and later to his death, when he was ambushed in the Solomon's due to the code leak."

Item 1789

Relations between press and government in a free society are never easy. This very uneasiness, however, is one of the surest safeguards of a free society. Article is about the New York Times sitting on the story of the buildup before the Bay of Pigs.

Item 1790

Kahn, David, Two Soviet Spy Ciphers, Privately printed: New York, 1960, 16 pp., 2 copies.

This booklet of 16 pages deals with two of the cipher systems used by the Russian (Soviet) spy, Col. Rudolph Ivanovich Abel, who engaged in espionage in the United States, was arrested on June 21, 1957 and was convicted after a 7 day trial in Brooklyn's Federal District Court. Abel was returned to Russia in exchange for an American spy who operated in the USSR, and was caught and convicted. Despite the title of the brochure, Kahn played no role in the solution of Abel's messages (does he claim he did?), however, Kahn's brochure is interesting. This copy bears on the back of its cover a dedicatory note dated, September 3, 1960, addressed to "William F. and Elizebeth S. Friedman." The "notes" on page 16 are especially interesting, "With Deepest Admiration and Gratitude to my mentors in cryptography." Presented at the Annual Convention of the American Cryptogram Association, New York: September 3, 1960. Copyrighted by David Kahn.

Item 1791

Price, William H., The Civil War Centennial Handbook, Arlington, Virginia: Civil War Research Association, 1961, 72 pp. PB.

There is a flattering salute to WFF by the author, a dedicated Civil War buff. Many illustrations. Page 5 is devoted to the many "firsts" which ushered in a new era in warfare, according to the author. The introductory section states that the material presented in this small pamphlet "have been selected from standard sources;" the most outstanding of these are listed below:

- First practical machine gun.
- First repeating rifle used in combat.
- First use of railroads as a major means of transportation.
- First mobile siege artillery mounted on rail cars.
- First extensive use of trenches and field fortifications.
- First large scale use of land mines.
- First iron clad ships.
- First multi-manned submarine.
- First organized and systematic care of the wounded on the battlefield.
- First organized military signal service.
- First visual signal by flag and torches during combat.
- First use of portable telegraph units on the battlefield.
- First military reconnaissance from a manned balloon.
- First draft.
- First organized use of Negro soldiers.
- First naval mines or torpedoes.

Item 1792

Editors of Life, Great Battles of the Civil War, Text by Paul Mandel, Life Assistant Editor; New York: Time, Inc. 1961, 48 pp. PB.

This booklet, issued by Time, Inc., following the issue of Life magazine commemorating the centennial of the Civil War, has no direct mention of that war, but it is an artistic and historical triumph as a brief history of the fateful war that almost wrecked the Union. A person knowledgeable in cryptology can distinguish sentences and short paragraphs which, although not explicit, must be interpreted as implicit cryptographical references. In this connection, therefore, **Item 187**, Federal Army ciphers, should be studied. They are the only exact, original papers and messages, so far as is known, of the Union's cryptographic methods—saved from burning (by a friendly clerk and WFF) from a massive burn of “old records” by the Adjutant-General's Department in the 1920's. See also Lincoln in the Telegraph Office (**Item 240**) by David Homer Bates, and **Item 490**, The Military Telegraph During the Civil War, by William R. Plum, who was chief operator to General G.H. Thomas. It has been said that the Confederate Army's cipher messages, although presumably a more secure system than those of the Northern side were continuously solved by the Union side. On Civil War cryptogrphy, see David Kahn, The Codebreakers, pp. 214-229.

Item 1793

Zeitlin & Verbrugge, Booksellers, Catalogue 200, Outstanding Rare Books, Prints, Manuscripts in Physical Sciences together with Medicine, Geology, Botany, Los Angeles, CA, 1962, 165 pp. Autographed to WFF by Jake Zeitlin, 1962, LA. Several interesting works on early military history.

Item 1793.1

Zeitlin, Jacob, “Thomas Salisbury Discovered,” Paper presented at the meeting of the Midwest Junto (Midwestern Section of the History of Science Society), University of Illinois, April 24, 1959, 99, pp. 455-458.

A bibliophile and book-seller who rates a high scholarly rank, herein relates a discovery which he (in his autographic injunction to WFF) hopes will develop further. No Item.

Item 1794

Folger Shakespeare Library, Tudor and Stuart History, See author card. A report of the Folger Library.

Conference on needs and opportunities. Held in celebration of the fourth century of the accession of Queen Elizabeth I. Sir John Neele, "The State of Elizabethan Studies after Four Hundred Years," pages 9-11.

Item 1795

Farago, Ladislas, Burn After Reading, The Espionage History of World War II, New York: Walker and Company, 1961, 319 pp. DJ.

The 319 pages of this book purport to be the inside story of espionage in WWII—not of one country, but of all, both allied and Axis. Farago, an East-European, not a citizen of this country at the beginning of WWII, somehow came to occupy a position in The United States Intelligence activities(?). Presumably a "writer." The title **Item 1795**, second part, demonstrates his colossal ego. It is believed that most of his information is second or third hand. For example, Chapter 17, "The Magic of the Black Chamber" came from the Pearl Harbor report. Farago cannot have endeared himself to Naval Intelligence authorities when he collaborated with Admiral Ellis M. Zacharius, whose several books after WWII were completely ignored by the Navy, this being the time-honored tactic for showing disapproval, the very ignoring of them being the highest form of disapproval and disagreement with what was said in the volume. It perhaps might be well for the reading public to take a direct reversal of its usual view on such books as Zacharius & Farago's. The person says to himself: "This must be all time, else the Navy (or Army, or State Department, as the case maybe) would suppress the book." The opposite is probably the real attitude of the U.S. Government. It is unnecessary to suppress it for little of it is true. If it leads the reading public away from the real truth so much the better.

Items 1796, 1796.1, 1797, 1797.1

Wohlstetter, Albert, "The Delicate Balance of Terror," Foreign Affairs, California: The Rand Corporation, January 1959, pp. 211-234. "Nuclear Sharing: NATO and the N+1 Country," Reprinted from Foreign Affairs, April 1961, pp. 355-387.

"No Highway to High Purpose." Article written while a research fellow of the Council of Foreign Relations, Inc., New York, Santa Monica, CA: The Rand corporation, 1960, 16 pp.

"When we ask ourselves what has happened to our national purpose, we sound vaguely as if, in a moment of absent minded mess, we had mislaid it. And in fact, our first self-conscious impulse is to see where we may have left it. Shall we look in the Constitution?" "A Purpose Hammered out of Reflection and Choice," Life, June 20, 1960, pages 126, 134. "WFF's comments on contemporary literature and art would lead us nowhere I want to go."

Item 1797.2, 1797.3, 1797.4, 1797.5, 1797.6

Wohlstetter, Albert, "Strength, Interest and New Technologies," Reprinted from Adelphi Paper, No. 46, 1968, pp. 1-13, "The Implications of Military Technology in the 1970s, Institute

for Strategic Studies, London: March, 1968, "Theory and Opposed Systems Design," Reprinted from The Journal of Conflict Resolution, 12, 3 (September 3, 1968), pp. 302-331. "The Role of the ABM in the 1970s," Statement before the Senate Armed Services Committee, April 23, 1969, "Good Guys, Bad Guys and the ABM," article submitted to the Los Angeles Times for publication, August 3,4 1969, "Supplement on Purported Proofs that the Minuteman Will Be Safe Without Further Protection," May 23, 1969. Note: All given by the author to WFF.

Item 1797.7

U.S. Government, "Planning-Programming-Budgeting, Defense Analysis: Two Examples," Submitted by the sub-committee on National Security and International Operations, Washington, D.C., 1969. Given to WFF by Albert Wohlstetter.

Item 1798

Bates, J. Leonard, The Origins of Teapot Dome: Progressions, Parties, and Petroleum, 1909-1921, Urbana, Illinois: University of Illinois Press, 1963, 278 pp. DJ.

This somewhat a dull book! The author, of which must be someone with no personal memories of the Teapot Dome Scandal of 1924, when Senate Investigating Committee uncovered the scandal of bribery of public officials by industrialists, or would be industrialists in the world of petroleum. The scandal culminated in the imprisonment of one cabinet officer, the resignation or expulsion of two other cabinet members, and the self-exile (to escape prosecution) of some of the "errand men." Although cryptography played an extremely important role in the Senate investigation and resulting court cases, this subject is not mentioned in Mr. Bates' volume. Edward Beale McLean, publisher of the Washington Post, was somewhat involved as a go between for Doheny, the industrialist, and Albert Fall, Secretary of the Interior. Doheny, who gave the bribe, was never indicted; Secretary Fall, who took the bribe went to prison. McLean, after learning that WFF had solved cryptic messages for the investigating Senate Committee, sent for WFF and asks him to prepare (for McLean) a private code. This was done after a duly-constituted and legal agreement was drawn and signed by WFF and ESF together, working in evening hours at home during the winter of 1924-1925. They learned a lesson in this experience. As cynically expressed by the attorney who drew up the contract and to whom they reported that no pay was forthcoming from the millionaire McLean. Original newspaper clippings on decipherment in **Item 2112**.

Item 1799

Hyde, H. Montgomery, Room 3603, The Story of the British Intelligence Center in New York During WWII. DJ.

The organization known as British Security Coordination or B.S.C. was the keystone of the successful Anglo-American partnership in the field of secret intelligence, counter espionage and

“special operations.” Their headquarters was in New York at 630 Fifth Avenue, Room 3603, hence the title. The director of this effort was Sir William Stephensen. The late Bill Donovan knew about foreign intelligence. Stephensen put his papers at the disposal of H. Montgomery Hyde. See A Man Called Intrepid, annotated by WFF. See page 56 for article on women.

Item 1800

Symons, Julian, Bland Beginning, Garden City, New York: Dolphin Books, Doubleday and Company, Inc., 1962, pp. 239. Copyright, British edition 1949. PB.

The “postscript” on the last page will reveal why this mystery story is in the collection. This one deals with a literary forgery (fictional) and uses detection methods which were described in the exposure of the Wise forgeries in the book by John Carter and Graham Pollock, published in 1934, of An enquiry into the nature certain Nineteenth Century Pamphlets... The bibliographical discoveries relating to paper tests were first proved by Carter & Pollock.

Item 1801

U. S. Government, NARS & GSA, United States Government Organization Manual, 1967-1968, Revised, Washington, D.C.: GPO, June 1, 1967, 829 pp. Indexed and Softbound. PB.

Office of the Federal Registrar National Archives and Records Service, GSA. Discusses Executive Branch: NSC and CIA, NSA page 208. NRO: Intelligence Reserve, Army 155, Intelligence Service, Foreign Broadcast 688, Intelligence Service, Interim Research 691, Intelligence Indications, Office of Current (State) 87; DIA 205.

Item 1801.1

Diringer, David and W.F. Friedman, “Staples Alphabet Exhibition,” Correspondence and miscellaneous, 1953-1960.

A thick folder containing many items concerning Dr. Diringer and his alphabet museum. WFF was so impressed with the Staples Exhibition on the Alphabet (see **Item 1108**) when he saw it in person in 1953 in London that he sought out Dr. Diringer. WFF had stated for more than a quarter century that the alphabet is the most important tool in the history of mankind. Therefore when the Staples Exhibition was closed, WFF tried to find a grant for Dr. Diringer so the exhibition could be brought to the United States, and travel throughout, so that children everywhere could grasp this remarkable tool. Unfortunately, this was never pulled off. In 1959-1960, when WFF and ESF spent the winter in Cambridge, they spent many hours with Dr. Diringer in his private alphabet Museum. In the folder there is correspondence; a booklet on the Diringer alphabet Museum and Seminar; news clippings; an “Augmented” alphabet; leaflet of the University of Louvain announcing the opening of the Diringer Alphabet Museum. Check other folder.

Item 1802

MacKenzie, Compton, "The Spy Circus," from The Nation, (December 5, 1959), pp. 411-414.

More jibes by MacKenzie at government "intelligence," and "laxity **? by Intelligence." The article concludes, "I owe it to my conscience to declare that the effects of intelligence work on International/is perhaps the greatest threat facing peace today." Compton's opinion of intelligence is well known. Article accuses the government of wasting money in subsidizing worthless information all over the world. Should keep every taxpayer resentfully awake at night. He says our peacetime spies are agitators and propagandists whose alleged activities are an excuse for officials to waste vast sums of money on counter espionage.

Item 1803

Backus, Paul H. (Commander, U.S. Navy, Ret.), "Security and the Double Standard," U.S. Naval Institute Proceedings 87, 12, (December 1961), pp. 36-47.

This author does not believe that very much is gained by over-emphasis on classification, so much of "classified" material is actually in the public press. A topic near and dear to WFF's heart. The author was an Annapolis graduate who survived the bombing of the Oklahoma at Pearl Harbor. Example: a storm arose in Congress when told Polaris submarines were sold. It was charged that plans to assemble the model were almost identical to the original blueprints.

Items 1804

Anonymous, "Exposé of Soviet Espionage," May 1960. Prepared by the FBI. Transmitted by direction of the Attorney General for use of the Subcommittee to investigate the administration of the Internal Security Act and other internal security laws of the Committee on the Judiciary, U.S. Senate, 86th Congress, 2nd session, Document No. 114, U.S. Government Printing Office, 1960, 41 pp.

Brief of many, many, cases of Soviet spying. Recruitment of Americans. Use of the U.N.

Item 1805

U.S. News and World Report Editors, "The True Story of Pearl Harbor, As the Japanese Tell It," U.S. News and World Report, (December 11, 1961, pp. 56-67).

Interviews with Gordon Prange and Admiral Shigeru Fukudome.

Item 1806 and 1806.1

Woods, Charles B. and Curt A. Zimansky, (Eds.), Studies in English Drama, Presented to Baldwin Maxwell, Editor of Philological Quarterly, 1929-1955, Iowa City: State University of Iowa, 1962, 360 pp., 2 copies, 1 bound in red buckram, 1 PB.

The following is quoted from The Cornell University Alumni news, under class of 1914, May 1962: "The January Philological Quarterly was an enormous Festschrift issue commemorating the retirement of its long time editor." Bill Friedman and his wife contributed in ancient type and language, a catalogue of the plays of the Bard, a striking thing. It contains a coded message..... This afterpiece represents a tour de force in the application of Bacon's biliteral cipher with the assistance of John Crow who "censored" our Latin and of Curt Zimansky, Assistant Editor of the Quarterly.

Item 1806.1

Correspondence, worksheets for the cipher message, reprints of the afterpiece, and related papers, including Professor Maxwell's statement that he had successfully deciphered our cryptic salute to him. ESF has crossed out "native of Russia" in newspaper clipping. Zimansky changed F BACON SIVE.

Item 1807

U.S. Government, Recommendations of the Coolidge Committee on classified information. Also relevant DOD Regs, etc., (itemized list included in envelope).

An envelope containing the two volumes of the Coolidge Committee on Classified Information, Part I, March 1957 also numerous other old directives having a bearing on the subject of classified material when and if even it could be declassified or downgraded. Some of these papers are laughable.

Most of these regulations are "more honored in their breach than in their observance." The consistency of the practice of permitting all officials (or unscrupulous writers) to get away unscathed with almost any revelations they please, plus the fact that regulations prohibit declassifying or downgrading cryptography in any form—after having upgraded to "classified" many, many, items which had been in the public domain for many years.

Item 1808

David Shulman, Crypto-Notes, Crypto Press, New York.

Issue No. 9, 1962

Issue No. 8, 1961

Issue No. 5, 1961

Issue No. 4, 1961

Issue No. 10, 1962

Issue No. 3, 1961

Issue No. 2, 1961. Note on a cryptogram in James Joyces' Ulysses in issue No. 2, backpage.

Issue No. 1, 1961

Item 1809

Brigman, Benjamin E., Correspondence with or concerning,

The correspondence concerns a remarkable fact, that by showing word lengths of the plain text words into the cipher text of a message, the crypto security of a very high security machine (the 5-rotor Hebern) with unknown wirings can be nullified. A cipher text, shown in the letter dated February 13, 1924 from J.A. Wright, Secretary of the Hebern Company to B.E. Brigman, was deciphered by Brigman without having the machine or roto-wirings. On March 14, 1924, Brigman wrote to Agnes Meyer (Driscoll) giving the settings and showing the translation of the last word. Brigman wanted to get into the Coast Guard as an intelligence officer.

Fabyan wrote a letter saying Brigman had no training and was a little off. He lasted at Riverbank for 10 days and then left. He went to the Public Health Institute in Chicago for treatment. He was a private, 6th class specialist, U.S. Army who worked in the Code Compilation Section, Office of the Chief Signal Office from October 22, 1924 to March 6, 1925. Note from WFF to Brigman: "bear in mind that codes and ciphers are more of less stale and unprofitable things at which to make a living for any length of time. The field and opportunities are very limited." What Brigman did was find a passage with the same word lengths of the ciphered text. He never actually deciphered it. WFF intended to write a story about this because it was a dramatic warning about sending a cipher message in word lengths.

Item 1810

Sterling, George E., "The U.S. Hunt for Axis Agent Radios," Studies in Intelligence, (Spring 1960), pp. 35-54. (RMS note: the journal classified, but now publishes an unclassified version.

An article about how FCC's routine policing of the ether became in WWII a multi-purpose defense service and a far flung counter espionage operation.

Item 1811

Kahn, David, "Is There Life in Outer Space," Newsday, April 19, 1962.

Ways of sending messages into outer space.

Item 1812

Fürer, Rear Admiral Julius Augustus, Administration of the Navy Department in World War II, Washington, DC: GPO, 1959, 1042 pp. Photostatic extract of pages 83-101 inclusive regarding attack on Pearl Harbor.

Substantial truth in abbreviated from about the surprise attack on Pearl Harbor, in an official document by the Navy, a department of the Armed Forces. In 1959, 12 years after the end of the many and long investigations of the surprise attack on Pearl Harbor, the army was still suppressing everything connected with the subject.

Item 1813, 1814, 1815

(Twenty years after Pearl Harbor), Three commercial articles on Pearl Harbor.

1813

Anderson, Jack, "Pearl Harbor." Washington Post, Parade Magazine, December 3, 1961, pp. 24-26. 20 years later, experts say it could happen again.

1814

Berryman, Jim, "Pacific Alert... 1961," The Star Magazine, December 3, 1961, pp. 8-11.

1815

Rosenthal, A.M., "The Day the World Changed Forever," The New York Times Magazine, December 3, 1961, pp. 32-33, 98-100.

Items 1816

1817

1818

1819

One envelope with items.

Item 1816

Walker, Gerald, "Spy for December 7, 1941," The American Weekly, The Washington Post, December 3, 1961, pp. 10-11.

Takeo Yoshikawa spied for the Japanese in Pearl Harbor. Among other things, he would feign drunkenness at Mama San's Tea House overlooking the harbor so she would let him sleep on the floor mat. Then he would rise early and plot ship movements. He was a 29-year old "consular clerk" (cover) really a naval intelligence officer. He also posed as a Filipino and got a job washing dishes at the Officer's Mess. The crucial bit of information was that Sunday morning all ships were in port. Yoshikawa was taken into custody right after the attack. When he returned for

a television special, someone found out his identity and threatened to make a citizen's arrest. There is no statute of limitations on espionage.

Item 1817

Butz, Sam Jr., "Pro Football Spy," United Aircraft Quarterly Beehive, Fall 1961, pp. 29-32.

Sent to WFF by David Kahn. Francis P. Halas spies for NFL and the Chicago Bears. He has a numbering system.

Item 1818

Cuban Messages, All messages marked "Secret K 7485" in individual sheets.

MSG 104

106

107

112

113

122

These cipher messages and plain tests have been copied from halftone reproductions in the September 25, 1961 editions of Revolucion a newspaper of Havana, Cuba. Revolucion asserts that the messages were sent by CIA to Luis Torroella, one of its spies in Cuba, in preparation for the ill fated invasion of Cuba by anti-Castro forces in the Bay of Pigs in April 1961, and that the Cuban Department of State Security intercepted and broke them. Where either plain text or cipher text was not legible. Blanks have been left in the five letter groups. New York Society, October 20, 1961. Sent to WFF by David Kahn.

Item 1819

David Kahn, "Number one from Moscow," CIA, Intelligence Articles, Volume 4, pp. A15, Autographed to WFF & ESF by David Kahn.

An article on the cipher message, found inside a hollow nickel by Col. Rudolph Abel. The code proved indecipherable until four years later when Reino Hayhanen, Abel's assistant defected. It was a monomaniac cipher. The cipher was so complicated that its description bored the jury to death at the trial. Kahn explains it.

Items 1820, 1821, 1822 in one folder.

Item 1820

Time Magazine, 70, (July 1, 1957), page 4 marked "important" by WFF.

Letter from Warren C. Wagensill praising all those who helped break the Japanese Codes.

Letter from Richard Baker asking whether those who broke the code can be named. The United States Navy said NO-period.

Item 1821

Shipmate, pp. 23-24, June 1957, 2 copies.

United States Naval Academy Alumni Association shows faith in Admiral Kimmel. He was elected alumni president of the Naval Academy Class of 1904. The article praises his trustworthiness and the fact that he was kept in the dark by Washington.

Item 1822

“Historical notes, June 4, 1942,” Time 69, 23 (June 10, 1957). Article on the Battle of Midway, 2 copies of entire magazine.

Items 1823

White, William L., The Little Toy Dog, New York: E.P. Dutton and Company, Inc., 1962, 304 pp.

Item 1824

Carton, Raoul, “Le Chiffre de Roger Bacon,” Revue d’ Histoire et de Philosophie, c. 1928.

Comments on Newbold’s book. Photostat negative. WFF doesn’t buy the solution.

Item 1825

Civil War, American, “The Lesson and the Legacy,” Army Information Digest, August 1961, 128 pp.

A special colorful issue commemorating the centennial of the U.S. Army in the Civil War. Issued by the GPO. There are tributes to Lincoln and to the common soldier; to poets. Sculptors, and newsmen who pictured or wrote about it. It ends with portraits of and statements of, both Grand and Lee. Perhaps important because of being the briefest official war, a period which is still noted for the continued spate of articles and books concerning it.

Item 1826

Part I and IV, United States Government.

Hearings on the Subcommittee on the Committee on Appropriations, House of Representatives, Ninetieth Congress, Second Session, Department of Defense Appropriations for 1969. Part I: Secretary of Defense; Chairman Joint Chiefs of Staff, overall financial statements; Service Secretaries and Chiefs of Staff. Part IV: Operations and Maintenance. All scorings and

notations herein by WFF personally. See particularly the failures of communications intelligence re the U.S.S. Liberty, beginning page 357. See also enclosed news clippings and others. Part I, pp. 332 covers hearings on troop withdrawal for Europe. Courtesy of C. B. Morrison (a neighbor) Administrative Assistant to Defense Committee. "...The use and operational capabilities of the Defense Communications System is nothing less that pathetic," pp. 357-358, and that the management of the system needs to be completely over hauled. 20% of all incoming messages are garbled. Difficulties within DOD are well documented and had been reported for years, but there was no interest in solving the problem until the Middle East crisis.

Item 1827

Koutsoudas, Andreas M. and Robert E. Machol, (with appendix by George J. Minty), Frequency of Occurrence of Words, University of Michigan Engineering Research Institute, Willow Run Laboratories, Willow Run Airport, Ypsilanti, MI: 2144-147-T,

A study of Zipf's Law, with application to mechanical translation;

The University of Michigan, late in 1955, began a program of research to investigate the possibility of mechanically translating language. The ultimate goal was to develop a process by which a foreign text in a particular field can be translated into precise and unambiguous English without the intervention of a human pre-editor or post editor.

Item 1828

Kent, Allen, "Anagrams in Information Retrieval," Sent from Western Reserve University, Center for Documentation and Communication Research, School of Library Sciences, Cleveland, Ohio.

Allen Kent was associate director of the center. How to retrieve information from the flood of printed material produced every year.

Item 1829

Kahn, David, "The Wizard War," Newsday, August 14, 1962.

Soviet trawlers off Long Island have another mission-electronic warfare with the U.S. The Americans fight back in their own way. U-Z, RB-47, "ferrets," Electronic specialists "ravens."

Item 1830

Kahn, David, "The Sound of Secrecy," Newsday, December 1, 1961, pp. 1. Replacement copy provided by VMI Department of History.

General article on scramblers, listening devices

Item 1831

Hynd, Alan, "The Great Stakeout of L.A.'s Geisha Spy House," STAG

Six years before Pearl Harbor, an undercover army of Japanese spies began infiltrating the West Coast. Note: Aliens relocated to camps 50 potential spies could be removed from the American scene and to "protect potential Japanese victims" from "war-angry mobs."

Item 1832

Revista de Indias, 15, 60, (April-June 1955). Instituto Fernandez de Oviedo Consejo Superior de Investigaciones Cientificas, Madrid.

Several articles on pre-Columbian, Central and South America.

Item 1833

Sacco, Luigi, General, Un Primato Italiano, La Crittografia nei Secoli XV^e XVI^e, Roma: Istituto Storico e di Cultura dell' Arma del Genio, 1958, 53 pp.

An enlarged edition, under exactly the same title, of that issued in 1947 (**Item 395.8**) q.v. Without doubt, General Sacco is the greatest Italian authority in this field, of the present century.

Item 1834

The Spectator, Photostat positive, pp. 214-243, 2 copies on various types of cryptograms.

Item 1835

Prange, Professor Gordon W., "Who Knew about Pearl Harbor in Japan?" Address before American Historical Association, Washington, DC, December 1961, 76th Annual Meeting.

The notes made by WFF at the meeting where Professor Prange spoke are enclosed. The speaker's argument was that hundreds of persons in Japan knew of the preparations for the attack in 1941, and that they had to know by the mere fact of having been engaged on some phase of the preparations. Walter Millis and Professor Buton's comments on Professor Prange's address were also recorded in abbreviated form by WFF. Panel on Pearl Harbor, Chair: Harold W. Bradley, Vanderbilt University. Just program.

Item 1836

Shulman, David, "Idiomorphic Solution of Plain Text Auto Key Ciphers," c. by author, Crypto Press, New York: 1961, 9 pp.

The solution of both cipher text and plain text auto key ciphers was adequately covered by WFF in Military Cryptanalysis-Part III, Washington, D.C. 1939. This work aims to extend an

important means of solution. Idiomorphs are “words having a characteristic construction as regards the number and position of repeated letters, making them easy to identify” or “a cipher group which leads the cryptanalyst to assume a probable clear word or phrase because of its repeated appearance or distinctive form.”

Item 1837

Watson, Thomas, Hekatompathia, 6 page photostat positive, Negatives enclosed.

Item 1838

Holden, Edward S., Cipher Des patches, International Review, (April 1879), pp. 405-424.

Holden worked at the U.S. Naval Observatory. Cipher dispatches sent between Republicans during the election of 1876 which Tilden lost. The author discusses the codes used and to discuss the appearance of the cryptogram as a factor in American politics. Negatives need sleeves preservation. The cipher telegrams were originally suppressed and hidden in New York offices of the Western Union Telegraph Company, but a Senate Committee subpoenaed them.

Item 1839

Johnson, Thomas M., “Search for the Stolen Sigaba,” Army, February 1962, pp. 50-55. No card.

The disappearance from CP of the 28th Division in Colmar of cryptographic equipment that would be of priceless help to the enemy if the secret war codes and ciphers got out. Col. David G. Erskine directed the search for the missing Sigaba. He was CIC chief of U.S. forces in Europe. The search for the missing Sigaba covered most of western Europe and involved 15 American and allied investigative agencies. The two guards on duty left them alone and took naps. In the morning they were gone. Mentions Friedman on page 52. Two of the three Sigaba safes were found in the vicinity of the small Alsatian city of Séléstat near Colmar. They were beside the Giessen River. They cleared mines and dead Germans from both sides of the river for miles. The third safe was found in the mud under the bridge. All three had been thrown off of the bridge. A French soldier had lost his truck in Colmar, so he liberated an American truck. He was afraid he'd be accused of stealing the safe, so he dumped them. Col. Erskine won the Bronze Star.

Item 1840

Scheips, Paul J., Union Signal Communications: Innovation and Conflict, Reprinted from Civil War History, 9, 4 (December 1963), pp. 414-415.

The author sent this reprint (see card within) to WFF. Scheips was at that time with the office of the Chief of Military History, and this article was a part of a doctoral dissertation. The

“conflict” refers to existence of two organizations for communication in the Civil War, The Army Signal Corps, and the U.S. Military Telegraph. See, for example, **Item 198** Myer, Manual of Signals; Also Bates, **Item 240**, Lincoln with Telegraph Office.

Item 1841

O’Donnell, John, “CIA: Intelligence or Ignorance,” American Mercury, (July 1957), pp. 118-120. Replacement copy provided by VMI Department of History.

Criticism of the CIA for not having notified the White House of the impending Suez crisis in 1956.

Item 1842

Pursglove, S. David, “Spy Secrets from U.S. Code Rooms,” Science and Mechanics, September 1962, (1), pp. 48-51; (2) pp. 138 (continuation).

The author of this short article is believed to be using a pseudonym. The title is misleading. This article deals almost entirely with the cipher system used by the U.S.S.R. spy, Col. Abel. It has nothing whatsoever to do with U.S. Code Rooms. The solution was not achieved. It was furnished by a different Russian spy, Remio Hayhaven, who had defected. Page 138 is a jumble of nonsense, although it is the concluding page of the main article. Most of the material on this page is either inaccurate in the details or completely untrue. Picture of WFF on page 51.

Item 1842.1

Pursglove, S. David, “Spy Secrets from U.S. Code Rooms,” and “Here’s How You Can Make and Break Secret Messages,” Science and Mechanics, (September and October 1962), pp. 48-51 & 138; 115 and 116, 132 and 133.

This is the magazine copy for the following month with another article even more ridiculous than the one the month before. Both were sent to us anonymously. They are preserved here as examples of what not to write when treating a subject where clarity with accuracy is the supreme test. Cylindrical cipher machine from Civil War pictured.

Item 1843

Thurber, James, “The Tyranny of Trivia,” New Yorker, (December 17, 1955), pp. 30-35. Word games and trivia. No Card.

Item 1844

“The Acronymous Society,” Time, July 28, 1961, pp. 39-40.

On acronyms in government and military.

Item 1845

Short item on literacy in Britain, Time, July 28, 1961.

Item 1846

Scheips, Paul J., "Union Signal Communications: Innovation and Conflict," Civil War History 9, 4 (December 1963) pp. 399-421. Off print.

Civil War signal communication is the story of two organizations-the U.S. Army Signal Corps and the U.S. Military Telegraph. Sent to WFF by the author. This was part of his dissertation. 3 copies, one autographed to WFF. F. David Kahn, The Codebreakers, pp. 214-229.

Item 1846.1

"The United States Military Telegraph in the Civil War," Typescript, carbon copy, 53 pp. No Card.

Paper read at the meeting of U.S. Army Reserve Officers at the Office of the Chief of Military History, Department of the Army, Washington, D.C., February 4, 1957. Autographed to WFF-1961.

Item 1846.2

Scheips, Paul Joseph, "Albert James Myer, Founder of the Army Signal Corps: A Biographical Study," reprint from Dissertation Abstracts, 26, 10 (1966).

Abstract of his doctoral address on the founder of the U.S. Signal Corps. He (Myer) had been McClellan's signal officer in the Army of the Potomac. Paper: "A. J. Myer and Union Signal Communication," mimeograph copy of paper; Read at the Office of the Chief of Military History, Department of the Army, June 1966. Revised from version delivered before the Civil War Round Table, Cleveland, Ohio, May 1966. Autographed to WFF, May 1967. See Myers entry in Wikipedia.

Item 1847

"Out of the Desert," Time, April 15, 1957, pp. 60-68.

Article on the Dead Sea scrolls. Calls them the "Cradle of Christianity?" to this day their origin and significance are controversial. See for example Lawrence H. Schiffman, Reclaiming the Dead Sea Scrolls: their True Meaning for Judaism and Christianity, Anchor Bible Reference Library (Doubleday) 1995.

Item 1848

Strängt förtroligt, Instruktion för Användning av Chiffer "KK," (1KK), Bound in black buckram.

Item 1849

Newsletter of New York Cipher Society, May 11, 1962.

David Kahn was president.

May 11, 1962

March 9, 1962

February 12, 1962

January 12, 1962

December 8, 1961

November 10, 1961

All annotated and sent by David Kahn.

Copy of Cuban Messages "K7485"

April 14, 1961

March 10, 1961

January 14, 1961

December 16, 1960

November 11, 1960

October 15, 1960

May 11, 1960

April 12, 1960

March 12, 1960

February 5, 1960

January 15, 1960

December 12, 1959

November 9, 1959

October 19, 1959

April 11, 1959

Item 1850

Cameron, James, 1914, New York: Rinehart 1959, 278 pp., London: Cassell, 210 pp. See pp. 176-177 and pp. 234-235.

Dead body of German officer found with cipher lists and signal books of the German Navy. He was found by the Russians when the light cruiser, Magdeburg, was wrecked in the Baltic.

Item 1851

Blackett, P.M.S., "Steps toward Disarmament," Scientific American, 206, 4 (April 1962), pp. 45-53.

A British physicist and WWII military operations analyst discusses the problems that underlie the armaments negotiations in Geneva.

Item 1852

Yoshikawa, Takeo (with LTC Norman Stanford, USMC), "Top Secret Assignment, U.S. Naval Institute Proceedings, 86, 12 (December 1960), pp. 27-39.

Item 1853

Time, December 12, 1960.

Short item on Takeo Yoshikawa, the former ensign in the Japanese Imperial Navy, who had been sent to Honolulu in April 1941, on espionage duty. He detailed his role in the U.S. Naval Institute Proceedings. See **Item 1852**. He rented planes for surveillance, walked everywhere in Pearl City, made observations on underwater obstructions, tides, and beach gradients, and mentioned local newspapers and radio. All open sources.

Item 1854

Gardner, Gerald, Who's in Charge Here? New York: Pocket Books, Inc.

Item 1855

Kahn, David, "Top Secret Language," Reader's Digest, (August 1961), pp. 164-168. Condensed from the New York Times Magazine, November 13, 1960.

General article on code-breaking and the NSA.

Item 1856

Thomason, Ted, "Army's Top Secret 'Black Chamber' Men," Ken (for men who want to know) 4,1, March 1961, pp. 12-14, 88, 90.

Lurid article on NSA

Item 1857

Crick, F.H.C., "The Genetic Code," Scientific American, 207, 4 (October 1962), pp. 66-74.

An early item on the "coding problem" that won Crick the Nobel Prize in 1962. Francis Crick is associated with two discoveries, probably two of the most important in the 20th century: the double helix of DNA and the genetic code. The first he discovered with James Watson, the

second he worked out mostly by himself, though with contributions from many others. Crick died in 2005.

Item 1858

Rosenbaum, E. P., "The Teaching of Elementary Mathematics," Scientific American, 198, 5 (May 1958), pp. 64-73.

New geometry, new algebra-The Illinois Program.

Item 1859

Burton, Benjamin (writer), "The Man Who Spied on Pearl Harbor," an episode in The Twentieth Century, broadcast on CBS TV, Sunday, December 3, 1961, 6:00-6:30 p.m.

Produced by the Public Affairs Department of CBS News-Producer Isaac Kleinerman. Discusses Yoshikawa, Pearl Harbor, Magic, "Winds Code," East Wind, Rain, with WFF's corrections. David Kahn, The Codebreakers, pp. 1-67.

Item 1860

A series of pamphlets on computers:

- 1) Murphy, E.A. Jr.
"Do You Talk Computerese?" Minneapolis: Minneapolis-Honeywell Regulation Company, 1960, 24 pp. Corrected by WFF.
- 2) Sperry Rand, "What Every Businessman Should Know about Electronic Brains," or "facts that will make you a cocktail party expert on office automation," 1956, 1959.
- 3) "How Digital Computing Systems Unburden Men's Minds," Sperry Rand, 1958.
- 4) "How the Computing System Works for Your Univac Educational Series," No. 1, Remington Rand Univac, 1957, 1959.
- 5) Early edition of #4, 1957.

Item 1861

IBM, Principles of Programming and a series of 12 pamphlets under the IBM personnel study program. Re electronic digital computers.

Item 1862

Schanche, Don A., "Ten Commandments of a Good Spy," Esquire, (November 1960).
Half sized brochure with 3 articles.

Stay sober, keep quiet, create a credible cover, remain constantly vigilant against counter espionage infiltrators. Best advice yet: Never become overwhelmingly attached to the ideals or personalities of the groups with which you work, for both may be expendable. "The moral side of your character must be kept apart from one's involvements as a spy." "Be prepared, at any

time, to break all the foregoing commandments as well as every ethical commandment ever written in the names of the gods of civilized men.” Hobbing, Enno, “The International Spy System.” Fleming, Ian, “The Russians Make Mistakes Too.”

Item 1862A

Fleming, Ian, “The Russians Make Mistakes, Too,” from: A Handbook for Professional Spies, Esquire, (November 1960), pp. 4.

Item 1862B

Hobbing, Emno, “The International Spy System,” from: A Handbook for Professional Spies,” Esquire, (November 1960), pp. 8.

Item 1863

IKLE, Fred Charles, “After Detection-What?” Foreign Affairs, (January 1961), pp. 1-13. Detecting violations on arms control. Reprint.

Item 1864

D.D.M., “Cryptography,” Encyclopedia entry, pp. 139-146. Cites *scytale* as earliest known transposition system. See Sheldon, EAW.

Item 1865

von Phul, Ruth, “The Sleeper in FW,” The James Joyce Review, 1, 2 (June 16, 1957). Autographed by author to WFF & ESF.

Also enclosed:

Ruth von Phul-“Joyce and the Strabismal Apologia,” a James Joyce Miscellany, ed. Marvin Magalaner, Southern Illinois University Press.

Frank Hermode-“Puzzles and Epiphanies,” The Spectator, November 13, 1959.

James Joyce’s unsolvable crossword puzzle “Finnegan’s Wake” on James S. Atherton’s, “The Books at Rewake.”

The Guffin, May 1959, letter from James Joyce to Henrik Ibsen.

Correspondence with Mrs. Von Phul.

Copy of “Shaun in Brooklyn,” The Analyst, No. XVI, Northwestern University, Department of English.

Item 1865.1

Copies of The Analyst, Northwestern University, Department of English.

Correspondence-Ruth von Phul. Code sheets for the letters in FW. In FW, on ten occasions, Thunder speaks in hundred letter words called “cletter.” They are a code that contain 200 names, mostly the names of gods, Varuna, Jehova, Zeus, Diana. Adaline Glasheen-“What Thunder said in Finnegans Wake,” No. XXII. Review of William York Tindalls, A Readers Guide to Finnegans Wake, Book World, March 2, 1969. Autographed copy of The Analyst, No. XXIV. Ruth von Phul, “Thunderstruck, A Reply to Mrs. Glasheen.” Von Phul takes apart the letters using WFF’s methods.

Item 1866

Hadas, Moses, Ancilla to Classical Reading, New York: Columbia University Press, 1954. Photostat negative of pp. 16-17, 146-147, and 300-301. 2 photostat positives of same.

Pliny the Elder dictated all the time, even in the bath, except when he was submerged (his nephew tells us this in 3.5). A shorthand writer constantly attended him with book and tablets. The secretary had to wear gloves in the winter so cold hands wouldn’t slow him down. Shorthand was introduced to Rome by Cicero. The invention was Greek. Ciphers and steganography.

Item 1867

Fleming, Ian, “The Great Tunnel into the East Zone,” The Washington Post, October 2, 1960. No Card.

The story of the Berlin Wall and the tunnels. In espionage, Parkinson’s Law operates with particular zest. Illustrated pictures of the telephonic apparatus in the tunnel.

Item 1868

“Acróstico,” Spanish Encyclopedia, pp. 484-488.

Item 1869

Shulman, David and George Weintraub, Glossary of Cryptography, The Terms used in Ciphers and Codes, New York, 1961.

Complimentary autographed copy sent by Mr. Shulman to WFF. A useful glossary for cryptologists, both amateur and professional. Mr. Shulman worked in Signal Intelligence Service (Army Signal Corps) during WWII. Use for Bacon’s Biliteral Cipher.

Item 1870

Hamilton, Andrew, USNR, “Where is Task Force Thirty Four?,” U.S. Naval Institute Proceedings, 86,10 (October 1960), pp. 76-80.

One of the best known messages of WWII and perhaps the most hotly argued was a dispatch sent on Wednesday, October 25, 1944, from the CinCPac headquarters of Adm. Chester Nimitz at Pearl Harbor to the flagship of Adm. William F. Halsey, Jr. Commander of the Third Fleet. It was delivered to Adm. Halsey on the Bridge of USS New Jersey, a part of Task Force 34: It is a gem of Sarcasm: “Where is Task Force 34? The world wonders. The 3rd and 7th fleets were locked in combat in the Battle of Leyte Gulf-one of the greatest naval battles of all times: greatest in number of men, ships, and area covered. The message was a communicator’s garble (actually 2 communicators garble). An ensign added “The World Wonders” as padding. This broke a cardinal communicators rule-the padding was never supposed to contain anything related to the message. The padding “Turkey trots to water,” was more obviously padding. Chester Nimitz had the code clerk crushed. Item sent to WFF by Roberta Wohlstetter.

Item 1871

Boyden, Sarah, “Col. Fabyan, “Eccentric Genius,” Chicago Sunday Times, September 25, 1960, 2 pages. Moved to folder 734, Fabyan Correspondence: Fabyan/Friedman.

Item 1872

Volume I & II, Abellio, Raymond, La Bible. Document Chiffre Essai sur la Restitution des clefs de la Science & Numérale Secrète, Tome 1, Clefs Generale Editor, Gallimard Paris: Librairie Gallimard, 1950, 299 pp., Tome II: Les sephiroth et les Premier Versets de la Genese, 348 pp.

These unsolicited volumes from an anonymous source deal with the “science” of numerology, and are unworthy of consideration. The author considers the Bible a vast “secret” which can only be unlocked with the key of numerology. Numerology has been one key generously applied by carious non-Stratfordians to challenge the S authorship. It is not unexpected that some believers in numerology would apply their “science” to the Bible. A modern example of numerology is the claim by many that the sum of the letters of the name Hitler adds up to 666, the number of the BEAST in Revelations. Examples of the same fallacy that motivated The Bible Code.

Item 1873

McManaway, James G., The Authorship of Shakespeare, Washington, DC: The Folger Shakespeare Library, 1962. Autographed to WFF. Mentions TSCE, page 36 and 42. (See **Item 1691**).

Item 1874

Morison, Samuel Eliot, Christopher Columbus, Mariner, Maps by Erwin Raesn, A mentor book, New Amsterdam Library, New York: Little, Brown & Company, 1955, 160 pp. PB.

This small paper back is a condensation from Professor Morison's 2-volume work published in 1942. Admiral of the Ocean Sea, A Life of Christopher Columbus. It is autographed to WFF by Admiral Morison. Disputations as to who was the first man to discover America are now pouring in from all quarters. Columbus may be merely one of many contenders in this skeptical age, but it will be a long time before any other contender will be treated to a biography as enchanting and readable as Admiral Morison's is of Christopher Columbus. Much after the 500 centennial 1992.

Item 1875

Morison, Samuel Eliot, "American Strategy in the Pacific," Oregon Historical Quarterly, 62, 1 (March 1961), pp. 5-56.

Item 1876

"U Butdz ofn Hpw Tzbu Quhhu Or, a Table for Phi Beta Kappa," The Key Reporter, 24, 4 (July, 1959), 2 copies,

Communications between chapters of QBK by code. It was a simple substitution cipher. Sent to WFF by Marshall Hall.

Item 1877

Carey, G.V., Making an Index, Cambridge: Cambridge University Press, 1951. Temporary Card.

A bibliographical aid with good advice.

Item 1877.1

Swift, Grace, Standard Operating Procedure for the Cataloguing and Classification of Books, National Security Agency, Technical Information Division, December 1954. Mimeograph copy in spiral binding.

Item 1878

Bethe, Hans A., "Strategy and Disarmament," Cornell Alumni News, (February 1962), pp. 33-40.

A leading nuclear physicist advocates arms limitations rather than bans on testing. The Bethe lecture was widely reported and commented on by the press.

Item 1879

Gylden, Yves, "Cryptograph," Stockholm, 1958.

A contribution to the history of the Swedish cipher machine. Astra International, Södertälje: Sweden. Tells how Damm and Wahlberg founded A.B. Cryptograph in 1916. The company was liquidated in 1929. The Hagelins then over took the invention.

Item 1880

Gardner, Martin, "Mathematical Games," Scientific American, (January 1960), pp. 150-156.

On numerology.

Item 1881

Hell, Rudolph (Engineer, Kiel Germany), "Key Generator."

The advantage of "one time tape" as keying element for ciphering and deciphering. Dr. Hell developed a Key Generator HL-502. Pictures, German Description, English Description.

Item 1882

Shirokov, Felix, "Computer Deciphers Maya Hieroglyphs," The UNESCO Courier, March 1962, pp. 26-32. No Card.

WFF labels this Soviet hoakum. The Novosibirski mathematicians used a computer to find the frequency of letter combinations in the Chilam Balam books. 3 copies.

Item 1883

Toland, Philip, But Not in Shame, New York: Random House, 1961, 427 pp.

This book probably abounds in inaccuracies as it does in plain common-garden variety mistakes. For example, WFF is listed in the index with citation. P. XVI "and there is no page XVI. Again on page 369 (indeed citation to WFF) there is a statement which has some true aspects but the author has not grasped their separate significance, hence when herded together and impression is created which is really untrue. Toland, like so many writers who are not scholars, had tried to put forth a popular, readable book. No really serious student of history should depend on it for accuracy. The hand written memorandum by Admiral Wenger, attached inside, is highly informative. WFF does not know if Toland did indeed submit that part of his manuscript to the Navy, re matters Admiral Roeder objected to. Following the index, there is a biographical page upon the author. This, too, is highly revealing. Details which would prove the author's historical objectivity and accuracy are totally lacking, because he lacked the training necessary for authenticity. The writer masquerades as a scholar, the subject treated is masked in secrecy. The truth is not necessarily obtained from travels covering hundreds of thousands of miles. A "popular" book—for "popular" readers.

Item 1884

Crime and the Literati: Fraud and Forgery in Literature, May 15-July 15, 1962, Exhibition at the Peabody Institute Library, Baltimore, Maryland.

Autographed to WFF & ESF by Bill Filby, June 30, 1962. Forgeries, fabrications, imitations and facsimilies.

Item 1885

Baker, Lafayette C., "Did Stanton Plan Lincoln's Murder," Civil War Times, 3, 5 (August 1961), pp. 4-23.

Lafayette Baker was a "master spy" of the Union cause, left a coded message in which he accused Edwin M. Stanton of plotting the murder of Abraham Lincoln. A New Jersey chemist brought to light both this startling charge and the possibility that Baker was poisoned to keep him quiet about Stanton. 2 copies of journal.

Item 1886

Dulles, Allen, The Craft of Intelligence, New York: Harper & Row, 1963, 277 pp. DJ.

Considering the amount of information which has already been disclosed and is in the public domain regarding U.S. Intelligence, it is not astonishing to find that there is little that is new in this book. The possession of a leading family name, and a man who had served as Head of the European branch of OSS in WWII, and following it became head of the CIA for eight years, was probably importuned by numerous publishers to write a "best-seller" disclosing many secret matters but considering to long experience of the author in the field of intelligence, it is fair to assume that he did not "tell all." WFF was associated with Allen Dulles as a member of an advisory board on matters connected with codes and ciphers. WFF was requested by Mr. Dulles to review the manuscript through the eight page (pp. 71-79) dealing with codes and ciphers. There are those who believe that the CIA has departed from its original statutory role in recent years, and that more control should be exercised by the Congress to take the organization out of the operations field and confine its activities to the Intelligence field. A lengthy article by former President Truman which appeared in 1963 is enclosed in the book-a strong pleas for "containment" of the CIA. Mr. Dulles, however, contends that present (1967) congressional controls over CIA activities are adequate.

Item 1886.1

Friedman, William F., Correspondence with Allen Dulles, 1963,

The interchange between Allen Dulles and WFF where in Dulles asks WFF to "glance over" certain pages of the rough copy of The Craft of Intelligence. What resulted is shown herein.

Scanned pages 48-61 on EB article on “Cryptography & Intelligence.” Dulles wanted WFF’s permission to write about WFF’s “outstanding work.”

Item 1887

Galbraith, V. H., “An Autograph Ms. of Ranulph Higden’s Polychronicon,” The Huntington Library Quarterly, 23, 1 (November 1959) pp. 1-18. Original journal.

This is a very early example in English literature of the use of acrostics by a writer to establish his own authorship. The last paragraph names other similar examples. Higden’s Polychronicon is described as “the most exhaustive history of medieval times” and a “best-seller” of the age. Higden’s writings constituted the most important source of English History up to about the middle of the 15th century. (This Benedictine Monk of Chester was born in 1299 and died in 1363). His Polychronicon, a 5 volume Latin work, covers the period of his lifetime, with the exception of a lapse from 1327 to 1340. Little else is known about him. The acrostic was discovered when ultra violet was used on the original ms. because of the many corrections and alterations, particularly at the beginning of chapters. Professor Galbraith states: “After a life time of anonymity, the author (Higden) yielded to the urge to link his name with his book.” (See page 18.) The capital letters that begin each of the sixth chapters of the first book (of the fine volumes in all) spelled out (page 4) “Presentem Chronicam Conpilavit Frater Ranulphus Cestrensis Monachus.” The massive history was translated into English and published in England in 1492. Gift of Professor Galbraith. WFF’s letter of thanks enclosed.

Item 1888

Pennypacker, Morton, General Washington: Spies on Long Island and in New York, Publication of the Long Island Historical society, Brooklyn, New York: 1939, 302 pp. DJ.

A very detailed and fully illustrated story about General Washington’s spies and Secret Service. There is even a chapter devoted to codes and camouflage (page 209). Mentions Entick’s New Spelling Dictionary and entries therein. The full story of Benedict Arnold and Major Andre is here. Much interesting information on jacket. The book does great credit to the Long Island Historical Society and to the author, for its detail. We hope it is also accurate. Autographed to Col. and Mrs. Friedman in memory of a dinner at Fort McNair, 1962. Gift of David Kahn unacknowledged.

Item 1889

Farago, Ladislás, The Broken Seal: “Operation Magic,” and The Secret Road to Pearl Harbor, New York: Random House, 1967, 439 pp., indexed. DJ.

This book has been termed, even by some journalists, as “fascinating.” It “fascinates” persons knowledgeable in the field by its innumerable inaccuracies, plus it’s not infrequent positive

untruths. (Although this is not being written or dictated by WFF, the latter's heavy scorings in the book, his exclamations, his horrified astonishment made evident in the margins, have indicated his contempt for the author.) The author has compounded error upon error, and seems not to mind the downright untruths, even about himself, permitting himself to be "Chief of Naval Intelligence" on the air with never a correction (and in later years permitting himself to be identified as "occupier of desk X in Radio Free Europe.") His mean innuendos about persons who refused him interviews are unforgiveable. See **Item 1889.1**, **1889.2**, and **1889.3** for numerous enclosures re **Item 1889**. WFF was such a lover of books that he almost never marked them up. The extent of the scoring in The Broken Seal indicates different degrees of questioning the truth of Farago's statements. Also, downright astonishment at the unwarranted "conclusions." RMS: For a more recent critical review of Farago's book, see George C. Constantinides, Intelligence and Espionage: An Analytical Bibliography, Westview Press, 1983.

Item 1889.1

Reader's Digest, condensation of **Item 1889**, The Broken Seal, Spring 1967. Gift of Mr. Stevensen, Washington, D.C. Rep of Reader's Digest, R. Adm. Joseph Wenger. See pp. 188-283.

Farago felt Pearl Harbor was caused by bureaucratic incompetence. So did WFF.

Item 1889.2

Pineau, Roger, Book Reviews of The Broken Seal and The Code Breakers, Proceedings of the Naval Institute, (February 1968), pp. 110-112.

Article is inscribed to "WFF- the bête noire of both these gents. February 12, 1968." Pineau is author of: Midway, the Battle that Doomed Japan, (1955), The Divine Wind, (1958), Japanese Destroyer Captain, (1961), and The End of the Imperial Japanese Navy, (1961). He is managing editor of the Smithsonian Institution Press, Washington, DC. Farago's book mentions the "sellout" to the Japanese of Herbert O. Yardley. Pineau and his consulted experts believed that the vast amount of detail he uncovered was hopelessly misused to produce wrong or at least misleading conclusions. Some believe it is total fiction. Pineau thinks Kahn's book is in "bright contrast" to Farago's. Pineau takes Kahn to task for criticizing WFF's patent award. Kahn calls the inventions "derivative." Kahn also criticizes Damm as "unsuccessful." Cf. The Codebreakers, pp. 422ff.

Item 1889.3

Anonymous, A 5x8 envelope containing miscellaneous items and comments concerning Farago and The Broken Seal.

- A) Life Magazine review of Charles Elliott which is favorable-but one may ask, who is Charles Elliott to judge?

- B) Book Week-Review by an authority-Louis Morton (March 12, 1967). The scoring and notes are in the handwriting of ESF. It is worthy of comment that when ESF asked WFF if the sentence marked "...” (Third paragraph from end) were true, WFF said yes. Then she asked if the Farago statement in the last sentence in that paragraph were true: “The Army System remained a mystery down to the end.” WFF replied, “No Comment.”
- C) A short review in the New York Times Book Review unsigned. Nondescript. Not penetrating in the least.
- D) Two cards with WFF’s handwritten notes concerning bibliographies, check lists, etc. Another card with random notes, giving page numbers; card relating the sale of Farago’s motion picture rights. The question and answer page from Parade (May 21, 1967) containing utterly untrue statements and another Q & A (July 9, 1967) stating the opposite of the above; a few lines of statements made by Farago during a CBS television interview (in ESF’s handwriting); a penciled page in both ESF’s and WFF’s handwriting, noting some remarkable quotes (page numbers cited are from Reader’s Digest edition of the book).
- E) Copy of a Walter Millis review of Farago from American Historical Review, October 1967, pp. 102-103. “Raises doubts about its strict historicity”...” lack of credibility is the vice of all books on espionage and intelligence...” “To be consulted with caution.”
- F) Two letters from Farago (one only, second missing); one to ESF with an angry attack on ESF because she “bawled him out” for daring to telephone this (unlisted) member after not a single one of his letters had been answered. What does it take to inform an opportunist that silence---ignoring of letter after letter, does not mean consent. The other letter of April 30, 1968 is to the Naval Officer Editor of Naval Institute Proceedings which published Roger Pineau’s critique of The Broken Seal (**Item 1889.2**). Farago announced he plans to turn the matter over to his attorneys. To date (1970), no action has been taken.

The two most respected of writers on military history and allied subjects have recorded many reservations on Farago’s book-Morton and Mullis. The other reviewer (Pineau) was suspect, perhaps at least in Farago’s mind, because he also reviewed The Code Breakers by Kahn in a more praiseful manner.

Item 1890

Kahn, David, The Code Breakers, The Story of Secret Writing, New York: The Macmillan Company, 1967, 1164 pp.

No book, only file with a single review marked Secret Administrative Security. Seven page carbon copy typescript. Written by ESF.

Item 1890.1

Pineau, Roger.

Letter from George Hagen in re Thorpe’s East Wind Rain, also a review of same by Pineau, long script of review of the David Kahn book, by Pineau, The Code Breakers paid for by a leading magazine but review was never published. (Why?) . . . too long. Letter to Roger Pineau

from George T. Hagen, Executive Officer of the War Criminals (Japanese) Parole Board in Washington, DC. See last paragraph: “One of the great pities made apparent by the amateurs—those who have never been involved in business of cryptanalysis—are able to publish whatever they wish on the subject. The people who really know—the professionals who usually devote most of their lives to the work—are forbidden to publish what only they can deal with authoritatively.” Page 34.

Item 1890.2

Anonymous, Time, February 16, 1968, “IURP WKH WURYH,” page 94. Review of the Kahn book, The Code Breakers. Original.

Kahn’s book The Code Breakers was published the previous September. Very favorable review. In fact, not one single initial word is recorded which would indicate that the writer of the review knew nothing what so ever of the subject, else some questions would have been raised about something. Not mentioned herein is Kahn’s story of the missing Sigaba machine (pages 510-512). Kahn differs in several respects from the other stories, hence there is no escaping the question: Who is telling the truth? What is the truth? **Item 1638 and 1839.**

Item 1890.3

Anonymous, The Code Breakers, by David Kahn, highlights from “Cryptology Today” and “P.S. Extra,” Popular Science (May 1968), pages 111-126. Replacement copy provided by VMI History Department.

In “P.S. Extra” there a highlights of the revelations in P.S.’s own word, but kindly checked for technical accuracy by the author himself. Pages 124-125 are devoted to “The Greatest Cryptologist, William F. Friedman.” Photograph of WFF and ESF (had to have been procured from Cambridge University Press, because it is one of a number of photographs ordered and paid for by CUP); permission for its use was never asked of us (ESF). The rewrite fortunately omits “Kahn’s ridiculous and entirely unfounded speculations concerning WFF’s “secret” inventions” (perhaps if P.S. had necessarily condensed “The whole of Kahn’s, the monumental size of which prevents thousands from reading the 1200 pages of The Codebreakers as published by MacMillan, the book would have found more readers.

Item 1890.4

Anonymous, “Biography of David Kahn,” Scientific American, (July 1966), pp--- a tentative section of the Kahn book, The Code Breakers.

The note re Kahn from the magazine’s page “authors” states the book was to be issued in the autumn of 1966- the book actually made its appearance a year late. This copy a gift to WFF from “your pupil Lambros Callimáhos.”

Item 1891

Arnaud, E., Lt. Col., La Revue des Transmissions, 6 pp., pp. 27-32.

An interesting diversion. Col. Arnaud speaks of a mere handful of authors and gives thumb nail sketches and opinion-judgments on them. General Sacco and Eyraudare “Superier,” Ceillier and Baudovin are “elementary,” Fletcher Pratt’s book is a “work of vulgarization.”

Item 1892

Sourbeś, Pierre, “Le Commandant Bazeries, L’homme qui “cassait” les codes,” Le Miroir de Histoire, No. 153, (September 1962), pp. 282-289. Nice photo of Bazeries and his wheel. Cf. David Kahn, The Codebreakers, pp. 244ff.

Item 1893

Newspaper article. Berlin Sealed Lusitania’s Fate. Secret Message to Von Bernstorff given out by Rathom. World Almanac was key to code. Chicago Evening Post, Wednesday, (January 30, 1918).

The cipher message which proved that Berlin directed the sinking of the Lusitania is made public for the first time. Details were given by John R. Rathom, editor of the Providence Journal. The cipher message came through from Nauen, Germany to Sayville, Long Island at 2:00 a.m., April 29, 1915 and was caught by the operator of a wireless station maintained by the Providence Journal. It followed none of the codes that they had previously observed. The World Almanac held the clue. Does not describe code in detail. 2 copies.

Item 1894

Abel, Col., Exhibits in trial of Col. Abel, Russian Spy, Received from Howard T. Oakley, September 25, 1958.

Code sheets and photos of Abel, 3-8X10’s.

Item 1895

Time Magazine Article, (March 4, 1966), p. 33 on Pearl Harbor. Paragraph marked “wrong” by WFF.

Item 1896

Anonymous, “Scrambled Ciphers and Bacon,” Time, (October 14, 1957), pages 50 and 52. Review of TSCE. Cf **Item 1691**.

Item 1897

Rémy, Col. Pseudo for Gilbert Renaud, Comment devenir agent secret, "Aujourd'hui." Editions Albin Michel, 1963, 218 pp. Preface by Colonel Passy. PB.

This French book, by a "Colonel Rémy" on How to Become a Secret Agent," is difficult to assess and to separate fact from fiction without a very careful study. It has a Chapter V entitled "Le Code et le Chiffre," (pp. 85-109), which seems to contain some authentic information including a detailed explanation of the true double transposition cipher, as well as a demonstration of the use of "subtractor tables and methods." "Colonel Rémy" was a member of the French Resistance during WWII. The Colonel Passy, who wrote the preface, was the Head of the French Resistance movement.

Item 1898

Anonymous, "No. 20, the Bacon Crase (sic Craze).

A thick file containing news articles, letters to the editor, a carton or two, etc. All of British origin. Subject: The Bacon-Shakespeare Controversy. Date range 1875-1907. Provenance unknown. Clippings pasted in album.

Item 1899

Young, Morris N., MD, The Art and Craft of Magic.

An exhibition in the Library of Congress, November 13, 1956-March 31, 1957. Reprinted from The Linking Ring, March 1957, 15 pages. Also correspondence between WFF and Dr. Young, 1961. This little booklet is a reprint from the official magazine of magicians. It is autographed to WFF by one of the exhibitors, a Doctor of Medicine in New York City and his wife whose real collecting enthusiasm was in the field of mnemonics (memory aids). Therefore, Dr. Young wrote to WFF, at the suggestion of David Shulman, a book dealer in New York City, in order to procure a copy (#50) of one of the series of Riverbank pamphlets-This one called "Memorization Methods" by H.C. Nolan. The enclosed correspondence is self explanatory. In LC, list of exhibits, there is a revealing item (page 5) to cryptologists, namely, that Giovan Battista della Porta of cryptologic fame also authored a text, Natural Magic, which was translated into several languages.

Item 1900 and 1900.1

Kahn, David and Book of Knowledge, "Number One from Moscow" and "Secret Writings in Codes and Ciphers," Book of Knowledge, 1962. 2 copies.

Article based on Kahn's booklet, "Two Soviet Spy Ciphers" and article from Book of Knowledge presented to Friedmans by David Kahn on April 6, 1962. Carbon copy of corrections. Checklist to "Plaintext" in the new unabridged.

Item 1901

Anonymous, Acrostics: Miscellaneous, unsolicited, also inquiry re Galland bibliography, 1958 and 1966. Miscellaneous examples.

Someone considering doing a post-Galland bibliography. WFF suggests that Galland's ms. on Shakespeare might be a better question.

Item 1901.1

Anonymous, Rebus, example of, and Palindromes, 1961 and 1969.

An example of a rebus, always a popular form of puzzle for young people; an issue of Telephone Almanac for 1961. Also two examples of palindromes (preserved "as is" in rough form because in WFF's handwriting). The name Revilo P. Oliver is the actual name of a professor from Illinois who spent WWII in Washington. Articles by Martin Gardner in Washington Post.

Item 1902

Friedman, William F., Manila envelope of statistical work done on First Folio.

Study made by WFF of 10,000 initial letters in S's First Folio. WFF backfile.

Item 1903

Pares-Baconia folder, No item.

Item 1904

Mercure de France, I-VI, 1952:

- A) "Letters Anglo-Saxonnes," "Shakespeare or Not Shakespeare," by Jaques Vollette, pp. 344-347.
- B) "Archeologie Orientale, La Cryptographie en Egypte et en Mesopotamie," by Dr. G. Contenau, pp. 349-353. Describes Drioton's work.

See Sheldon, EAW, on Drioton and Egyptian cryptography.

Item 1905

Wrigley, Elizabeth S., Short Title Catalogue Numbers in the Library of the Francis Bacon Foundation, Inc., Pasadena, California: 1958. PB.

The Francis Bacon Foundation came into existence at the death of Walter Conrad Arensberg. He left one-half million dollars to the Foundation with the provision that the funds be spent in ten years, in the sole project of proving his beliefs in his own Baconian theories of authorship and of the “sonship” relation of Francis Bacon to Queen Elizabeth the First. Mr. Arensberg paid expenses for WFF to come to California and discuss the proposal that WFF become the director of such a foundation. WFF told Arensberg that he would do so only on the terms, not of Arensberg’s theories, but a genuine foundation for the collection of Francis Bacon’s known works and the studies thereof. (safe offer!) After WFF and some other men candidates had all refused to direct any continuance of Arensberg’s former “cipher” works, Elizabeth Wrigley, who had worked as a “cipher” clerk during Arensberg’s later years, accepted the directorship. She continued a somewhat half-hearted effort to fulfill Arensberg’s commands. In the meantime, his will-appointed Board of Trustees did so well with the puny half million in funds, that a small library building to house the Foundation was built at a college campus at Claremont. As of now (1970), she directs the “work,” whatever it may be at this time. The Francis Bacon Foundation Library at Claremont comprises a collection of English books from 1475-1640 and therefore is a real contribution to the study of the FB period; in spite of its hazy “cipher” beginnings.

Item 1905.1

Friedman, William F. and E.S. and Andrew S. Peck.

Letter from Andrew S. Peck, a cipher enthusiast, who Mrs. Wrigley “passed the buck,” June 11, 1961.

Item 1906, 1906.1, and 1906.2

1906: McManaway, James G., “The Year’s Contributions to Shakespearian Study,” Reprinted from Shakespeare Survey, No.12, (1959), pp. 146-152. Autographed by author.

1906.1: McManaway, James G., “L’heritage de la Renaissance dans la mise en scène en Angleterre (1642-1700),” La Lieu Theatral à la Renaissance, Paris: March 22-27, 1963, pp. 459-472. Enclosed is a photograph of projected reconstruction of Christopher Wren Theatre. Autographed by author.

1906.2:

McManaway, James G., Shakespeare in the United States, published by the Modern Language Association of America, December 1964, pp. 513-518.

Autographed by author:

“To Bill, whose smashing blow should have crushed all the heretics, Mac.” Dr. McManaway, a second in command since the beginning of the Folger Library in 1934 to his retirement in 1968, is also the editor of The Shakespeare Quarterly.

Item 1907

Folger, Shakespeare Library, “The Restoration of the Stuarts, Blessing or Disaster?” A report on a Folger Library conference held on March 12 and 13, 1960, pp. 1-91, The Folger Shakespeare Library: Washington DC, 1960. PB.

Item 1908

Friedman, William F., “Shakespeare, Secret Intelligence and Statecraft. “Reprinted for Proceedings of the American Philosophical Society, 106, 5, (October 1962), pp. 401-411, 3 copies: 1 original and 2 off prints. Separate manila envelope with printed version of quote.

Contains WFF’s favorite quotation from Henry V, Act II, scene 2:

“The king hath note of all that they intend, by interception which they dream not of.” ESF’s note on envelope: this is the S quotation from Henry V which had fascinated WFF all his life, and finally was utilized by him in his talk at the American Philosophical Society in April 1962. (Shakespeare: “Secret Intelligence and Statecraft.”) ESF repeats the quotation and underlies interception.

Extra copy plus notes in oversized grey box.

Item 1909

Crow, John, “Heretics Observed,” The Times Literary Supplement, (April 23, 1964).

A long delightful article on the authorship controversy by a Shakespearean scholar, a Brit ESF and WFF first met at the Huntington Library and later at the Folger Library.

Item 1910

Anonymous, Shakespeare in North America, Shakespeare Anniversary Committee, New York, 1964.

Semi-catalogue of events all over the United States commemorating the 400th Anniversary of Shakespeare.

Item 1910.1

Anonymous, The Shakespeare Festival, 1564-1964, The Folger Shakespeare Library and the Library of Congress, 1964.

Events and exhibits by the Library of Congress and the Folger Shakespeare Library. 2 copies.

Item 1910.2

Anonymous, William Shakespeare, 1564-1616, The Washington Post Potomac Magazine, Sunday, April 5, 1964, pp. 1-36.

Entire issue devoted to 400th anniversary of Shakespeare.

Item 1910.3

Hamblin, Dora Jane, "History's Biggest Literary Whodunnit. Was the Bard Really Will of Stratford?" Life, April 24, 1964.

Also:

"The Burning of the Globe."

"Shakespeare at 400."

"An Age Bursting with Spectacle and Excitement."

"Burton's Stormy Interpretation."

An excellent general coverage of S's time and writings. 2 copies.

Item 1911

Anonymous, Promotional material from Dr. Frank Baxter's Shakespeare programs, Westinghouse Broadcasting, KPIX, San Francisco, 1964.

In 1964, Dr. Frank Baxter, Professor of English Literature at UCLA, persuaded the Westinghouse Station in San Francisco, KPIX-5 to prepare a series of 57 television and 26 radio programs to commemorate the 400th Shakespeare Anniversary. WFF and ESF's daughter, Barbara, was Assistant Production Manager for two of the series. These were broadcast on the Westinghouse networks. "Who Wrote Shakespeare's Plays?"

Item 1912

Bander, Edward J., "More Shakespeare and the Law," Case and Comment, (July-August 1968) and "Shakespeare and the Law."

Another lawyer comes forth as a vociferous advocate for Shakespeare and the law, 2 copies photostat positive. Author believes S's works contain many cryptic comments on the law:

The letter of the law, lying witnesses, losing a case, mergers, motive, oral argument, pardons, paternity suits, turning state's evidence, women lawyers.

Item 1913

Folliard, Edward T., "Shakespeare's Man, Folger Library's Dr. Wright Leaving Behind Dump-the-Bard Cult," The Washington Post, June 23, 1968.

As Dr. Louis Wright prepares to retire as Director of the Folger Library, he rejoices that he can perhaps at last cease having to listen to the anti-Stratfordians raucous wails. No reference to TSCE (Item 1691).

Item 1914

Anonymous, Rare book catalogues. A selection of:

- A) Goodspeed's, London, 36, 7 (April 1965), see page 228. Here is a "priceless" quotation of a flyer, price \$165.00. See interesting note to WFF enclosed from Ed Fishel. (Flyer for a book that never existed.)
- B) Advance copy of catalogue 56 from Levinson, Beverly Hills, California. See section on cryptography, pp. 60-64. Several of the 17th to 19th century items named are to be found in the FC in one or another edition. Art of the Book.
- C) Selected list from AMS Press, Inc. New York City, re Shakespeare, 47 in number.
- D) Richardson of London, "Rare and Important Books." Approximately 50 pages listing chiefly books of the 16th and 17th centuries.
- E) The book Exchange. Advertising from the Mitre Press of London. This press has a strong leaning toward exponents of the anti-Stratfordian thesis. Some of the items listed are the old Baconian standbys of fifty or so years back.

Item 1915

Tweedale, R.L.,

- A) Cipher readings and acrostics "proving" The Earl of Oxford wrote Shakespeare.
- B) Correspondence concerning both Mr. Tweedale and his "ciphers." ESF considered them "Baseless"

Folder contains apology from Joseph M. Lane, lawyer, to ESF. ESF started to draft a letter to Tweedale, but dropped the idea when Mr. Lane's letter arrived.

Item 1916

Rutledge, Leslie A., "John Dee: Consultant to Queen Elizabeth," January 1968, pp. 1-16.

When Mr. Voynich first tried to interest scholars in the mysterious manuscript he had acquired, many types of speculations began. What was the age of the manuscript? Who might be its author? What sort of man was the author? So on and so on. Dr. John Dee was a possibility many thought as the author. He was a very learned man, known and sought after all over the

world. He was also feared by some, as a magician. He communicated with spirits in a “heavenly cipher system.” He understood Trithemius (the Abbot of Spanheim) and his Steganographia which hardly anyone has ever done, even unto this day. One of the most delightful essays ever written. The whimsicality of the comparisons between the days of John Dee and today’s government consultants and favorites, leaves the reader in a gleeful frame of mind. Item from Yale University Library Gazette on the Voynich ms. Some Photostats, positive and negative, from Brig Tiltman on the Voynich ms.

Item 1917

Anonymous, The Voynich Ms: History, Photostats of pages 31 and 32.

Although the beginning and end pages of this excerpt are missing, it clearly refers to the letter written by Johannes Marcus Marci of Cronland to Athanasius Kircher, date of August 19, 1665 (or 1666). The letter accompanied the manuscript as a gift to Kircher to be the only man then alive capable of deciphering it. Kircher, considered the most erudite man in Europe, failed and thus perhaps, every other learned man was discouraged from trying.

Item 1918

Neale, J.E., Queen Elizabeth I, a biography, New York: Doubleday, Anchor Books, 1957, 424 pp. PB.

An early paperback. First published in HB in 1934. A charming, straight forward, uncomplicated story of the very complicated age of Henry VIII, Elizabeth I, and Mary Stuart. Thomas Phelippes, the Decipherer and his connections with the tragic period are briefly recorded on pages 279, 281, and 344-345.

Item 1919

Reader’s Digest Compendium, Secrets and Spies, Behind the scenes stories of WWII, Pleasantville, New York, 1964. DJ.

This compendium is a collection of 65 stories of what the Reader’s Digest claims is fact. All are originals from the Reader’s Digest, most of them by well known and all by reputable writers. The stories are grouped into six parts, each part given a descriptive title. They are:

Part I: The Intrigue of Infamy: December 1941

Part II: Backs to the Wall: 1939-1941

Part III: Against the Enemy Tide: 1942

Part IV: Cunning vs. Cunning: 1943

Part V: Striking Back: 1944

Part VI: Victory Behind the Lines: 1945

Item 1920

Desfemmes, General, "Reflexions Sur La Guerre Electronique," from: L'Armée Revue Périodique de L'Armée de Terre, Le numéro 3, NF, (December 24, 1962), pp. 21-25.

A general of the French Army, Desfemmes by name, and whose title is Inspecteur des Transmissions, herein gives a good account of cryptology during WWII and mentions names famous only to other cryptologists- General Cartier, Captain Painvin, and others. Gift of J. Rives Childs, who like WFF, spent WWI at GHQ, AEF. This article gives a complete description of the German High Command cipher, the ADFGVX, and also describes the German Field Codes. On Childs see David Kahn, The Codebreakers, ch. 11.

Item 1921

Sayers, Michael and Albert E. Kohn, Sabotage! The Secret War Against America, New York and London: Harper and Brothers, 1942, 266 pp. DJ.

As is implied in the title of this book, even after the surprise of the attack on Pearl Harbor, the authors were very much concerned with the possibility that sabotage was the weapon most likely to be used by Japan and her principal ally, Germany. A previous owner of this item has carefully underlined lengthy portions of Part II entitled "Psychological Sabotage." The donor of this item paid only \$.40 for this book (see almost invisible mark on fly leaf). ESF wrote (October 20, 1967). Gift of David Kahn in 1962 inscribed to WFF & ESF. Tells the story of Axis saboteurs and Axis Sabotage in America up to 1942. Second card says scorings done by ESF.

Item 1922

Ellegård, Alvar, Who Was Junius?, Stockholm-Goteburg-Uppsala: Almqvist and Wiksell, 1962, 159 pp. DJ.

The Letters of Junius are a classic of English Literature. The first of the Junius letters appeared in The Public Advertiser, London's leading daily newspaper of the time, on January 21, 1769. (The series suddenly stopped on January 21, 1772). They were literary vituperations against George III and his ministers. He concludes that Philip Frances was Junius. Washington Post Article, September 10, 1962 claims two mathematicians using an old theorem and a new computer, solved the mystery of whether James Madison or Alexander Hamilton wrote The Federalist Papers. Their conclusion: Madison. 2 copies. Has bibliography attached.

Item 1923

Ellegård, Alvar, A., Statistical Method for Determining Authorship, The Junius Letters 1769-1772. Gothenburg studies in English 13. ACTA Universitatis Gothoburgensis, 1962, 164 pp.

By author of **Item 1922**, describes his method of determining authorship based on frequencies of word use, phrase repetition. Certain stylistic characteristics of a writing style remain constant—sentence length, use of certain expressions. It is unlikely that two different authors will have identical lists of characteristic words.

Item 1923.1

Anonymous, Review of Who Was Junius? (Item 1922) and A Statistical Method for Determining Authorship, the Junius Letters 1769-1772 (Item 1923). Reprinted from Studia Neophilologica, Uppsala, Sweden, 36, 1 (1964), pp. 203-206.

Item 1924

Arvnegas, Hubert, “Antoine Rossignal et le grand Chiffre de Louis XIV,” Bulletin de la Société des Science Arts et Belles Lettres, vol. 16, N.S. (January-December 1955), pp. 511-516.

A biographical sketch of Rossignal the famous French cryptographer of the 17th century. Information re the French Court and “The Great Cipher” of Louis XIV, of Rossignal’s services to the court and his wealth and retirement where he created a great Library in his chateau. The author unfortunately says nothing about what became of Rossignal’s library after his death in 1682.

Item 1925

Cook, Major General Earle F., “Electronic Black Chamber; there is nothing more in the public domain than war secrets in the ether,” Army, (September 1962), pp. 37-40 and 57-60.

General Cook retired after serving as the last Chief Signal Officer of the Army for approximately two years. The Office of the Chief Signal Officer was abolished in 1962, as were other technical branches of the Army as such. General Cook presented this item (with its striking lessons of what can happen when communications in the ether are not utilized properly.)

To WFF: “To Billy, to whom I owe a deep gratitude for whatever I know about the subject.”

Compare **Item 1520**, Flicke.

Item 1926

Gibson, H.N., The Shakespeare Claimants, New York: Barnes & Noble, Inc. 1962, 320 pp.

A gift of and inscribed to the Friedman’s by the donors “Bill and Vera,” Mr. & Mrs. P.W. Philby, he is a librarian, and both are bibliographers and cryptologists. This British author treats the claimants and claims four of the chief names employed by followers in contending for the Shakespeare authorship. Dr. Gibson has rather exhaustively treated the four claims, classifying

his arguments under headings of which cryptograms is one. The Friedman book is quoted frequently and one illustration from it is reproduced. "Xerox and File." Item missing.

Item 1927

Wilson, John Dover, An Introduction to the Sonnets of Shakespeare for the use of Historians and Others, New York: Cambridge University Press, 1964, 109 pp. DJ.

A gift of CUP. The author's subtitle, For the Use of Historians, leads the reader into what amounts to a literary detective story. He deals with facts of publication, of dates, of 16th and early 17th century wrongdoing in the Stationer's world of publishing of that day. Most convincing. Non-Stratfordians should be bathed in his cool and calm analysis. This book contains shining examples of thefts from Shakespeare during the latters' lifetime, also of the use of the name Shakespeare to cover thefts from other writers.

Item 1928

Fishel, Edwin C., "The Mythology of the Civil War Intelligence," Reprinted from Civil War History, 10, 4 (December 19, 1964).

This is an article prepared by an experienced cryptologist, a colleague of WFF, dealing with intelligence activities on both sides during the War Between the States. There are seven myths, which the author shows are without basis in fact. The enclosed letter from Mr. Fishel is enlightening and gives convincing evidence of his passionate and lengthy devotion to ferreting out the real (sic) truth re the Civil War. (Letter dated February 1, 1965) the article is inscribed: "To William Friedman whose friendship and example helped to instill the belief that this story could be recovered." Cf. David Kahn, The Codebreakers, pp. 214-229.

Item 1929

Burton, Robert, The Anatomy of Melancholy, for the first time with the Latin completely given in translation and embodied in all English text. Edited by Floyd Dell and Paul Jordan-Smith, New York: Tudor Publishing Company, 1927, 1036 pp. Xerox of original card. DJ.

This is one of the most amazing books in the world. A great classic, still so rated, but read by very few people, which is a great pity for everyone. This item is in the FC for two reasons, the more important reason that (see page 463) the author mentions a series of "pastimes" to aid the melancholic person; namely palindromes anagrams, chronograms, acrostics, and others that will "divert their idle thoughts." The second reason it came into the FC is that it is the most outstanding of the contemporary works other than Shakespeare ascribed to Bacon by Mrs. Elizabeth Wells Gallup. There are also many references to the great Italian cryptographer Cordan. Duplicate Card. See pp. 176-179 on the Devil and Witches provoking people to do things. (I still think this is the most overrated book in the world-RMS).

Item 1930

Arensberg, Walter C., Facets of the Renaissance, The Arensberg Lectures, First Series originally presented at USC, February 6-May 24, 1956, under the auspices of the Francis Bacon Foundation, Inc. and published by the University of Southern California Press, Los Angeles, 1959, 112 pp. No DJ.

Legitimate Bacon not Baconian's or Bacon-Shakespeare type of material. Gift of Elizabeth Wrigley, director (after the death of Arensberg) of the Francis Bacon Foundation, 1959.

Item 1931

Friedman William F., Correspondence with Dr. Glenn G. Morgan. Also re Burdick Ciphers 1963-1969. In WFF file.

Recent inquiry on cryptographic evidence of Mexican-German conspiracy in WWI (Burdick Ciphers). Morgan worked for NSA from 1952-1958, but left to get a Ph.D. and teach. "No man past the age of 50 should put any reliance on his memory."-WFF. Cites Top Secret Decoder Ring in Wheat Chex boxes (1968) and the 1936-1938 Little Orphan Annie Secret Decoder pins. Letters enclosed. Note: WFF & ESF finally met Professor Morgan and got a "totally different impression of him" in person than from his friendly letters.

Item 1932

Casanova, Jacques (de Seingalt, Venitien), Histoire de Ma Vie, Edition Integrale, Tome Premier, F.A. Brockhaus, Weisbaden: Librairie Plon, Paris, 1960, 6 volumes.

According to J. Rives Childs, this edition is the first true and complete printing of the Casanova Memoirs as actually first written. All other editions up to 1960 were pirated, adapted, or truncated.

Item 1933

Casanova, Jacques, The Memoirs of Jacques Casanova de Seingalt, Translated by Arthur Machen, New York: Dover Publications, Inc., 1961, 3 volumes.

The English translation of the Casanova Memoirs by Arthur Machen. (Introduced by Arthur Symens) It was first published in 1925 in 12 volumes. That translation was used as a basis for the present 3 volumes. An eight volume edition was published by the Limited Edition's Club in 1946, introduction by Havelock Ellis, 3 volume boxed set.

Item 1934

Friedman, William F., "Jacques Casanova de Seingalt, Cryptologist," Casanova Gleanings, 4 (1961), pp. 1-12.

In 1959, when the Friedmans were in England, they received a letter from J. Rives Childs, publisher of Casanova Gleanings, requesting WFF to consider preparing an article on Casanova as the first person ever to cryptanalyze polyalphabetic ciphers based on a Vigenère Square. A feat until that time attributed to Kasiski. (See J. Rives Childs correspondence, **Item 1936**, letters from Childs to WFF October 22, 1959). With WFF's meticulous care in covering every detail of a project, he undertook and completed a thorough reading-making notes all the while of the Casanova Memoirs in Arthur Machen's English translation in the twelve volume edition. This project, including the writing of the article herein (Volume IV, 1961), consumed approximately sixteen months. The development of the final form of the article and the antithetical disputes between the writer, his wife, and Editor Childs, make interesting reading through the section of "Correspondence" (**Item 1936**) up through July 1961. Was the first person ever to cryptanalyze polyalphabetic ciphers based on a Vignère Square (a feat until that time attributed to Kasiski). See J. Rives Childs correspondence, **Item 1936**, letter from Childs to WFF, October 22, 1959. On Kasiski, see David Kahn, The Codebreakers, pp. 207-213.

Item 1934.1

Friedman, William F., Worksheets and notes re Casanova article in Casanova Gleanings, 1960-1961.

Work sheets of WFF on the Casanova decipherment of the Mme d'Urfe Journal and correspondence relating thereto. Marked **1934.1 and 1934.2**.

Item 1934.2

Friedman, William F.,

Various versions of WFF's article on Jacques Casanova, Cryptologist. Also a news article from Saturday Review, Cryptologist. Also a news article from Saturday Review, October 1, 1960, re further research into Casanova 1960-1961. In same folder with **1934.1**. Handwritten version.

Item 1934.3

Friedman, William F.,

Version changed by J. Rives Childs, Editor, Casanova Gleanings of WFF's article "Jacques Casanova, Cryptologist," 1961. The first version of WFF's article was changed by the editor and publisher of CG rather drastically. The Friedmans objected, but to no avail as will be seen by a comparison of this "original SGG" with published version.

Item 1934.4

Friedman, William F., Correspondence between Professor George Stewart and LTC William R. Fedor re: "Seingalt and Snetlage" and onomatology, 1960-1962. Clippings about Motherwell murder trial.

Item 1934.5 Friedman, William F., "Jacques Casanova de Seingalt, Cryptologist," Casanova Gleanings, 4, (1961), pp. 1-12, 5 copies of original journal.

In 1959, when WFF and ESF were in England, they received a letter from J. Rives Childs, publisher of Casanova Gleanings, requesting WFF to consider preparing an article on Casanova. Also Friedman, William F., Biographical Sketch for Casanova Gleanings, 1961.

Item 1934.6

Casanova, Letter and "Ciphral Dispatch," n.d. photostats.

Item 1934.7

Marder, Louis, "His Exits and His Entrances," Lippincott, April 23, 1963, Galley Proofs.

These galley proofs of the book published in 1963 was sent to WFF by friend William Filby, then with the Peabody Institute Library, Baltimore, and frequent reviewer of books. The author, Louis Marder, then editor of the "Shakespeare News Letter," was considered a lesser member of the vast world of learned Shakespearean scholars. Also a review of Shakespeare and his Betters by R.C. Churchill. Picture of Bill Filby taken in Peabody Library, February 1958.

Item 1935

Friedman, William F., Working papers on Casanova's Oracular Pyramid. Also Xerox copy of Introduction. La Kabbale de Jacques Casanova from Volume III, Sirene edition of Memories.

Casanova chose to baffle Madame d'Urfe even more by using the term Oracular Pyramid as a form of the Vigenère Square as well as the square from which is traditional. Speaking cryptanalytically, the Oracular Pyramid had no real significance. Article La Kabbale de Jacque Casanova Etude de Bernhard Marr.

Item 1936

Friedman, William F., Correspondence with J. Rives Childs re: Casanova 1956-1969.

Item 1937

Friedman, William F., Working papers, letters and notes for revision of Casanova article, 1969.

In the autumn of 1969, WFF started Part II of his article on Casanova as a cryptologist. It was the barest beginning and his sense of humor led him to digress a good deal. His death ended any completing or revising, November 1, 1969. Clippings on Casanova. Correspondence from Glenn Morgan. Review of The Codebreakers in The Cryptogram. William Maxwell Bowers-Decipherment of Casanova's Cryptogram.

Item 1938

Childs, J. Rives, Casanova Gleanings, Volume I-XI, 1958-1968. See **Item 1934** for Volume IV, 1961. 2 copies of Volume V. 12 Items.

Item 1939

(Casanova) Hunt, Dr. L.B., "Casanova on the Metallurgy of Platinum," The Experiments of the Marquise d'Urfe, Platinum Metals Review, 6, 1 (January 1962), pp. 28-30.

This article acclaims the disclosure of the fact that Casanova met the Marquise d'Urfe in the course of their common interests in Alchemy, and Casanova's feat of solving her cipher journal was an outcome of their common interest in Metallurgy. A valuable chapter in Casanova's life history which considerably enhances the story in his memoirs. Original journal.

Item 1940

Anonymous, Miscellaneous on Garrison and Oswald, "cipher" 1963. See typed note inside folder.

Clipping re Jim Garrison and Clay L. Shaw. Lawsuit, backdrop to the Kennedy assassination made famous by Oliver Stone's film JFK. A San Jose draftsman-Joseph W. Esparza 40, with an amateur's interest in codes, thinks there is a possibility that the name Oswald is alleged to have been used when he ordered the Italian rifle-was in code. The name is reported to be A. Hiddell. The FBI interviewed Esparza. Garrison claims to have discovered and deciphered the code. Pam Hill of NBC got the story, contacted NSA who sent her to WFF. Transcript of interview of Garrison on Meet the Press. ESF wrote a letter concerning the telegram. WFF thought Garrison was a nut job. WFF's health precluded his being interviewed about the code or bothered with the entire issue.

Item 1941

U.S. Government, Availability of Information from Federal Departments and Agencies. Fourteenth Report by the Committee on Government Operations, GPO 1963, pp. 1-223.

The items in this Congressional Committee Report, which are pertinent and important to Communication's Intelligence, are "checked" in the Table of Contents. The abuse of the Secrecy Stamp, page 10, was a long standing source of dismay to WFF, as was the classification of security information, page 37 following, especially to the kind of personnel permitted to determine classification-a concern which has existed since the beginning of WWII.

Item 1942 & 1942.1

U.S. Government, Omnibus Crime Control and Safe streets Act of 1968, Public Law 90-351, June 19, 1968. 2 copies, pages 1-42, and:

1942.1

“The Wiretapping Problem Today,” ACLU, Washington, D.C. 1965, 24 pp.

The subject of government attitudes and rules (or laws governing interception) either by electronics, wiretapping or whatever means and the question of allowable or illegal disclosure of matter obtained by such means-all this has been of life time interest to WFF. Herein is the latest word on both matters-1965 and 1968.

Item 1943

Snyder, Samuel S., “Automation at LC: Philosophy, Plans, Progress,” LC Journal, (November 1, 1965), pp. 4709-4714 and “Access Time.” Reprinted from the Encyclopedia of Library and Information Sciences, NY: Marcel Dekker, Inc., 1963, pp. 45-50. “Introduction and Overview,” Library of Congress Automation Activities, July 1966, pp. 1-6.

Three papers by a former student and colleague of WFF’s, Samuel S. Snyder, who launched the program of computerization at the Library of Congress. See Washington Post, Monday December 31, 2007 for his obituary.

Item 1944

Sinkov, Abraham, Elementary Cryptanalysis, A Mathematical Approach, New York: Random House. The L.W. Singer Company, 1968, 189 pp. Yale University. PB.

This volume was received after WFF’s death. It is autographed “To Bill Friedman, the Master Cryptanalyst, Abe Sinkov. Dr. Sinkov was one of the two young mathematicians who came into WFF’s organization in 1930, and progressed rapidly from student to colleague. He became a professor of mathematics at Arizona State University in the 1960’s after retiring from NSA. On Abraham Sinkov, see David Kahn, The Codebreakers, pp. 678ff.

Item 1945

Shoup, General David M., “The New American Militarism,” The Atlantic, 223 (April 1969), pp. 51-56. Also: a copy (with revisions) in Outlook Section of The Washington Post, April 6, 1969, and an editorial from the National Observer, April 14, 1969.

The famous article of former Marine High Commandant Shoup on the generals and admirals “take over” of American thought by creating a “subtle military dictatorship.” Clippings.

Item 1946

U.S. Government, Enquiry into the USS Pueblo and EC-121 Plane Incidents, Hearings before the Special Subcommittee on the USS Pueblo of the Committee on Armed Services, House of Representatives, March-April 1969, SPO, 1969, pp. 1-1176. 2 copies.

Principal report of Hearings: 325 pages, plus 616 pages of DOD Directives and innumerable documents pertaining to prisoners of war. Very significant news item enclosed.

Item 1947 and 1947.1

Anonymous, (1947) Miscellaneous re USS Liberty, 1967-1968.

- 1) Article from National Observer, July 15, 1968.
- 2) Article from Jewish Week, July 18, 1968.
- 3) Editorial from National Observer, August 28, 1968.
- 4) Envelope covered with WFF's writing and enclosing article from Mayday.
- 5) An article from the Washington Post, June 18, 1967, "Liberty Attack Punctured Pentagon Cover."

1947.1

See separate sheet, Articles on the USS Pueblo incident and Lloyd M. Bucher. Including Inquiry into the USS Pueblo EC-121 Plane Incidents, July 28, 1969.

Item 1947.1

Miscellaneous re USS Pueblo, 1969:

- 1) Subcommittee report "Inquiry into the USS Pueblo and EC-121 Plane Incidents," July 28, 1969, 2 copies.
- 2) "Pueblo Inquiry Raises Questions for the Pentagon," written by John Peterson, National Observer, February 3, 1969.
- 3) "Aboard the Pueblo the day it was Seized," The Sunday Star, November 2, 1969.

These shocking results of the failure of communications (and of communication intelligence) created poignant lessons learned through tragedy. Therefore the establishment of a Naval Communication command in July 1967 raised a question: "What was the new command doing for a year after it was established?"

While monitoring North Korea, the Pueblo came under attack by North Korean forces, even though U.S. Naval officials and the crew have affirmed the ship was in international waters at the time. North Koreans boarded the ship and took her to the port at Wonsan. For the next 11 months, Commander Bucher and his crew were held as POW's by the North Koreans, and were starved and tortured during this time. This treatment became especially harsh when the North Koreans realized that crewmen were secretly giving them the finger, which they explained as being a "Hawaiian good luck sign" in staged propaganda photos. Eventually the U.S. issued a written apology, signed under duress by Maj. General Woodward who stated explicitly before signing the document that he was doing so to ensure the return of Commander Bucher and his crew, and only for this reason. No combat operations have been attempted to retrieve the vessel, which remains in commission in the United States Navy's Naval Vessel Register.

Item 1948

Fort, Charles Hoy, The Book of the Damned, New York: Ace Books, Inc. 1919, 1941, 287 pp.

"Strange events that have stumped science" says the jacket blurb. Charles Hoy Fort was one of the founders of a magazine and a society (see **Item 1948.1**) which was still flourishing and of this writing (1969) was very eager to obtain access to the Voynich ms. Gift of James Truitt. 1,001 attested phenomena that science cannot answer and deliberately ignores.

Item 1948.1

Fortean Society, The Fortean Society Magazine, 7, (June 1943), 14 pp.

See **Item 1948**. “More Notes on Charles Fort.”

Item 1949

Childs, J. Rives, The Rewards of Book Collecting, On occasion of the Formal Opening of the Walter Hines Page Library. Randolph-Macon College, Ashland, Virginia, May 30, 1962, 16 pp.

Former Ambassador J. Rives Childs delivered this dedicatory address at the opening of the Walter Hines Page Library, wherein he mentions several of his literary idols, among them Casanova, whose scientific achievements has aroused him to a fervid devotion to a promotion of the Casanova attainments. On page 10, he lauds Casanova’s cryptologic achievements as were developed from WFF’s study Jacques Casanova, Cryptologist.

Item 1950

National Security Agency, Selected Mathematical Papers, NSA, Autumn 1964, 76 pp.

An unclassified publication fathered by the NSA Technical Journal. The reason for doing so is explained in the letter from the editor. (opposite page 5). Cipher disk on front cover. Intro by Lou Tordella, Deputy Director.

Item 1950.1

National Security Agency, NSA Technical Journal, Special Linguistics Issue, NSA, 108 pp.

The Behavior of Machines and Languages; information theory; psychology of languages; mechanical translation; and others. The book review (pages 101-105) is illuminating. A.D. Booth, L. Brandwood, and J.P. Cleave, Mechanical Resolution of Linguistic Problems, London: Butterworth, 1958, reviewed by H. H. Campaigne.

Item 1950.2

National Security Agency, NSA Technical Journal, Special Issue, Winter 1965, 126 pp.

A “propaganda” document for the use of recruiters for NSA.” A series of technical articles. Preceded by an Editorial Comment by John H. Rubel, one-time Assistant Secretary of Defense.

Item 1950.3

National Security Agency, “Collected Editorials of Sydney Fairbanks.” NSA Technical Journal, Washington, DC: NSA, December 1966, 29 pp.

A memorial number of the journal on the occasion of the retirement of Dr. Fairbanks, who was instrumental in founding the NSA Technical Journal and was its first editor. See enclosed letter to WFF.

Item 1951

Schoenbrun, David, Review of Cerey Ford's book: Donovan of OSS, New York Times Book Review, March 29, 1970. No Item.

"Wild Bill" Donovan came into public service in WWII as the head of an agency known as the "Office of Coordination of Information." Almost the first "item of equipment" the COI needed was a cryptographic system for their own use. ESF was a consultant to the COI and spent several months organizing a "Message Center" and secret systems of correspondence for use by the agents and headquarters. James (Jimmy) Roosevelt acted as the head of the division handling these matters. Later, the COI became two agencies: OSS (Office of Strategic Services). Here were the spies and informers so intrepidly led by Donovan himself; and 2) OWI (Office of War Information), headed by Elmer Davis. Later, at war's end, the OSS and OWI merged and became the CIA, a stupendous organization which has never won the applause and approbation won by the OSS.

Item 1952

Friedman, William F., Lantern Slides for lectures.

Item 1952.9

Index to Lantern Slides AFSA-OOT, May 24, 1952.

Note cards with handwritten notes for lecture given November 18, 1957 at the Cosmos Club, "The Shakespeare Ciphers Examined." Pictures, negatives, and notes.

Item 1953

Friedman, William F., Index cards used with Lecture Lantern Slides. See **Item 1952**.

Item 1954

No card, No item.

Item 1955

Desnoyers, Charles-Hubert, Cryptanalytic Essay, solution of Problem No. 166, published in Elementary Cryptanalysis, 1 (1967), pp. 1-28.

A talented member of the American Cryptogram Association solves a problem found in Gaines (**Item 157**).

Item 1956

Anonymous.

A folder containing many examples of cipher and code messages. Most of the miscellaneous items in this folder are jottings in (or containing) WFF's handwriting as he collected bits and pieces, many of them sent to him for solutions.

- A) Speedy reconstruction of a key word.
- B) Solution of a crossword puzzle in cipher.

- C) Solution of a “Confederate Code Setter” by a Mrs. Barnes when writing a biography of Farragut (1931).
- D) An example of cockney jargon in verse.
- E) “Stop” can reverse meaning in a message. WFF’s handwriting.
- F) Cipher in Bible.
- G) An actual code message in a code: “Telegraphic Code to Insure Secrecy in the transmission of Telegrams. By authority of the Secretary of War, by LTC J.F. Gregory, 1885.”
- H) Dr. C.J. Mendelsohn sent this British cipher method, which originated from an American soldier attached to the British forces in 1918.
- I) A publishing company in Pennsylvania advertises the symbol cipher method for use between friends.
- J) Two photostats of pages from Porta (1563) of disk or wheel cipher (Compare with army Cipher disk) in use at time WWI began.
- K) A symbol cipher method sent to Army Signal Corps with the developer “challenging anyone in the world to solve it.”
- L) Another symbol cipher. Used by the German spy Rumrich.
- M) A message in Playfair cipher. Spanish espionage.
- N) WFF queries statement in Porta that Cicero drew up first code; also note on Hindu love-message cipher.
- O) Brief note on Army cryptographers lack of understanding of own method
- P) Lewis Carroll, Anagram.
- Q) Some alphabets to use in attempted solution and small blocks with single letters on each.

Item 1957

Plaintext in the New Unabridged, An examination of the definitions on cryptology in Webster’s Third New International Dictionary, New York: Crypto Press, 1963.

This privately published brochure is a commentary on the definitions relating to cryptologic terminology in Webster’s Third New International Dictionary of The English Language, Unabridged, which was published in September 1961, by the G & C Merriam Company. The cryptologic terms were defined by Dr. Martin Joos, who during WWII worked in the field of Secret Communications in the Army Security Agency. The author dedicated his brochure “To WFF, coiner of the term Cryptanalysis.”

Item 1957.1

Anonymous, Re Ciphers, spies, etc. 1947-1969.

Advertizing campaign material for movies involving codes and ciphers.

The Secret Code, Movie Poster, Starring Paul Kelly and Anne Nagel, Original screen play by Basil Dickery, Leighton Brill and Robert Beche.

Uncle Sam’s Secret Agents Battle Nazi Spies in a Blood Tingling Serial.

Other tie ins were published: (Henry Lysing)

The Secret Code
Secret Writing
Cryptography Book

15 Episodes, Publicity brochure. For Sale: posters, stills, banners, and slides. Cipher Bureau. Panama Patrol.

B. Cauvet-Duhamel, "Comment on Emploie Secrets et Chiffres, France illustration, November 15, 1947, n. 111, pp. 441-445.

Illustrations of codes from **1648**: code Bonaparte in Italie and code of Louis XVI. Examples of historical French codes. Le Chiffre ou "face á face" cinquante ans après'; L'Armee', 87, May 1969, pp. 36-53. Codes and ciphers in WWI by the French. The "cabinet noir" Careé de Painvin the GEDEFEC and ADFGX code. Photo of an encrypted telegram. Stützel, Hermann, Geheimschrift und Entzifferrung im Ersten Weltkrieg, Truppen Praxis, July 1969, Heft 7, pp. 541-454. An ad for Camel cigarettes in code. Cryptograph expert Virginia Candela. Women in WWII. On the ADFGX code, see David Kahn, The Codebreakers, ch. 11.

Items in square brackets are using numbers left blank in the FC.

[Item 1958] War Department, Office of the Chief Signal Officer, Notes on the Liaison Service and the Liaison Intelligence Service of the German Army During the World War, Washington, D.C.: GPO, 1935. Reclassified by the NSA and removed from the FC.

In black binder returned from NSA.

[Item 1959] German Enigma Cipher Machine.

A captured World War II German Army Enigma Cipher machine. This device evolved from the commercial enigma cipher machines invented by Dr. Arthur Scherbius and first marketed in August 1923 by the German firm Chiffriermaschinen Aktiengesellschaft (Cipher Machine Corporation).

The Enigma was not a financial success, and only upon Hitler's military build-up was the machine produced in quantity for exclusive governmental use. Different models were employed for high-level German military communications throughout WWII.

Enigma belongs to a class of electrical cipher machines employing cryptographic components called wire rotors. Through the induced motion (stepping by gears) of one or more of these rotors, series of different alphabets are generated and a successive letter of the plain text is enciphered from each of these.

When a letter on the keyboard is depressed in the enciphering process, current flows through the leftmost endplate stator, goes through the maze of the rotors to the reflector stator, reverses direction, proceeding along a different path, and exits as a cipher letter through the output mechanism.

Additional crypto-security is obtained by varying the ply-board connectors (lower front) which link the keyboard to the right-most stator.

No card, no items for the following numbers:

Items 1960

1961

1962

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Items 1976

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1982

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1984

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Item 2000

Linder, Leslie (Translator), The Journal of Beatrix Potter, London: Warner & Company, 1966, 348 pp. SLC only. Missing.

Item 2001

Brecht, Bertold, The Life of Galileo, London: Methuen and Company, LTD. See author card. PB. Autographed to WFF by his son John.

Item 2002

Tully, Andrew, The Super Spies, New York: William Morrow, 1970. PB.

Inside story of NSA, "America's biggest, most secret, most powerful spy agency."

Item 2003

Gray's New Manual of Botany, London: 1908, 926 pp. Revised by Benjamin Lincoln Robinson and Merritt Lyndon Fernald. Textbook used by Col. Friedman at Cornell.

Item 2004

Wilson, Vincent Jr., The Book of Presidents with Portraits by Distinguished American Artists Selected Portraits in Color, Silver Spring, Maryland: American History Research Associates, 1969, 4th Edition.

Item 2005

PenicheVallado, Luis, Gramatica Razonada de la Lengva Castellana para su uso en las Escuelas Secundarias, Segundo Curso, 2nd Edition, Mérida, Yucatan, Mexico, 1956, pp. 213. PB.

Item 2006

Peniche Vallado, Dr. Luis, Gramatica Preceptiva de la Lengua Castellana, para los grados normal y preparatorio, Mérida, Yucatan, Mexico, 1956, 254 pp. Ediciones de la Universidad Nacional de Sureste. PB.

Item 2007

Birch, Frank, This Our Freedom, Cambridge: The University Press, 1937, 256 pp. The Book of the Broadcast talks. See author card. HB, DJ.

Autographed to WFF by the author 8/11/53. Selections on Freedom and the Church Freedom and the Government, Freedom and the Law, Freedom and Parliament, Freedom and Trade, Our Civil Liberties, Freedom and Justice. The Free Man in Society. British Law.

Item 2008

Cowley, Abraham, The Crypto Mistress, Love poems of Abraham Cowley. HB.

Autographed to WFF by Dick Mindte, October 4, 1958. "You will find an age old message herein."

Item 2009

No card, No item.

Item 2010

Trésors des Bibliothèques d'Écosse, Bruxelles: Bibliotheque Albert I, 1963.

Catalogue of a show organized by the Bibliothèque Nationale d'Écosse. Introduction by William Beattie, Director of the Bibliothèque. Medieval and Renaissance Mss.

Item 2011

Diringer, Dr. David, Alphabet Exhibition, The Alphabet Throughout the Ages in all Lands, February 27 until March 29, 1958. Foyles Art Gallery. See **Items 863, 1108**.

Item 2012

IBM Research Reports: Data Privacy, Cryptology and the Computer at IBM Research. No Card.

Picture of a cipher disk from the High Renaissance from about 100 years after the invention of the prototype devise. (Porta). Close up of "Lucifer Box" in which a magnetic stripe card is inserted containing the user's personal 128-bit key. Picture of Blaise Vigenère. Systems approach to data security.

Item 2013

Langer, Susanne K., Philosophy in a New Key, A Study of Symbolism of Reason, Rite, and Art, New York: Mentor Books, 1961, 11th printing. PB.

Item 2014

Blackett, P.M.S., Studies of War, New York: Hill and Wang, 1962. HB, DJ.

A challenge to Western military policies, nuclear and conventional, by a Nobel Prize winner in physics and author of Fear, War, and the Bomb. Blackett was a professor of Physics at the Imperial College of Science at the University of London.

Item 2015

Bowers, William M., Two papers on Dellastelle:

- 1) "F. Dellastelle-A name or a 'nom'?" Xerox copy of 6 pages, Clarksburg, WV, December 1962.
- 2) Bowers, William M., "F. Dellastelle, Cryptologist," 8 pages, Clarksburg, WV, December 1962.

These slender articles tell the delightful story of a tireless search for the author of Traite Elementaire de Cryptographie. A French cryptographer who also devised cipher systems. For a time it seemed that Dellastelle was a mythical person, but W. M. Bowers, a very thorough researcher, refused to give up. After eight years, he was able to prove that Dellastelle lived. ESF note: This is WFF's assessment which turned up recently. I consider it a real find. (Plus correspondence with Bowers.)

Item 2016

Aldington, Richard, "The Gullibility of the British," The Saturday Review, January 18, 1958, pp. 11-12, 61-62.

Although the author has much to say about "gullibility" of the British in general, the last two pages are a striking summary of the most unbelievable of the frauds and forgeries foisted not only upon the public, but even upon the British Museum. Piltdown finds, Shakespearean forgeries.

Item 2017

Smith, Meredith, Correspondence with ESF and WFF.

"I think Nixon should be placed in a mental institution for that blooper [Cambodia] 1970. Meredith Smith was ESF's niece and cousin to Barbara and Chris. Nine snide comments on David Kahn. Chris worked at Jet Propulsion Lab, 1969.

Item 2018

Truitt, James, Correspondence with the Friedman's. Newspaper clippings and post cards regarding archeology.

Article on Richard Helms in Parade. Review of Tora, Tora, Tora. July 1969 "I use to be able to read Mayan glyphs but that was a long time ago." Letter to Jim Truitt. Truitt thought WFF was "severe" on Valdimir Nabokov.

Item 2019

Wohlstetter, Albert and Roberts, "Third Worlds Abroad and at Home," Copied from The Public Interest, pp. 88-107. Xerox-2 copies.

Item 2020

No card, No item

Item 2021

No card, No item

Item 2022

No card, No item

Item 2023

Philips, Calvin, Jr., Correspondence with WFF concerning Furneaux's book messages and Rossignol.

Use of computer in analytical work. Correspondence with Bibliothèque Nationale in Paris. On Rossignol, see David Kahn, The Codebreakers, pp. 157-162.

Item 2024

No card, No item

Item 2025

No card, No item

Item 2026

Friedman, William F.

Correspondence with several individuals assisting them to get a civil science retirement pension based in part on their years spent in the Black Chamber. Mrs. Marguerite Meeth, Mr. Thomas Lomad Kimberly.

Item 2027

Zimansky, Professor Curt, Correspondence with the Friedmans regarding the Bacon-Shakespeare question. Professor Zimansky is editor of Philological Quarterly.

Item 2028

Chronogram,

Example of a chronogram and WFF's note on how to encipher and decipher. No Item.
2 -8X10 photos of Trinobantiados Augustae sive Londini, Libri VI and one sheet showing how to add up Roman numerals on front cover.

Item 2029

Friedman, William F., Newspaper clippings and correspondence and coded messages pertaining to the connection of a counterfeiter, "Count" Victor Lustig.

Robert V. Miller, alias "Count Victor Lustig" master counterfeiter and swindler with a record of 37 arrests (but no convictions) was sentenced to 20 years in a Federal Penitentiary by Federal Judge Alfred C. Coxe. He was convicted of possessing and counterfeiting bills. Five more years added for his escape on September 1, 1935 from a Federal House of Detention. William Watts, the engraver who made the plates was sentenced to 10 years. They counterfeited more than two million dollars in bills. A coded message was found on Watts, referring to Lustig (German)-Secret Service wrote to WFF. Deciphered message enclosed.

Item 2030

United States Army Electronic Research and Development Laboratory, Ft. Monmouth, New Jersey, "Advanced Character Recognition Techniques Study, Report No. 3," Third Quarterly Progress Report, July 1, 1963 to September 30, 1963, Contract No. DA 36-039 AMC-00112 (E), Technical Requirement-SCL-20101 N, July 14, 1961, DA task no. 160-23201-A-100-02-09, RCA, Data Systems Center, Bethesda, Maryland.

Item 2031

Friedman, Elizebeth S., Correspondence regarding revision of an article on cryptology in Standard Reference Encyclopedia.

When revising the 25 volume Funk and Wagnall's Standard Reference Encyclopedia, ESF was asked to revise the article on Cryptograph (1969 not hers). The encyclopedia was first published in 1931. She felt it was "shockingly inaccurate." It needed not revision but a whole new article. It was done by an amateur.

Item 2032

Morison, Samuel Eliot, "Life in Washington a Century and a Half Ago: Letters of a Federalist Congressman and Senator and his Wife," Fifth Annual Cosmos Club Award, April 29, 1968.

Item 2033

Wenger, Joseph N., Description of Method for Mechanizing the Process of Decoding and Encoding Messages, Witnessed by WFF, May 10, 1938.

"This represented the beginning of automatic decryption and translation. The method proposed here in was extensively used by the U.S. Navy during WWII for processing bulk traffic and for code recovery." J. N. Wenger, O20-GY, April 1938, 2 pages.

Item 2034

Campaigne, Howard H., "Time Is, Time Was, Time is Past, Computers for Intelligence." Reprint of paper read before The MIL-E-CON 8, September 16, 1964. Unclassified.

Intelligence in the title does not mean military intelligence but pattern recognition, adaptive behavior or "imagination." What is "intelligence" in a machine? See Roger Bacon building an artificial brain and putting a brass wall around Britain.

Item 2035

Stuart, George, Correspondence with ESF regarding loaning of books for descriptive cataloging at the National Geographic Society.

WFF loaned out Codice Troana, Paris Codex, Codex Perez.

Item 2036

Maugham, W. Somerset, Ashenden or the British Secret Agent, Avon Books, 1943. PB.

After WWI the author, W. Somerset Maugham, was imprisoned for violation of the British Official Secrets Act. This novel was written "in retaliation." An astute reader will be able to ascertain that fact.

Item 2037

Childs, J. Rives, Correspondence with the Friedman's regarding Casanova Gleanings.

Includes resume of WFF.

Item 2038

Cryptanalytic forms (sliding strip, etc.), Extension Course of the Army Security Agency.

Item 2039

Printing Telegraph Code, Negative and positive photocopies of tape showing code.

Item 2040

No card, No item

Item 2041

Patton, P., R. McHenry, and B. Lombardi, "An Approach to Large Scale Information Systems Analysis," IBM Corporation, July 19, 1963.

Also contains correspondence between Patton and WFF, and R. C. McHenry, "An Approach to Systems Analysis Employing Functional Descriptions."

Item 2042

Friedman, William F., "Codes and Ciphers, (Cryptology)," Reprinted from Encyclopedia Britannica, 1956.

The first authoritative article ever included in an encyclopedia. This is the 1956 edition of Encyclopedia Britannica. Printed version, typescript, contributors guide, and carbon copy.

Item 2042

Friedman, William F., "Codes and Ciphers," reprinted from Encyclopedia Britannica. Second Card.

Mrs. Friedman was requested by EB in 1970 to revise the article on codes and ciphers. She was too busy and felt not as qualified as others to do the article. She therefore inquired of Mr. Lambros Callimahos, if he would be willing to do the revision. He agreed and wrote the article which appears in the current edition of the EB.

Item 2043

Hester, Brig. General Hugh B., "The Meaning of Sputnik," Saturday Review, November 16, 1957, pp. 28.

"Under the guise of security needs we have woven a curtain of conformity at the cost of driving many of our outstanding scientists and technologists from government service while preventing others from joining....Dr. Robert Oppenheimer is the most celebrated...." The real enemies of man are poverty, ignorance, and bigotry. That wars and preparation for war increase these, and that totalitarianism in whatever form is more often than not the symptom rather than the cause of man's maladies.

Item 2044

Notes on Ethel Seaton by ESF and WFF. Includes reprint from The Review of English Studies, n.s., 13, 50, (May 1962), pp. 194-198 of Medium Aevum, 27, 3 (1958) and correspondence.

Studies in Villon, Vaillant and Charles d' Orleans by Ethel Seaton. Reviewed by the Friedmans in Medium Aevum. Hand-written worksheets.

Item 2045

Official Guides to Yucatan and other Mayan Sites,

Autographed to WFF and ESF by Dr. Alberto Ruz, director of the Instituto, 1958. Letter to Dr. Ruz. Copy of the Friedman book plate.

Item 2046

Correspondence between WFF and the George C. Marshall Research Library, Lexington, Virginia.

Also Col. Friedman's collection of newspaper clippings pertaining to the library. These news stories were part of the materials WFF collected and reflected upon in making his decision to give his collection to the Marshall Research Library.

Item 2046

WFF wrote: What to do about those early writings of mine which are still held in the vaults of the NSA and copies of which I was not permitted to retain. (10/22/69). "I have practically given up hope of being able, at long last, to get those things released so that they might be integrated with the things included in my gift to the Marshall Library." Classified slides in the vault of NSA. Texts of WFF's lectures at NSA. "Double tape cryptographic system used, 1919-1921." "Does History Repeat Itself?" paper by WFF. NSA wouldn't let him keep a copy. Forrest Pogue tried to sell the Friedman books September 7, 1970. 1500 descriptive cards, sent with the collection to Dr. Pogue in 1966. The cards were typed by Miss Mary Ann Knight of the Marshall Library Staff. 74 boxes, 3 items (desk, file cabinet, card file), author file by author and decimal number December 17, contracts, and donation papers.

Item 2047

George Washington Papers, Benjamin Church coded letter, July 22, 1775 and translation of Church's letter. Also Benjamin Church's letter to George Washington, October 1775. Copied from Presidential Papers, Library of Congress.

Dr. Benjamin Church, George Washington's chief medical officer, was found to be a British spy or collaborator. Xerox copies from Library of Congress, 1960.

Item 2048

Mayhew, George P., "Rage or Raillery," Swift's Epistle to a Lady and on Poetry: A Rhapsody," Reprinted from The Huntington Library Quarterly, 23, 2 (February 1960), pp. 159-180.

Comments on editions of Swift's works in the Huntington Library.

Item 2049

Mayhew, George P., A Missing Leaf from Swift's "Holyhead Journal," reprinted from The Bulletin of the John Rylands Library, 41, 2 (March 1959), pp. 388-413.

Item 2050

Concealment Cipher,

Example of a concealment cipher message sent to WFF by William Dulin, chief audio engineer and operating head for Voice of America. He was formerly of NSA and remained a great friend. It was Bill Dulin who designed and built the elaborate hi-fi system in the Friedman home.

Item 2051

Friedman, William F., "Afterpiece," from catalogue of Shakespeare comedies and history.

Item 2052

Zimansky, Curt, "Editor's Note: William F. Friedman and the Voynich Manuscript," Reprinted from Philological Quarterly, 49, 4 (October 1970), pp.433-42.

General Carter's personal copy presented to the Library.

Item 2053

Friedman, William F., List of books and articles presented to the American Cryptogram Association by WFF, September 1, 1960.

Item 2054

Friedman, William F., List of travelling expenses incurred en route from the International Telegraph Conference in Belgium, 1928.

Item 2055

Ancient Maya Paintings of Bonampak Mexico, Supplementary Publication 46, Carnegie Institution of Washington, Reproductions of paintings with commentary.

Item 2056

Blair, William, Negatives and print of article on "cipher" in Ree's Encyclopedia. One of the two earliest items on cipher in English.

Item 2057

American Philosophical Society, William F. Friedman,

Material concerning WFF's paper read before the American Philosophical Society, 1962. Also contains a brief history of APS, members who attended the April 1962 meeting and the program from that meeting. See also **Item 1908** for numerous copies of an abstract of the speech "Shakespeare, Secret Intelligence and State Craft." WFF's own assessment of this study. No Item.

Item 2058

Arensberg, Walter Conrad, Correspondence with WFF concerning Baconian philosophy.

Walter C. Arensberg, a millionaire graduate of Harvard in 1925, approached WFF to offer him a job-purpose, to affirm Arensberg's belief that Bacon wrote Shakespeare. Earlier Arensberg had devoted some years in attempting to prove that Dante was not the author of Dante. This fixation (Arensberg's The Cryptology of Dante) brought forth, in Professor E. R. Vincent's work in the Rossetti and Dante, the striking statement "an idée fixe so strong that judgment cannot cure." When Arensberg dropped Dante and went to the "secret trails" of Bacon-Shakespeare, the quoted statement remains absolutely true. This quotation is from Professor E. R. Vincent of Corpus Christi College (Italian Literature). Professor Vincent's quotation concerns Dante and is so applicable to the Bacon-Shakespeare controversy, that it is almost inspired. The "idée fixe" specifically applied to the "Dante Gabriel Rossetti controversy."

Item 2059

Friedman, William F., Eulogies at grave site and extract from letters. Buried at Arlington.

Item 2060

Denniston, Commander A.G. C.M.G., Correspondence,

Important in the history of persons from WWI. Sir William James and Reginald Hall have been much written about, Commander Denniston was a "great," but little known. He served Great Britain a long time in this field-from WWI through WWII. See WFF's assessment of Denniston in the personal letters herein.

Items 2061

Cutout letters, anagram, and PQR Article.

Item 2062

No card, no item

Item 2063

Martin, Gardner, "Mathematical Games," Scientific American, 227, 5 (November 1972), pp. 114-118.

On the practical uses and bizarre abuses of Sir Francis Bacon's bilateral cipher. Ref to WFF page 116.

Item 2064

Three tributes to WFF by three Navy cryptanalysts: Captain Joseph John Rockefeller, Captain Thomas Harold Dyer, and Captain Wesley Arnold Wright. Delivered on BBC television show The Code Breakers, December 1, 1970.

Item 2065

Friedman, Elizebeth Smith, Tape recorded interview conducted by Dr. Forrest C. Pogue at Marshall Library on May 16 & 17, 1973.

Typed, sanitized version of the transcript, reviewed by NSA, September 1984. Tapes still with NSA. Topics discussed include the Riverbank Lab years, Safford and the Pearl Harbor hearings, David Kahn and the publication of The Codebreakers, Boris Hagelin, WFF's assistants Rowlett, Kullback and Sinkov.

Item 2066 Marked "start assigning numbers"

[2067] – Mendelsohn, Charles J., "Studies in German Diplomatic Codes Employed during the World War: I. Code 18470 and its Derivatives, II. The "Fünfbuchstabeniiest," III. German Methods of Code Encipherment. War Department, Office of the Chief Signal Officer, Washington, D.C.: GPO, 1937.

Black binder. Returned from NSA.

[2068] 17th Century Antique combination lock

Small brass lock with bands of letters around the cylindrical body. Item in the George C. Marshall Museum.

[2069] Ribbon for Army Service Forces, 10 years.

Blue with white trim, blue star surrounded by white cloud at center, circled in red, gold wreath around center indicates Exceptional Service. There are two such medals in the FC. Items in the George C. Marshall Museum.

[2070] Bronze medal

Medal has the relief of a large domed building and "Geneva, Illinois" on the front. An eagle perches above the picture. On the back, "Presented to her gallant sons in grateful recognition of their part in the World War." The medal hangs on a badly frayed red-white-blue ribbon. Item in the George C. Marshall Museum.

[2071] Green Ribbon with red-white-blue center stripe.

"War Department Civilian Award for the overseas European-African-Middle Eastern Theater. Item in the George C. Marshall Museum.

[2072] Printer's block.

Item in the George C. Marshall Museum.

[2073] Metal Indian head bookend.

Item in the George C. Marshall Museum.

[2074] Desk Name Plate

Black plaque on light wood. Reads: William F. Friedman. Item in the George C. Marshall Museum.

[2075] Name Tag

Small gold-colored frame around a name label which reads W.F. Friedman. There is a pin on the back. Item in the George C. Marshall Museum.

[Item 2076] Signature Scroll

Large Wooden box with glass plate inserted in top. Item in the George C. Marshall Museum.

[Item 2077] Black Chamber Award (Joke gift).

Grey metal disk inscribed: To Wm. F. Friedman for making the intelligible unintelligible and vice versa 1921-1946. Presented by those he has led (astray). A chain and a grey ribbon are attached to the disk. Item in the George C. Marshall Museum.

[Item 2078] Giant Monocle (joke).

Large Plexiglas disk with a black ribbon attached. Given to WFF as a joke by office associates. Item in the George C. Marshall Museum.

[Item 2079] Oversize brass paper clip.

Item in the George C. Marshall Museum.

[Item 2080] William F. Friedman

Oval Gold Cuff links. Item in the George C. Marshall Museum.

[Item 2081] William F. Friedman

Silver tie clasp with WFF printed on a small plaque which hangs from a chain.

[Item 2082] William F. Friedman

Two decks of playing cards made for or by the Hagelin Co. On the backs of the cards is the Hagelin-Cryptos emblem. Given to the Friedmans as a Christmas gift with the compliments of the Hagelin Company. Item in the George C. Marshall Museum.

[Item 2083] William F. Friedman.

Two black velvet page weights. Small bags which open out to rest on either page of a large open volume. Sewn for WFF by a staff member at the Folger Library. Item in the George C. Marshall Museum.

[Item 2084] Medal

Bronze medallion with relief portrait of Boris Hagelin and the date. Item in the George C. Marshall Museum.

[Item 2085] Writing utensils

Eight pens and two rulers. Items in the George C. Marshall Museum.

[Item 2086] Letter opener.

Letter opening in the form of the Sword of Toledo. Probably acquired by WFF when he attended the ITT convention in Spain in 1932. Item in the George C. Marshall Museum.

[Item 2087] William F. Friedman

Ivory-colored plastic letter opener with WFF's name on the grip. Item in the George C. Marshall Museum.

[Item 2088] William F. Friedman

Black bookmark with William F. Friedman imprinted on it in gold. Item in the George C. Marshall Museum.

[Item 2089] William F. Friedman

Heavy glass rectangular paperweight. Item in the George C. Marshall Museum.

[Item 2090] William F. Friedman

Eight monocles. Worn by William F. Friedman. Items in the George C. Marshall Museum.

[Item 2091] William F. Friedman

Turquoise eyeglass case, felt with three compartments. Item in the George C. Marshall Museum.

[Item 2092] William F. Friedman

Chinese black skull cap with red tassle at the top. Item in the George C. Marshall Museum.

[Item 2093] William F. Friedman

Crocheted black wool skull cap; made for WFF by Boris Hagelin's wife. Item in the George C. Marshall Museum.

[Item 2094] William F. Friedman

Silver belt buckle with colorful inlay designed by WFF – a Mayan god. Item in the George C. Marshall Museum.

[Item 2095] William F. Friedman

Sigma Chi Key. Fraternity pendant on a gold chain. Back of the pendant is inscribed: Cornell/1956/William Friedman. Membership pendant worn by WFF, a member of the scholarship honor society. Item in the George C. Marshall Museum.

[Item 2096] William F. Friedman

Freemasons lapel pin. Freemasons' emblem on a pin - - open protractor over a right-angle ruler with a blue enamel G in the center. Item in the George C. Marshall Museum.

[Item 2097] William F. Friedman

A game on manila-covered cardboard with red wheel and game instructions. In a yellow box with red label which reads: The Crypto-Set Headquarters Army Game. A new and Exsciting party game. Item in the George C. Marshall Museum.

[Item 2098] William F. Friedman, Kriptor.

Made of pressed wood. The two rotating disks are ivory-colored. This was devised as a game by WFF. Item in the George C. Marshall Museum.

[Item 2099] De-coding device.

Wooden sliding device. Wooden strip with two slots running the length of the object for strips of paper. Twenty-two strips of paper with numbers and alphabets. Two of the strips were used to check the encipherment of the Myer numerical code. Item in the George C. Marshall Museum.

Item 2100-3001

No cards, no items. All the following numbers have been assigned by RMS to material added later, held by the Marshall Museum, or recovered from NSA.

[Item 2100] William F. Friedman

Black silk top hat belonging to WFF in a hat box. Item in the George C. Marshall Museum.

[Item 2101] William F. Friedman

Yellow ribbon with red-white-blue stripe at each edge. It is a ribbon for the American Defense service. Item in the George C. Marshall Museum.

[Item 2102] William F. Friedman, Miscellaneous Army Insignia.

2 Lt. Col. shoulder pins, 4 "U.S." officer collar insignia, 3 "U.S." officer collar insignia (smaller than the other 4). 2 Lt. bars, 2 insignia for an officer, not member of arms or service. Items in the George C. Marshall Museum.

[Item 2103] Mayan stone mask.

Mask with stylized animal features, much like a monkey's. It is 3.5" wide at extreme points. Item in the George C. Marshall Museum.

[Item 2104]

Oil portrait of Elizebeth Friedman. Painted by Dutch artist Leon Engers in 1930. Item in the George C. Marshall Museum.

[Item 2105]

Oil portrait of William F. Friedman. Beautifully framed and executed portrait by Wilson Josey in 1956. Item in the George C. Marshall Museum.

[Item 2106] Medal for Merit.

An open wreath trimmed with blue enamel and 13 white stars. At the center an eagle upon a sheath of arrows. "Novus Ordo Seclorum" is embossed on the disk. A small green wreath hangs between the medal and a pink and white ribbon. 2) ribbon, pink with two white stripes at center. 3) Extra cloth and ribbon pin. 4) wooden box with landscape scene made to house the medal. Item in the George C. Marshall Museum.

[Item 2107]

Friedman, William F., The Friedman Lectures on Cryptology, National Cryptological School, NSA, 22 March 1984.

Six lectures on cryptology delivered by WFF in 1965. 10 bound copies are on the filing cabinet. Declassified by NSA 22 March 1984.

[Item 2108]

Eight boxes of Signal Corps Bulletins

Box 1

March-April 1935.
May-June 1935
July-Aug 1935
Sept, - Oct 1935
Nov. – Dec. 1935
March April 1936
May – June 1936
July-Aug. 1936
Sept. – Oct. 1936
Nov. – Dec. 1936

Box 2

June 1925
March 1926
May 1926
March 1929
July – Aug 1929

Box 3

Sept.-Oct. 1930
Nov.-Dec. 1930

Jan.-Feb. 1931
March-April 1931
May-June 1931
Nov.-Dec. 1931
Jan. – Feb. 1932

Sept.-Oct. 1932
Nov.-Dec. 1932

March-April 1933
July-Aug 1933
Sept.-Oct. 1933
Nov.-Dec. 1933

March-April 1939

Box 4

July to September 1937 22 copies declassified 10/28/81

Box 5

Jan. – March 1938 (2)
Oct. – Dec. 1937 ((2)
July – September 1937 (12)
 July-Sept. 1938 (3)

Box 6

April-June 1939 11 copies
Jan. – March 1939 9 copies

Box 7

Oct-Dec. 1939 11 copies
July-Sept. 1939 2 copies.

Box 8

July-Dec. 1940 (2) copies
April – June 1940 10 copies

[Item 2109]

Charles J. Mendelsohn, An Encipherment of the German Diplomatic Code 7500,
Washington, D.C.: GPO, 1938.

Declassified by NSA 7/25/75. Copy sent by NSA under FOIA.

[Item 2110]

Kruh, Louis, "The Inventions of William F. Friedman," Cryptologia 2,1 (January, 1978).

Article describing WFF's patents. On shelf below cipher devices. See **Item 871** in FC.

[Item 2111]

Deavours, C.A. and James Reed, "Enigma. Part I. Historical Perspective," Cryptologia 1 (1977), pp. 381-391.

[Item 2112]

Articles and clippings removed from folders in the FC are in one acid-free box, catalogued by numbers in the collection. Stored above file cards.

[Item 2113]

Principles of Cryptograms Produced by the IT&T Cypher Machine.

In black binder returned from NSA.

[Item 2114] Red-covered album with certificates and pictures from the dedication of the William F. Friedman Memorial Auditorium, NSA, May 21, 1975.

[Item 2115] Givièrge, Marcel, Course in Cryptography.

English translation of Cours de Cryptographie. In black binder returned from NSA.

[Item 2116] Hagelin Cipher Disk.

In bankers box on desk.

[Item 2117] Friedman, William F., Analysis of a Mechanico-Electrical Cryptograph, U.S. War Department. Office of the Chief Sigbnal Officer. Washington, D.C. : GPO 1934, Part 1.

Friedman, William F., Analysis of a Mechanico-Electrical Cryptograph, U.S. War Department. Office of the Chief Sigbnal Officer. Washington, D.C. : GPO 1935, Part 2.

In black binder returned from NSA. Copy sent through FOIA on shelf.

[Item 2118]

Department of Defense, Industrial Security Manual for Safeguarding Classified Information, 21 September 1956.

Also revised edition June 1, 1960, and March 1, 1965.

[Item 2119] War. Department. Office of the Chief Signal Officer, Washington, D.C., GPO 1934. Principles of Solution of Cryptograms Produced by the I.T.& T. Cipher Machine. Technical Paper. Declassified by NSA 06/17/2010 at the request of Col. Sheldon, Department of History, VMI.

[Item 2120] Kullback, Solomon, General Solution for the Double Transposition Cipher. Technical Paper, Washington, D.C.: GPO 1934. Declassified under FOIA 2010 at the request of Col. Sheldon, Department of History, VMI.

[Item 2121] – ESF tape Track 1 on St. Elizabeth's patient and decoding drawings. Track 2 on Riberbank Labs.

[Item 2122] – ESF tape. The Riverbank years. How the Friedmans got into cryptography.

[Item 2123] – ESF tape. The Riverbank years, pt. 2 and the sound labs.

[Item 2124] – ESF tape. The Chinese ciphers.

[Item 2125] – ESF tape on the FC, Parker Hitt, George Fabyan.

[Item 2126] – ESF tape. On David Kahn and the publication of The Codebreakers.

[Item 2127] – ESF tape on sale on the publication of TSCE. The award of \$100,000 to WFF from the U.S. Government.

[Item 2128] – ESF tape on Prohibition

[Item 2129] – Tape by John R. Friedman

[Item 2130] – ESF tape on inaccurate newspaper articles

[Item 2131] – ESF interview with Bruce Norma, BBC on Purple, Japanese Codes,

[Item 2132] – Interviews by ESF and WFF by RCA on Voynich Manuscript

[Item 2133] – Elizebeth Friedman's personnel file from the National Personnel Records Center in St. Louis, MO. It contains the record of her transfer from the U.S. Coast Guard to the navy Department by executive order No. 8929 effective November 1, 1941, and of her transfer to Treasury Dept. by Executive Order 9666 effective January 1, 1946. We still have no documentation concerning her work with OSS.

[Item 2134] - *The Friedman Legacy*. A Tribute to William and Elizebeth Friedman, Sources in Cryptologic History, Number 3, Center for Cryptologic History, National Security Agency, 2006.

A beautiful tribute volume to WFF with a Foreword by David Gaddy, A biographical sketch of WFF, an introduction to the Six Lectures on Cryptology by WFF himself, and a printed copy

of the lectures. Recently added are nine disks which contain recordings of WFF delivering the lectures.

[Item 2135] Robert J. Hanyok and David P. Mowry, West Wind Clear: Cryptology and the Winds Message Controversy – A Documentary History, U.S. Cryptologic History, Series IV: World War II, Vol. 10., Fort Meade, MD: NSA: Center for Cryptologic History, 2008.

A collection of every document concerning the infamous West Wind Clear message which Navy Captain Safford claimed to have seen. See **Item 254**.

Item 3000

Friedman, William F., Numerous personal items belonging to Col. Friedman. For complete listing see **Item 3000** in vault. Author card.

Item 3001 Silk top hat belonging to WFF. With Family? Museum?

Item 3002

File cabinet containing extensive correspondence to and from the Friedmans on many subjects. See item **Item 2046**

Item 3003

Riverbank Publications and related correspondence. SLC.

Listing of Riverbank Publications and related correspondence.

Item 3004

Miscellaneous newspaper clippings reflecting WFF's varied interests.

