HISTORY OF WORCESTERSHIRE SAUCE

(1837-2012):

EXTENSIVELY ANNOTATED BIBLIOGRAPHY AND SOURCEBOOK

Compiled

by

William Shurtleff & Akiko Aoyagi



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Chronology of Worcestershire sauce

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Timeline of Worcestershire sauce

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DEDICATION AND ACKNOWLEDGMENTS

This book is dedicated to Mr. John Wheeley Lea and Mr. William Henry Perrins - the founders. And to Brian Keogh and Louise Wright - authors and historians.

Part of the enjoyment of writing a book lies in meeting people from around the world who share a common interest, and in learning from them what is often the knowledge or skills acquired during a lifetime of devoted research or practice. We wish to give deepest thanks...

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This book, no doubt and alas, has its share of errors. These, of course, are solely the responsibility of William Shurtleff.

■ This bibliography and sourcebook was written with the hope that someone will write a detailed and well-documented history of this subject.

INTRODUCTION

Brief chronology of Worcestershire sauce:

Millions of people throughout the English-speaking world first tasted soy sauce as the main secret ingredient in Lea & Perrins' Worcestershire Sauce.

Lea & Perrins' factory was located on the River Severn in Worcester, a city and county town of Worcestershire in the West Midlands of England – for centuries a major transportation hub – first by water, then (starting in 1850) by rail.

Soy sauce remained the main secret ingredient until World War II, when supply problems caused it to be replaced by hydrolyzed vegetable protein (HVP) (Garnett 1991). Other important ingredients have long been vinegar and anchovies (or essence of anchovy).

1823 Jan. 1 – Mr. John Wheeley Lea, an established chemist, takes into partnership Mr. William Henry Perrins, at his chemist shop on Broad Street, Worcestershire. They prepare a catalog for the occasion which lists over 300 items, including herbs and spices from around the world (The Road from Aston Cross, by Louise Wright 1975, p. 30; The Secret Sauce: A History of Lea & Perrins, by Brian Keogh, 1997, p. 1).

1823 Jan. 21 – Partnership between William Perrins and James Perrins (chemists and druggists in the County of Worcester, England) is dissolved by mutual consent. James Perrins plans to carry on the business alone (London Gazette, p. 111).

1837 – John Wheeley Lea and William Henry Perrins, chemists and partners since Jan. 1823, start to make Lea and Perrin's Worcestershire Sauce in the back of their chemist shop at 68 Broad Street in Worcester, England. Worcester is a thriving commercial town on the River Severn, which connects it to the Bristol Channel and international maritime trade (Keogh 1997, p. vii, 1-2; Wright 1975. Note: We are not told by Wright when Lea & Perrins Worcestershire sauce started to be made commercially, or when the first bottle of Worcestershire sauce was sold – a glaring omission!).

Late 1830s – "In a show of great business acumen, Lea & Perrins managed to get cases of their sauce onto all ocean liners that came in and out of British waters. A fee was paid to the on-board stewards, who served the sauce in the dining rooms. Passengers tried the sauce, and, intrigued, would then... buy a bottle to take home. It didn't take long for word to get around, and Lea & Perrins' fame grew quickly"

(Hartley 2005, p. 76).

1840 Oct. 17 – Lea, Perrins, & Smith (of Worcester and Cheltenham) run a small ad titled "Worcestershire Sauce" in the Manchester Guardian, England (p. 1). It states: "The Worcestershire Sauce is prepared by us from the favourite recipe of a nobleman of acknowledged gout [taste]; it possesses a peculiar piquancy; it is applicable to almost every dish, on account of the superiority of its zest; the diffusible property of its delicate flavour renders it the most economical, as well as the most useful of sauces." This ad is the earliest known proof of the sauce's existence.

1840 – John Duncan & Sons, the New York agent for Lea & Perrins, begins to handle Worcestershire Sauce (Wright 1975,

1842 – Lea & Perrins sells 636 bottles of their sauce (Wright 1975, p. 31).

1843 March 5 – This ad appears in the *Observer* (London), p. 1. "Lea and Perrin's 'Worcestershire Sauce, prepared from the recipe of a nobleman in the country. The above celebrated Sauce, has from the time of its introduction, been steadily progressing in public favour; its peculiar piquancy, combined with exquisite flavour, establish it of a character unequalled in the sauces. Noblemen and others of acknowledged gout [taste], pronounce it to be 'the only good sauce;' and for enriching gravies or as a zest for fish, curries, steaks, game, cold meat, &c. especially unrivalled. As a rapidly increasing inquiry is now made for it in all parts of the kingdom, the proprietors beg to state that druggists, grocers, and others may be supplied by their agents: - Messrs. Barclay and Sons, Farringdon-street; Mr. J. Harding, 59, Ling St., Stepney; Messrs. Metcalfe and Co., 16, Southampton Row; and by the wholesale oil and Italian warehousemen in London, upon the same terms as at their warehouse at Worcester. - Sold retail by the usual venders of sauces in half-pint bottles at 1s 6d. pints 2s. 6d. and quarts 5s. each, with the Proprietors' stamp over the cork of every bottle"

This is the earliest document seen that gives prices for Lea and Perrins' sauce, or that shows them selling it in three sizes of bottles, or that uses the word "celebrated" or the phrase "only good sauce" to describe this sauce. They have picked up their first big-name distributor - Barclay and Sons, in London. A very similar ad also appeared in 1843 in The Pictorial Times (England).

1844 July 15 – Ad in *Times* (London, p. 11). "Sold wholesale by the proprietors, Messrs. Lea and Perrin, Worcester; Messrs. Barclay and Sons, Farringdon street; and the principal oil and Italian warehousemen in London;..." Lea &

Perrins is now selling their sauce wholesale.

1844 Oct. 4 – An ad for Lea & Perrin's Worcestershire Sauce appears in The Indian Mail. It is served in the cabin of the Great Western Steam-ship. This is the earliest ad seen for Worcestershire Sauce outside of England.

1844 – Production figures for the year show a record 1,326 dozen 12 oz and 1,314 dozen 6 oz bottles; this totals 31,680 bottles made and bottled in the back of the shop at 68 Broad Street. All bottles are still hand-filled. They soon rented a warehouse on the Quay, then another on Bank St. (Keogh 1997, p. 64).

1845 April 15 – Ad in *Times* (London, p. 11): "... is pronounced by connoisseurs to be the only good sauce for enriching gravies, or as a zest for fish, curries, soups, game, steaks, cold meat, &c., and its rapidly increasing sale has induced the proprietors to open a warehouse in London. The very general and decided approbation bestowed on this sauce having encouraged imitations, the proprietors have adopted Betts's patent metallic capsules, on which are embossed the words 'Lea and Perrins' Worcestershire Sauce,' as a means of protection. Sold wholesale, retail, and for exportation by the proprietors, Vere-street, Oxford-street; Crosse and Blackwell, Soho-square; Barclay and Sons, Farringdonstreet; Metcalfe and Co., Southampton-row; and by venders of sauces generally." This is the earliest known use of the word "connoisseurs" or the word "imitations," or the word "exportation" (or "export" or "exports") in connection with this sauce.

Lea & Perrins has opened a new office in London ("Verestreet," "Oxford-street"), is exporting, and has picked up their biggest distributor to date - Crosse and Blackwell, London. It is a time of major expansion.

1845 – A manufactory for Lea & Perrins sauce is set up in Bank Street, Worcester (Wright 1975, p. 31).

1846 May 9 - Ad by Lea and Perrins titled "Worcestershire Sauce testimonials" in The New Zealand Journal (p. 107). They "beg to submit the following Testimonials, as a guarantee to the public of the superior qualities of this sauce, and also to caution purchasers against worthless imitations, by observing their names are affixed to the metallic capsule which secures the cork of each bottle, to imitate which is fraud." This is the earliest ad seen for this sauce in New Zealand or Australia. It is also the earliest such ad seen that mentions "fraud."

1846 Sept. 19 – Ad by C.V. Earle, agent for Lea & Perrins in the Maitland Mercury & Hunter River General Advertiser (New South Wales, Australia, p. 3). "Celebrated Worcester Sauce, Patronized by the Royal Family." This is the earliest

ad seen for this sauce in Australia, and the first to use the word "Royal" or to claim that it is "Patronized by the Royal Family." Note the widely-used spelling "Worcester Sauce."

1846 Dec. 30 – Ad for Lea & Perrins' Worcestershire Sauce states: "... may be obtained of the most respectable dealers in sauces, universally; the wrapper and label of each bottle bearing the names of Lea and Perrins; without which, it cannot be genuine" (Manchester Guardian (England), p. 1). This is the earliest document seen that mentions the word "universal" or the word "wrapper" or the word "label" or the word "genuine" in connection with this sauce. Clearly imitations in England were becoming more of a problem.

1847 Oct. 6 – "Lea and Perrin's Worcestershire Sauce,... is acknowledged to contribute to health by its stomachic and digestive properties, is used and recommended by the faculty, and patronised by the nobility and gentry." (Times (London), p. 7). Earliest known use of the words "health" or "digestive" or "nobility" in connection with this sauce.

1850 July 10 – Earliest known use of the term "Worcester Sauce" in New Zealand (New Zealander, Auckland, p. 2).

1850 – The Great Western is the first railway to arrive in Worcester; mechanical transport begins (Keogh 1997, p. 2).

1851 June 9 – Ad for P.T. Barnum's menagerie mentions "Worcestershire sauce" (Hartford Courant, p. 3). The earliest mention of this sauce in the United States.

1851 – Worcestershire sauce is first called for as an ingredient in a recipe ("Wild fowl sauce") in a cookbook – published in England (Soyer 1851, p. 103). It is first called for in a U.S. cookbook in 1857.

1852 March 10 – An article in the "New York City" section under "The label forgeries ended" begins: "Some two years ago a Pearl-street importer, named George Raphael, was indicted at the instance of Messrs. Duncan & Sons, who alleged that defendant had sold large quantities of Worcestershire Sauce, with forged labels, in the name of Lea & Perrins, the English manufacturers. The case was finally brought to trial." The Jury returned "a verdict of Not Guilty. The defendant was therefore honorably discharged, and thus ends a two-years' litigation." (New York Daily Times, p. 1). This is the earliest document seen that mentions "Duncan" or "Duncan & Sons," or that concerns a lawsuit, in connection with Lea & Perrins sauce.

1854 March 1 – "Business notices: "Lea & Perrin's Worcestershire Sauce. - Is the only sauce to which a medal has been awarded by the Juries in the Crystal Palace at New York, for foreign exhibitors, and in order to guard the

public against numerous counterfeits the proprietors deem it requisite to state that the genuine Sauce can at all times be obtained of the wholesale agents for the United States, Messrs. John Duncan & Sons, New York." (New York Daily *Times*, p. 4). This is the earliest document seen that mentions a medal or the word "counterfeits" (or "counterfeit," etc.) in connection with this sauce.

1854 March 30 – An ad by Lea & Perrins states: "The celebrity of this sauce has extended to every quarter of the globe, and its efficacy in promoting the general health is becoming daily more observed and acknowledged. In the United States it is held to be the most agreeable condiment, and is esteemed for its tonic and invigorating properties, its habitual use enabling the stomach perfectly to digest the food."

"On the continent of Europe these qualities have been testified to, by a gentleman who writes to Lea & Perrins thus - 'I have carried a bottle of your Worcestershire Sauce in a tour I have just completed through Spain and Portugal, and I believe I owe my present state of health to its use. Your sauce is stomachic, and I think medicinal. I can with truth say there is nothing in a traveller's baggage so essential to his comfort, at least in these countries, as your sauce.' (Times (London), p. 11). This is the earliest document seen that uses the word "medicinal" (or "medicine" or "medical") in connection with this sauce, or that mentions a letter from a man who has carried a bottle of this sauce through Spain and Portugal.

1854 – "Extract of a letter from a medical gentleman at Madras [India], to his brother at Worcester, May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made." This is the earliest document seen that contains (even approximately) these words: "Extract of a letter from a medical gentleman at Madras, to his brother at Worcester..." or "Tell Lea & Perrins that their Sauce is highly esteemed in India,..." or "the most wholesome sauce made." This is also the earliest document seen with an illustration of a bottle of this sauce (In: Charles Pope. 1854. Yearly Journal of Trade. 24th ed. London. See p. 84 near end).

1855 – Yearly sales of the Worcestershire Sauce are up to 30,000 bottles. "Travellers [traveling salesmen] covered Great Britain and there were agencies in Australia and the United States" (Wright 1975, p. 31).

1861 Sept. 3 – Ad for "Lea & Perrins' celebrated Worcestershire sauce" notes: "On the Breakfast, Luncheon, Dinner or Supper Table, a cruet containing 'Lea & Perrins' Worcestershire Sauce' is indispensable" (Hartford Daily Courant (Connecticut), p. 3). Earliest document seen that mentions the use of a "cruet" (or "cruets") in connection with Worcestershire sauce.

1862 Jan. 2 - Ad for "Lea & Perrins celebrated Worcestershire sauce" states: "Extensive frauds. L. & P. having discovered that several of the Foreign Markets have been supplied with Spurious Imitations of the 'Worcestershire Sauce,' the labels of which closely resemble those of the Genuine Sauce, and in one or more instances the names of L. & P. forged, they have deemed it their duty to caution the public, and to request purchasers to see that the name of Lea & Perrins are upon the Wrapper, Label, Stopper,

"L. & P. further give notice, that they will proceed against any one who may infringe upon their right, either by manufacturing or vending such imitations, and have instructed their correspondents in the various parts of the world, to advise them of such infringements" (Quebec Mercury, Canada), p. 1). This is the earliest document seen showing the sauce is in Canada, or containing a threat "to proceed against" infringers.

1866 Jan. 1 – Lea & Perrins have sold their three chemists shops and are now free to concentrate on making and selling their sauce - which is increasingly popular worldwide (Keogh 1997, p. 65).

1866 Aug. 25 – A new brand of Worcestershire sauce (Phillip's) is now being advertised (Bombay Times and Journal of Commerce, p. 7) and sold by Phillips & Company, Ltd. of Bombay – for significantly less than the price of Lea and Perrins' sauce. This is the earliest document seen that mentions a brand of Worcestershire sauce made by a company other than Lea and Perrins.

1870 Dec. 12 – An article in *The Argus* (Melbourne, Victoria, Australia) notes that James Dunlea, James Nicholson, and Thomas and Richard Fogarty were charged (by an agent of Lea and Perrins) with having on the 20th November last sold certain bottles containing, an article called Worcestershire sauce, together with a forged or counterfeited trade-mark, knowing the same to be the forged or counterfeited trademark of Lea and Perrins, used by them in an article known as Worcestershire sauce. The judge agreed. This is the earliest document seen that uses the word "trade-mark" (or "trademark") in connection with Worcestershire sauce.

1872 Feb. 2 – An article titled "Worcestershire sauce – Rival manufacturers in court," in the New York Times tells how Mr. John P. Duncan of Union-square proffered "a complaint against Messrs. James Stevens and Edward Cole, composing the firm of Stevens & Cole, carrying on business at No. 500 Washington-street, charging them with forging the trademark of 'Lea & Perrin's Worcestershire Sauce' and selling a counterfeit sauce put up in exact imitation of the genuine

article, of which Duncan & Son are the sole agents in this country. The accused were arrested later in the day and arraigned."

1873 Nov. – The earliest known recipe for Worcestershire sauce (and the earliest in which soy sauce is used as an ingredient) is published in the Notes & Queries" section of the magazine Manufacturer and Builder (New York, p. 264). We read: "[801] Worcestershire sauce [homemade]. – This is quite a complex condiment. It is made of wine vinegar, 11/2 gallon; walnut catsup, 1 gallon; mushroom catsup, 1 gallon; Madeira wine, ½ gallon; Canton soy [China], ½ gallon; moist sugar, 2½ pounds; salt, 19 ounces; powdered capsicum, 3 ounces; pimento, 1½ ounces,... Boil 2 pounds hog's liver for 12 hours in 1 gallon of water, add water continually so as to keep up the quantity of one gallon; mix the boiled liver thoroughly with the water, strain through a coarse sieve, and add this to the above mixture..."

1874 March 3 – A humorous article, titled "The U.S. Circuit Court: Worcestershire sauce," pokes fun at Lea & Perrins' boastful claim to be "the only persons living, who have any show of right to manufacture stuff of this kind." But "yet one Charles Hastings of Chicago dared to get up a compound in imitation of the one they prepare..." This is the earliest reference seen to Worcestershire sauce seen in a Chicago newspaper.

1875 March 15 – Ad titled "Caution – In consequence of spurious imitations of Lea and Perrins Sauce,..." states: "... which are calculated to deceive the public, Lea and Perrins have adopted a new label bearing their signature, Lea and Perrins, which will be placed on every bottle of Worcestershire Sauce after this date, and without which none is genuine" (Times (London), p. 1). This is the earliest document seen that mentions a plan to use the Lea & Perrins' signature on the labels of their bottles to distinguish their genuine article from imitations. However the signature itself is not shown.

1875 May 16 – A long display ad by John Duncan's Sons in the New York Times (p. 6) begins: "Supreme Court – General term. John W. Lea et al. against Sundry Counterfeiters." It proceeds to summarize the Supreme Court's rulings in favor of the plaintiff concerning "false representation and deceit." This is the earliest document seen that mentions the Supreme Court in connection with Worcestershire sauce.

1874 Dec. 24 – Ad by John Duncan's Sons titled "There is no relish in the world which is so universally liked..." (New York Times, p. 6). Earliest document seen with these words, later often repeated, in the title.

1875 Oct. 3 – Ad by Lea & Perrins titled "Lea & Perrins'

is the only genuine Worcestershire Sauce" (Atlanta Constitution, p. 3). Earliest ad seen for this sauce in a Georgia newspaper.

1875 – Holbrook's Worcestershire Sauce is now being made in England by The Birmingham Vinegar Co. (The Law Journal, England) 1888, p. 99-100).

1875 – The demand for Lea & Perrins Worcestershire Sauce had spread over much of the United States. It was agreed to import the sauce in casks and bottle it in New York. The secret formula was later divulged to the Duncans and the rights of manufacture in the USA were granted to them (Wright 1975, p. 33).

1876 March 10 – William Espenmuller now makes "Worcester sauce" in the United States at 281/2 Indiana Place, Boston (Boston Daily Globe, p. 8). He is an early competitor to Lea & Perrins' sauce in the USA.

1876 July 26 – The High Court of Justice in England rules that Lea and Perrins, of Worcester, the plaintiff, do not own the rights to the name "Worcestershire" in connection with a sauce such as that made by their company. Richard Millar and Co. is free to continue using this name. While Lea and Perrins appeared to be the first to use that name, starting in about 1836, within no more than two years "other people, of whom one Batty seemed to be the first, began to sell an article under the same name" (Times, London), p. 11).

1880 Jan. 5 – Display ad by John Duncan's Sons titled "Great reduction in price: Lea & Perrins signature on the bottle of the genuine Worcestershire sauce" includes large illustrations which show: (1) The earliest known "Lea & Perrins" signature in an ad for this sauce. (2) A bottle of the sauce (San Francisco Chronicle, p. 2).

1881 – A book titled *Coffee*, by Francis Beatty Thurber, contains a long appendix that covers many different subjects unrelated to coffee. In the section titled "Chinese notes" (p. 279+) we read: "Most of the soy manufactured here [in Canton] is shipped to England, where it is used in large quantities as a base for the manufacture of sauces." Note: Maybe the soy sauce used to make Worcestershire sauce in England came from Canton! In what other sauces was it used in England at this time?

1883 March 11 – Worcestershire sauce is now being sold in Los Angeles (*Los Angeles Times*, "The city" section).

1884 Feb. 9 – The earliest known "History of Worcestershire sauce" explains: "A scrutiny of the label will show that it is prepared 'from the recipe of a nobleman in the county.' The nobleman is Lord Sandys, and Messrs. Lea & Perrins's

connection with the sauce came about rather curiously" (New York Times, p. 3, from London World). This is also the earliest document seen that mentions "Lord Sandys."

- **1886 July 25** During most of the 1800s, the ingredients used in making Worcestershire sauce were a carefully kept secret. Allan Forman, in writing about soy sauce, states: "From the East Indies to England, where it was still more spiced and flavored and patriotically called Worcestershire sauce." He is the first to state that soy sauce is used as a key ingredient in Worcestershire sauce (Washington Post, p. 5).
- 1889 May 4 Gawne's Worcestershire sauce is now being made in Dunedin, New Zealand. It is advertised as equal in quality to the imported sauce at half the price (Southland Times (Otago, New Zealand, p. 3; New Zealand Tablet, 15 Jan. 1892, p. 16).
- 1895 Jan. 24 Holbrook's Worcestershire Sauce is now being advertised and sold in the United States (Hartford Daily Courant (Connecticut), p. 12).
- 1896 It has become necessary to build a new factory at Midland Road in Worcester. Lea and Perrins begin to make the sauce there in 1896. A photo (Wright 1975, facing p. 33) shows the front of this building at a later date. Despite a disastrous fire in 1965, Lea & Perrins Worcestershire Sauce continued to be made at this plant at least until the 1980s (Garnett 1991).
- 1902 ca. Duncan & Sons begins making Lea & Perrins Worcestershire sauce in New York City (Wright 1975, p. 33).
- 1902 For the first time in a cookbook, it is stated that soy sauce "forms the foundation of" Worcestershire sauce (Rorer 1902, p. 334-35).
- 1904 Based on chemical analyses in a laboratory, Fesca shows that soy sauce is an ingredient in Worcestershire sauce (p. 159-63). Many subsequent documents confirm this fact.
- **1905 Jan. 7** Ad by Lea and Perrins in the *Japan Weekly* Mail (Yokohama, p. 24) states: "The original and genuine Worcestershire. By Royal warrant to His Majesty the King." This is the earliest known ad to contain the last sentence in connection with this sauce.
- 1910 Hotel St. Francis: Book of Recipes and Model Menus. L'Art Culinaire, by the legendary Victor Hirtzler, a native of France and one of America's first "celebrity chefs," is published. He was chef of the Hotel St. Francis in San Francisco from 1904 (the year the hotel was built) until 1926. The lavish hotel was a success right from the start. It "was the best known hotel in San Francisco and probably the

- best known west of Chicago" [Illinois]. "If the hotel was a grand theater, Victor was its greatest actor." Worcestershire sauce (called simply "Worcestershire," as in "a dash of Worcestershire," in 8 recipes) is used as an ingredient in a surprising 20 recipes in this cookbook – thus clearly showing its standing as a highly respected sauce and ingredient in the USA.
- **1914 June 8** An article in the *Times* (London, p. 22) titled "Worcester: The making of a famous sauce," states: "Before being bottled, the sauce is allowed to mature in barrels in the cellars of the factory." "Seventy years ago [i.e., 1844] the output of sauce was very limited and was practically all consumed locally. At that time, and for twenty years afterwards, the bottles were filled from a jug carried in the hand."
- 1923 Jan. 29 A recipe for "Chop suey" in the Quebec Daily Telegraph (Canada) first refers to soy sauce as "the Worcestershire of China."
- 1923 Mrs. Beeton's Cookery, by Isabella Mary Beeton (of England) contains a recipe for "Worcestershire sauce" (p. 136) in which soy [sauce] is used an ingredient – a relatively late recipe of this type. Another ingredient is walnut ketchup, which may well have served as a substitute for soy sauce.
- **1930 June 11** Lea and Perrins is sold to H.P. Foods Ltd.
- 1935 Dec. Kar-Kay Hygienic Worcestershire Sauce, made and sold by Carque Natural Foods of California (Los Angeles), is now on the market (House of Better Living Newsletter, Nov/Dec. 1935, p. 3).
- 1940-1945 During World War II, when soy sauce became extremely difficult to obtain, its use was discontinued by Lea & Perrins; it was not reintroduced following the end of World War II, but was replaced by HVP (hydrolyzed vegetable protein – which is less expensive) (Letter from J.W. Garnett, Factory General Manager, Lea & Perrins Ltd. 1991. Jan. 29).
- 1972 Chef Bonneau's Premium Worcestershire Sauce. made by Bonneau Products Co. (Portland, Oregon) is the earliest known vegetarian Worcestershire sauce; it is free of the traditional anchovies.
- 1975 The Road from Aston Cross: An Industrial History, by Louise Wright published (xix + 79 pages). While it is basically a history of the Midland Vinegar Co, it contains a good history of Lea & Perrins.
- 1978 April 19 Craig Claiborne, food writer par excellence, writes "The Saga of a Sauce" [Worcestershire] in the New

York Times (p. C1, C8). His main source seems to have been Lea & Perrins. The story includes many of the myths that Lea & Perrins have invented and disseminated. For example: "The story of this sauce is said to date back to the early 1800s, when the governor general of Bengal returned from his colonial post to his native land, England. He brought with him a formula for a sauce that had been created in India, one which he had enjoyed at his home and offered to his guests."

1997 – The Secret Sauce: A History of Lea & Perrins, by Brian Keogh published (viii + 135 p.). The best history of Lea & Perrins seen to date, by the company's longtime archivist and accountant.

2005 – The Lea & Perrins Worcestershire Sauce Cookbook. by Paul Hartley published (80 p.). Includes many early, handsome graphics from Lea and Perrins plus a 3-page chronology of the company.

2005 – Lea & Perrins is bought by U.S. food company Heinz (H.J. Heinz Company).

2012 March – More than 100 records in this book state that soy sauce was used as an ingredient in Worcestershire sauce or call for soy sauce as an ingredient in a recipe or formula for homemade Worcestershire sauce.

Search engine keywords:

History of Worcestershire sauce History of Lea & Perrins History of Lea and Perrins History of Lea & Perrins Worcestershire sauce Bibliography of Worcestershire sauce Bibliography of Lea & Perrins Bibliography of Lea and Perrins Bibliography of Lea & Perrins Worcestershire sauce Chronology of Worcestershire sauce Chronology of Lea & Perrins Chronology of Lea and Perrins Chronology of Lea & Perrins Worcestershire sauce Timeline of Worcestershire sauce Timeline of Lea & Perrins Timeline of Lea and Perrins Timeline of Lea & Perrins Worcestershire sauce

ABOUT THIS BOOK

This is the most comprehensive book ever published about the history of Worcestershire sauce. It has been compiled, one record at a time over a period of 35 years, in an attempt to document the history of this subject and of its relationship to soy sauce. It is also the single most current and useful source of information on this subject.

This is one of more than 100 books compiled by William Shurtleff and Akiko Aoyagi, and published by the Soyinfo Center. It is based on historical principles, listing all known documents and commercial products in chronological order. It features detailed information on:

- 30 different document types, both published and unpublished.
- 516 published documents extensively annotated bibliography. Every known publication on the subject in every language.
- 12 original Soyinfo Center interviews and overviews never before published.
- 12 unpublished archival documents
- 9 commercial Worcestershire sauce products.

Thus, it is a powerful tool for understanding the development of this subject from its earliest beginnings to the present.

Each bibliographic record in this book contains (in addition to the typical author, date, title, volume and pages information) the author's address, number of references cited, original title of all non-English language publications together with an English translation of the title, month and issue of publication, and the first author's first name (if given). For most books, we state if it is illustrated, whether or not it has an index, and the height in centimeters.

For commercial soy products (CSP), each record includes (if possible) the product name, date of introduction, manufacturer's name, address and phone number, and (in many cases) ingredients, weight, packaging and price, storage requirements, nutritional composition, and a description of the label. Sources of additional information on each product (such as advertisements, articles, patents, etc.) are also given.

A complete subject/geographical index is also included.

ABBREVIATIONS USED IN THIS BOOK

A&M = Agricultural and Mechanical Agric. = Agricultural or Agriculture

Agric. Exp. Station = Agricultural Experiment Station

ARS = Agricultural Research Service ASA = American Soybean Association

Assoc. = Association, Associate

Asst. = AssistantAug. = AugustAve. = AvenueBlvd. = Boulevard bu = bushel(s)ca. = about (circa)

cc = cubic centimeter(s)Chap. = Chapter cm = centimeter(s)

Co. = companyCorp. = Corporation Dec. = December

Dep. or Dept. = Department

Depts. = Departments

Div. = DivisionDr = Drive $E_{\cdot} = East$

ed. = edition or editor e.g. = for exampleExp. = Experiment Feb. = February

floz = fluid ounce(s)ft = foot or feet

gm = gram(s)ha = hectare(s)i.e. = in other wordsInc. = Incorporated

incl. = including

Illust. = Illustrated or Illustration(s)

Inst. = Institute $J_{\cdot} = Journal$

J. of the American Oil Chemists' Soc. = Journal of the

American Oil Chemists' Society

Jan. = January kg = kilogram(s)km = kilometer(s)Lab. = Laboratory Labs. = Laboratories

lb = pound(s)Ltd. = Limitedmcg = microgram(s)mg = milligram(s)ml = milliliter(s)

mm = millimeter(s) $N_{\cdot} = North$

No. = number or NorthNov. = November

Oct. = Octoberoz = ounce(s)p. = page(s)

photo(s) = photograph(s)P.O. Box = Post Office Box

Prof. = Professor

psi = pounds per square inch R&D = Research and Development

Rd. = RoadRev. = Revised

RPM = revolutions per minute

S. = South

SANA = Soyfoods Association of North America

Sept. = September

St. = Street

tonnes = metric tonstrans. = translator(s)Univ. = University

USB = United Soybean Board

USDA = United States Department of Agriculture

Vol. = volumeV.P. = Vice President

vs. = versus $W_{\cdot} = West$

°C = degrees Celsius (Centigrade)

°F = degrees Fahrenheit > = greater than, more than

< = less than

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For those using a Mac without Acrobat Reader: Safari is often the default browser. Click "Edit" in the toolbar at top. In the dropdown click "Find," then click "Find..." again. A search bar will open across top of screen with a search box at right. In this box type a word or phrase you would like to search, such as China or Rockefeller Foundation. Click "Done" then scroll through the various matches in the book.

Chronological Order: The publications and products in this book are listed with the earliest first and the most recent last. Within each year, references are sorted alphabetically by author. If you are interested in only current information, start reading at the back, just before the indexes.

A Reference Book: Like an encyclopedia or any other reference book, this work is meant to be searched first - to find exactly the information you are looking for - and then to be read.

How to Use the Index: A subject and country index is located at the back of this book. It will help you to go directly to the specific information that interests you. Browse through it briefly to familiarize yourself with its contents and format.

Each record in the book has been assigned a sequential number, starting with 1 for the first/earliest reference. It is this number, not the page number, to which the indexes refer. A publication will typically be listed in each index in more than one place, and major documents may have 30-40 subject index entries. Thus a publication about the nutritional value of tofu and soymilk in India would be indexed under at least four headings in the subject and country index: Nutrition, Tofu, Soymilk, and Asia, South: India.

Note the extensive use of cross references to help you: e.g. "Bean curd. See Tofu."

Countries and States/Provinces: Every record contains a country keyword. Most USA and Canadian records also contain a state or province keyword, indexed at "U.S. States" or "Canadian Provinces and Territories" respectively. All countries are indexed under their region or continent. Thus for Egypt, look under Africa: Egypt, and not under Egypt. For Brazil, see the entry at Latin America, South America: Brazil. For India, see Asia, South: India. For Australia see Oceania: Australia.

Most Important Documents: Look in the Index under "Important Documents -."

Organizations: Many of the larger, more innovative, or pioneering soy-related companies appear in the subject index - companies like ADM / Archer Daniels Midland Co., AGP, Cargill, DuPont, Kikkoman, Monsanto, Tofutti, etc. Worldwide, we index many major soybean crushers, tofu makers, soymilk and soymilk equipment manufacturers, soyfoods companies with various products, Seventh-day Adventist food companies, soy protein makers (including pioneers), soy sauce manufacturers, soy ice cream, tempeh, soynut, soy flour companies, etc.

Other key organizations include Society for Acclimatization (from 1855 in France), American Soybean Association, National Oilseed/Soybean Processors Association, Research & Development Centers (Peoria, Cornell), Meals for Millions Foundation, and International Soybean Programs (INTSOY, AVRDC, IITA, International Inst. of Agriculture, and United Nations). Pioneer soy protein companies include Borden, Drackett, Glidden, Griffith Labs., Gunther, Laucks, Protein Technologies International, and Rich Products.

Soyfoods: Look under the most common name: Tofu, Miso, Soymilk, Soy Ice Cream, Soy Cheese, Soy Yogurt, Soy Flour, Green Vegetable Soybeans, or Whole Dry Soybeans. But note: Soy Proteins: Isolates, Soy Proteins: Textured Products, etc.

Industrial (Non-Food) Uses of Soybeans: Look under "Industrial Uses ..." for more than 17 subject headings.

Pioneers - Individuals: Laszlo Berczeller, Henry Ford, Friedrich Haberlandt, A.A. Horvath, Englebert Kaempfer, Mildred Lager, William Morse, etc. Soy-Related Movements: Soyfoods Movement, Vegetarianism, Health and Dietary Reform Movements (esp. 1830-1930s), Health Foods Movement (1920s-1960s), Animal Welfare/Rights. These are indexed under the person's last name or movement

Nutrition: All subjects related to soybean nutrition (protein quality, minerals, antinutritional factors, etc.) are indexed under Nutrition, in one or more of 14 subcategories.

Soybean Production: All subjects related to growing, marketing, and trading soybeans are indexed under Soybean Production, e.g., Soybean Production: Nitrogen Fixation, or Soybean Production: Plant Protection, or Soybean Production: Variety Development.

Other Special Index Headings: Browsing through the subject index will show you many more interesting subject headings, such as Industry and Market Statistics, Information (incl. computers, databases, libraries), Standards, Bibliographies (works containing more than 50 references), and History (soy-related).

Commercial Soy Products (CSP): See "About This Book."

SoyaScan Notes: This is a term we have created exclusively for use with this database. A SoyaScan Notes Interview contains all the important material in short interviews conducted and transcribed by William Shurtleff. This material has not been published in any other source. Longer interviews are designated as such, and listed as unpublished manuscripts. A transcript of each can be ordered from Soyinfo Center Library. A SoyaScan Notes Summary is a summary by William Shurtleff of existing information on one subject.

"Note:" When this term is used in a record's summary, it indicates that the information which follows it has been added by the producer of this database.

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- 3. An asterisk in a listing of the number of references [23* ref] means that most of these references are **not** about soybeans or soyfoods.

Documents Owned by Soyinfo Center. Lack of an * at the end of a reference indicates that the Soyinfo Center Library owns all or part of that document. We own roughly three fourths of the documents listed. Photocopies of hard-to-find documents or those without copyright protection can be ordered for a fee. Please contact us for details.

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About the Soyinfo Center. An overview of our publications, computerized databases, services, and history is given on our website.

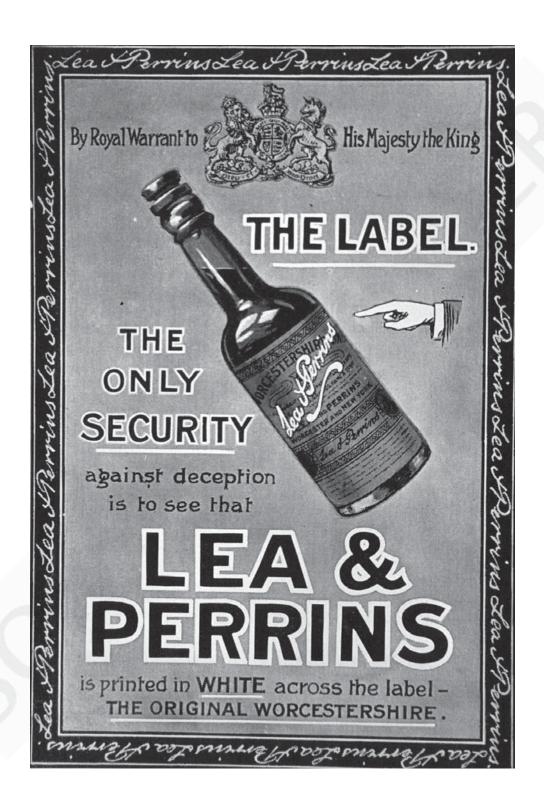
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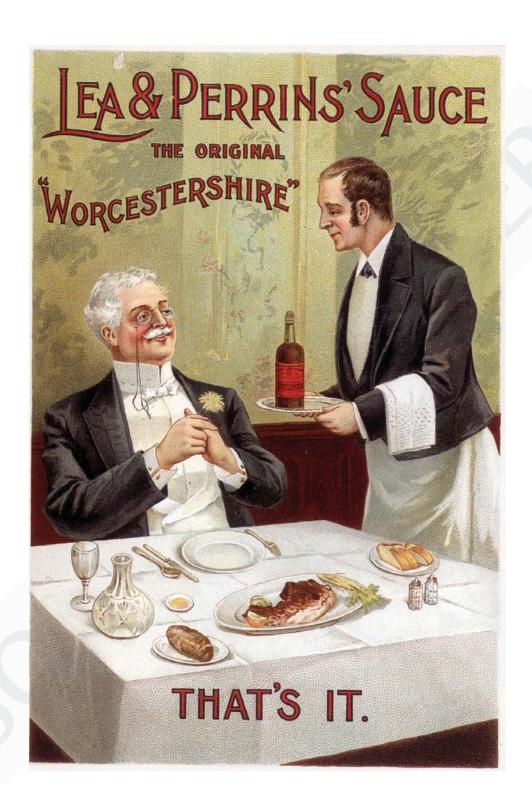
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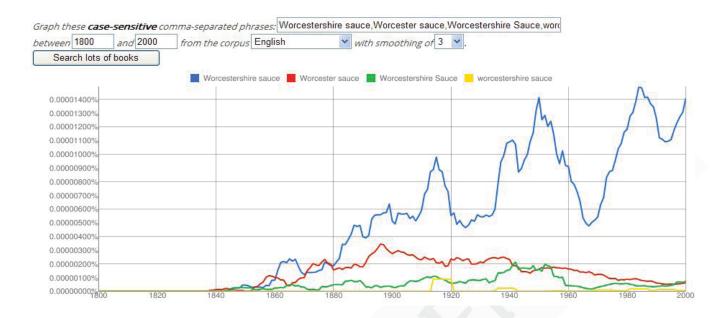


The graphics on this page and the next three pages are (courtesy of Lea & Perrins) from the colorful The Lea & Perrins Worcestershire Sauce Cookbook, by Paul Hartley (Absolute Press, 2005)















HISTORY OF WORCESTERSHIRE SAUCE

- 1. London Gazette (The). 1823. [Partnership between William Perrins and James Perrins is dissolved]. No. 17889. Jan. 21.
- Summary: "Notice is hereby given, that the Partnership subsisting between William Perrins and James Perrins, of Evesham, in the County of Worcester, Chemists and Druggists, was this day dissolved by mutual consent; and that the business will be carried on by the said James Perrins alone, who will receive or pay all bills due to or from the said concern,-Witness our hands this 2d day of December 1822."

Note 1. A typed statement in one of the Lea & Perrins historical scrapbooks (Fair Lawn, New Jersey) states: "The partnership between Mr. William Perrins of Evesham and Mr. John Wheeley Lea to carry on the Chemists and Druggists business at 68 Broad Street, Worcester, was announced 1st January 1823 in Number 17889 of The London Gazette, published January 21st 1823. Eventually in 1837, The Original and Genuine Lea & Perrins Worcestershire Sauce was produced commercially, a small quantity having been made up some years previously from the recipe of a Nobleman of the County, and after a period of maturation, the potentialities of the Sauce were recognized by the partners. Lea & Perrins Worcestershire Sauce became popular almost at once,..."

Note 2. Letter from Jessica Portz, Rare Books & Special Collections, University of Minnesota at Minneapolis. 2001. June 4. A careful examination of this issue (21 Jan. 1823) and of all issues from Jan. 1 to March 1, 1823, reveals no announcement of a partnership between Mr. Perrins and Mr. Lea. Further investigation reveals "that The London Gazette lists only the dissolution of partnerships and does not announce the formation of partnerships. At least this was the case in 1823." An index to the journal for 1823, which is attached, shows this clearly.

Note 3. The two men said to have started making Lea & Perrins Worcestershire sauce in 1837 were John Wheeley Lea and William Henry Perrins. How are the William Perrins and James Perrins above related to the William Henry Perrins of Worcestershire sauce fame? If the two William Perrins are one and the same person, how did the dissolution of this partnership relate to his formation of a partnership with John Wheeley Lea?

Note 4. If the two William Perrins are one and the same person, this is the earliest document seen (Feb. 2012) related to Lea & Perrins Worcestershire sauce. Address: London, England.

2. Lea and Perrins. 1823. Catalog of drugs and chemicals

sold by Lea & Perrins, Broad-Street, Worcester [England]. Worcester, England. 2 p.

• Summary: Contents: Drugs. Domestic Articles, Spices, etc. Essences, Oils, etc., Patent Medicines.

Under domestic articles is listed "India Soy" [sauce].

Note 1. The latter product was probably Japanese shoyu, exported from Japan, whence the Dutch or British East India Company shipped it to England.

Note 2. This document is not the original 1823 document, nor a photocopy or facsimile reproduction of that document. Rather it is a recent computer printout of an "extract from Lea & Perrins' catalogue published in January 1823." It may well be inaccurate. Address: Broad-Street, Worcester, England.

3. Product Name: Worcestershire Sauce. Manufacturer's Name: Lea and Perrins.

Manufacturer's Address: Bank Street, Worcester, England.

Date of Introduction: 1837. January. Wt/Vol., Packaging, Price: Bottle.

How Stored: Shelf stable.

New Product–Documentation: Ad in *Times* (London). 1844. July 19. p. 11, col. 5. "Lea and Perrin's Worcestershire Sauce, prepared from the recipe of a nobleman in the country."

Times (London). 1876. "High Court of Justice, July 26, Chancery Division. (Before the Master of the Rolls.) Lea v. Millar." "It appeared to his Lordship to be established that Messrs. Lea and Perrins' predecessors in business either invented or obtained the recipe for an article to which they gave the name of Worcestershire sauce, and that they were the first persons to sell an article by that name. This was about the year 1836, and within a very few, probably not more than two, years afterwards other people, of whom one Batty seemed to be the first, began to sell an article under the same name. Indeed the name, within a very few years after it was first used by Messrs. Lea & Perrins, appeared to have become a common name in the trade;..."

Berg and Toit. 1938. Farming in South Africa. Oct. p. 392 "The soybean: Its production and industrial use." A black-and-white photo shows two small jars of this sauce. Only the words "Lea and Perrins" are legible. The product is made in England.

Louise Wright. 1975. The Road from Aston Cross: An Industrial History, 1875-1975. Imperial House, Leamington Spa, Warwickshire, England: Smedley-HP Foods Ltd. Page 32 states that Mr. Lea and Mr. Perrins "believed in having friendly dealings with their overseas agents. Foremost among them were their New York agents, John Duncan

& Sons. Established since 1819 as importers of wines, quality foodstuffs and preserves, they began to handle Worcestershire Sauce in 1840. Soon, they were handling ever-increasing amounts." Page 30 states that the Lea & Perrins partnership in Worcester was created on 1 Jan. 1823 (New Year's Day).

Note: We are not told when Lea & Perrins Worcestershire sauce started to be made commercially, or when the first bottle of Worcestershire sauce was sold-a glaring omission!

Pages 31-32 state: "In 1842, Lea & Perrins sold 636 bottles [of Worcestershire Sauce]. In 1845, a manufactory was set up in Bank Street, Worcester. Ten years later the yearly sales were up to 30,000 bottles of Worcestershire Sauce." In 1897 "it became necessary to build a new factory in Midland Road, Worcester." Page 33 states: "By 1875 the demand for Worcestershire sauce had spread throughout the United States. It was agreed to import the sauce in casks and bottle it in New York." In about 1902 the sauce was first manufactured in New York. In 1910 production was moved to a nine storey building on West Street, New York.

Note 1. This is the earliest known commercial soy product (April 2001) that uses soy sauce as an ingredient. Boston Globe. 1987. Sept. 30. Gives address only.

Letter from J.W. Garnett, Factory General Manager, Lea & Perrins Ltd., P.O. Box 31 Registered Office, Midland Road, Worcester WR5 1DT, England. 1991. Jan. 29. The Lea & Perrins Company of Worcestershire was purchased by HP Foods in 1930 and as such operates as a brand in its own right with general control coming from HP Foods. The Lea & Perrins Worcestershire Sauce is still manufactured in the Midland Road Factory, Worcester, and has been since 1896. "I am certain that Lea & Perrins' Worcestershire Sauce contained soy sauce up to 1940 when supply became extremely difficult due to the Second World War. We have a recipe dated 1948 which records the use of soy sauce as being discontinued, so we assume that it was not reintroduced following the end of Second World War. I'm sorry I cannot be more specific."

"BSN group [B.S.N. Ltd.] purchased HP Foods from Hanson Trust in July 1988. BSN is a large French multinational company; their brands include Evian and Dannon. For details see the book titled The Road to Aston Cross, a copy of which I am enclosing with our complements."

Keogh, Brian. 1997. The Secret Sauce: A History of Lea & Perrins. Worcestershire, England: Leaper Books. viii + 135 p. Lea & Perrin's Worcestershire sauce "has been produced commercially in Worcester since 1837, basically to the same secret formula and process. It was first made at 68 Broad Street, Worcester, England, in the back of the chemist shop owned by the two men who created it: Mr. John Wheeley Lea (born 1791) and Mr. William Henry Perrins (born 1793). Both men were born in villages in

Worcestershire. From the early 1840s it was widely exported (Introduction, p. vii). In Jan. 1823, Lea, an established chemist, took on Perrins as a partner. Their original catalog, dated 1 Jan. 1823, which lists over 300 items from around the world, is still in existence. The catalog includes two ingredients of the sauce to be-anchovies and tamarinds. However the recipe for the sauce and the method for making it must remain a secret. By 1837 Lea and Perrins owned 3 chemist shops; they were now well established and successful chemists.

Worcester lay on the River Severn, which flows southward into the wide Bristol Channel, and which for centuries had been used to carry goods between Bristol and the Midlands. In 1815 the opening of the Birmingham-Worcestershire further increased traffic. In 1850 the Great Western finally brought its railway to Worchester (p. 1-5, 27,

Note 2. During the 1800s, the ingredients used in making Worcestershire Sauce were a carefully kept secret. Forman (1886) was one of the first to state that soy sauce is used as an ingredient in Worcestershire sauce. Rorer (1902) repeated this idea, but in more detail, and for the first time in a cookbook. Fesca (1904) was the first to show this based on chemical analysis in a laboratory. At least 101 documents confirm this fact. During World War II, soy sauce was permanently replaced by HVP as an ingredient in Lea and Perrins Worcestershire Sauce (see Garnett 1991, above).

- 4. Lea, Perrins, & Smith. 1840. Worcestershire Sauce (Ad). Manchester Guardian (England). Oct. 17. p. 1.
- Summary: "So many sauces, under every variety of name, have been of late contending for public favor, that we have hesitated to extend beyond our own vicinity the introduction of a new one, which has, nevertheless, in a very short time, become much sought after and esteemed in other parts of the kingdom.-The Worcestershire Sauce is prepared by us from the favourite recipe of a nobleman of acknowledged goût; it possesses a peculiar piquancy; it is applicable to almost every dish, on account of the superiority of its zest; the diffusible property of its delicate flavour renders it the most economical, as well as the most useful of sauces.

"Lea, Perrins, & Smith, Worcester and Cheltenham. Sold in Manchester by Messrs Roach and Co., Market-street; Mr. Yates, Old Exchange, and Mr. Hutchinson, Old Church Yard."

Note: This is the earliest document seen (Feb. 2012) that mentions "Worcestershire Sauce," or Lea and Perrins, or "a nobleman" in connection with Worcestershire Sauce. The sauce must have been sold commercially by this time. What happened to Mr. Smith? Address: Worcester and Cheltenham.

TORCESTERSHIRE SAUCE.—So many stuces, under every variety of name, have been of late contending for public fivour, that we have hesitated to extend beyond our own vicinity the introduction of a new one, which has, nevertheless, in a very short time, become much sought after and esteemed in other puts of the kingdom .-The Worcestershire Sauce is prepared by us from the favouritrecipe of a nobleman of acknowledged quit, it possesses a peculi ir piquancy; it is applicable to almost every dish, on account of the superiority of its zest; the diffusible property of its delicate flavour renders it the most economical, as well as the most useful of sauces.

LEA, PERRINS, & SMITH, Worcester and Cheltenham Sold in Munchester by Messrs. Rouch and Co Murket-street; Mr. Yates, Old Exchange, and Mr. Hutchinson, Old Church Yard.

- 5. Lea and Perrin's. 1843. Lea and Perrin's "Worcestershire Sauce" (Ad). Observer (London). March 5. p. 1.
- Summary: "Prepared from the recipe of a nobleman in the country. The above celebrated Sauce, has from the time of its introduction, been steadily progressing in public favour; its peculiar piquancy, combined with exquisite flavor, establish it of a character unequalled in sauces. Noblemen and those of acknowledged goût, pronounce it to be 'the only good sauce;' and for enriching gravies, or as a zest for fish, curries, steaks, game, cold meat, &c, especially unrivalled. As a rapidly increasing inquiry is now made for it in all parts of the kingdom, the proprietors beg to state that druggists, grocers, and others may be supplied by their agents:-Messrs. Barclay and Sons, Farringdon-street; Mr. J. Harding, Kingstreet, Stepney; Messrs. Metcalfe and Co., 16 Southamptonrow; and by the wholesale oil and Italian warehousemen in London, upon the same terms as at their warehouse at

Worcester-Sold retail by the usual venders of sauces in halfpint bottles at 1s. 6d., pints 2s. 6d., and quarts 5s. each, with the proprietors' stamp over the cork of every bottle."

Note: This is the earliest document seen (March 2012) that gives prices for Lea and Perrins' sauce, or that shows them selling it in three sizes of bottles, or that uses the word "celebrated" to describe Lea & Perrin's Worcestershire sauce. Address: Worcester.

- 6. Naval and Military Gazette: East India and Colonial Chronicle (London). 1843. Lea & Perrin's 'Worcestershire Sauce' (Ad). April 1. p. 208, col. 2. *
- Summary: This small ad states: "prepared from the recipe of a nobleman in the country."

Note: This article was cited by the Oxford English Dictionary (1989) at "Worcestershire Sauce." Soyinfo Center has not seen it. This periodical was published from 1833

EA AND PERRIN'S ben steadily progressing in public favour; its peculiar piquancy, combined with topicitie favour, establish it of a character unequalier in sauces. Notilemen and them of acknowledged good, proviouses it to be "the only good sauce;" and for entiting gravies, or as a sest for fish, curries, steaks, game, cold meat, &c., especially included. As a rapidly increasing inquiry is now made for it in all parts of the institute. As a rapidly increasing inquiry is now made for it in all parts of the institute. As a rapidly increasing inquiry is now made for it in all parts of the institute. As a rapidly increasing inquiry is now made for it in all parts of the institute. As a rapidly increasing inquiry is now made for it in all parts of the institute. As a rapidly increasing inquiry is now made for it in all parts of the applied by their agents:—Mesers. Barelay and Sons. Farringdom-street; Mr J. Barling, 18, King-airset, Stephery; Mesers. Metcalis and Co., 16, Southampton-bw; and by the wholesale oil and Italian warehousemen in London, upon the same irrat seat their warehouse at Worcester.—Sold retail by the usual venders of sauces is latificated bottles at it. \$61., pints \$2. \$61., and quarts is, each, with the proprietors' steaks over the cork of every bottle. he above celebrated Sance has, from the time of its introduction over the cork of every bottle.

to 1886. The British Library owns only Jan. 1861 to Dec. 1874. Shelfmark: Newspapers9ab. Address: Worcestershire, England.

- 7. Lea and Perrins. 1843. Lea and Perrin's "Worcestershire Sauce;" (Ad). Pictorial Times (England).
- Summary: "prepared from the Recipe of a Nobleman in the Country.-The above celebrated Sauce has, from the time of its introduction, been steadily progressing in public favour; its peculiar piquancy, combined with exquisite Savour, establish it of a character unequalled in the sauces. Noblemen and others of acknowledged gout [taste], pronounce it to be 'the only good sauce;' and for enriching gravies or as a zest for fish, curries, steaks, game, cold meat, &c. especially unrivalled. As a rapidly increasing inquiry is now made for it in all parts of the kingdom, the Proprietors beg to state that druggists, grocers, and others may be supplied by their agents:-Messrs. Barclay and Sons, Farringdon Street; Mr. J. Harding, 59, Ling St., Stepney; Messrs. Metcalfe and Co., 16, Southampton Row; and by the wholesale oil and Italian warehousemen in London, upon the same terms as at their warehouse at Worcester.-Sold retail by the usual venders of sauces in half-pint bottles at 1s. 6d. pints 2s. 6d. and quarts 5s. each, with the Proprietors' stamp over the cork of every bottle." Address: [Worcester, England].
- 8. Lea and Perrins. 1844. Classified ad: Lea and Perrins' Worcestershire Sauce,... Times (London). July 15. p. 11, col.
- Summary: "... prepared from the recipe of a nobleman in the country. 'Great Western Steam-ship, June 6, 1844.—The cabin of the Great Western has been regularly supplied with Lea and Perrins' Worcestershire Sauce, which is adapted to every variety of dish from turtle to beef, from salmon to steaks, to all of which it gives a famous relish. I have great pleasure in recommending this excellent sauce to captains and passengers for its capital flavour, and as the best accompaniment of its kind for a voyage.-(Signed) James Hosken.' Sold wholesale by the proprietors, Messrs. Lea and

Perrin, Worcester; Messrs. Barclay and Sons, Farringdon street; and the principal oil and Italian warehousemen in London; and retail by the usual venders of sauces."

Very similar ads appeared in the July 19 issue (p. 11, col. 5) and in the Aug. 23 issue (p. 8, col. 1). In both of these, the name is written "Lea and Perrin's" instead of "Lea and Perrins" Worcestershire Sauce. Address: [Worcester, Worcestershire, England].

- 9. Lea & Perrin. 1844. Classified ad: Lea & Perrin's [sic] Worcestershire Sauce.... Indian Mail (The) 1(18):574. Oct. 4. • Summary: "... prepared from the recipe of a nobleman in the country.
- "Great Western Steam-ship, June 6, 1844.-The cabin of the Great Western has been regularly supplied with Lea and Perrin's Worcestershire Sauce, which is adapted to every variety of dish, from turtle to beef, from salmon

to steaks,-to all of which it gives a famous relish. I have great pleasure in recommending this excellent sauce to captains and passengers for its capital flavour, and as the best accompaniment of its kind for a voyage.

"(Signed) 'James Hosken.'

"Sold wholesale by the proprietors, Messrs. Lea & Perrin [sic], Worcester; Messrs. Barclay and Sons, Farringdon street; and the principal Oil and Italian warehousemen in London; and retail by the usual venders of sauces."

This ad also appeared in this same periodical on 6 Dec. 1844 (p. 638).

Note: This is the earliest ad seen (Feb. 2012) for Worcestershire Source outside of England. The new product will soon be sold worldwide, starting in British colonies. Address: Worcester, England.

- 10. Lea and Perrins. 1845. Classified ad: Lea and Perrins' Worcestershire Sauce... Times (London). April 15. p. 11, col.
- Summary: "... is pronounced by connoisseurs to be the only good sauce for enriching gravies, or as a zest for

WORCESTERSHIR SAUCE, prepared from the recipe of a nobleman in the country. Great Western Steam-ship, June 6, 1844.—The cabin of the Great Western has been regularly supplied with Lea and Perrin's Worcestershire sauce, which is adapted for every variety of dish from turtle to beef, from salmon to steaks, to all of which it gives a famous relish. have great pleasure in recommending this excellent sauce to captains and passengers for its capital flavour, and as the best accompaniment of its kind for a voyage.—(Signed) James Hosken." Sold wholesale by the proprietors, Messrs. Lea and Perrin, Worcester: Messrs. Barclay and Sons, Farringdon street; and the principal oil and Italian warehousemen in London; and retail by the usual venders of sauces.

fish, curries, soups, game, steaks, cold meat, &c., and its rapidly increasing sale has induced the proprietors to open a warehouse in London. The very general and decided approbation bestowed on this sauce having encouraged imitations, the proprietors have adopted Betts's patent metallic capsules, on which are embossed the words 'Lea and Perrins' Worcestershire Sauce,' as a means of protection. Sold wholesale, retail, and for exportation by the proprietors, Vere-street, Oxford-street; Crosse and Blackwell, Sohosquare; Barclay and Sons, Farringdon-street; Metcalfe and Co., Southampton-row; and by venders of sauces generally."

Note: This is the earliest document seen (Feb. 2012) that contains the word "imitations" (or "imitation"), or the word "connoisseurs," or the phrase "only good sauce," or the names "Vere-street" or "Crosse and Blackwell," in connection with Lea and Perrins or Worcestershire sauce. Address: [England].

- 11. Lea & Perrin. 1845. Classified ad: Lea & Perrin's [sic] Worcestershire Sauce... Supplement to Allen's Indian Mail No. 36. p. 543. Sept. 2.
- Summary: "... is pronounced by connoisseurs to be 'the only good sauce' for enriching gravies, or as a zest for fish, curries, soups, game, steaks, cold meat, &c. The approbation bestowed on this sauce having encouraged imitations, the proprietors deem it necessary to caution purchasers to ask for 'Lea and Perrin's [sic] Worcestershire Sauce,' and to observe that the same is embossed on Betts's metallic capsules, which they adopted as a protection to the public. Sold wholesale, retail, and for exportation by the proprietors, Vere-street, Oxford-street; Crosse and Blackwell, Sohosquare; Barclay and Sons, Farringdon-street; Metcalfe and Co., Southampton-row; and by venders of sauces generally." Address: Worcester, England.
- 12. Lea and Perrin. 1845. Classified ad: Lea and Perrin's [sic] Worcestershire Sauce... Times (London). Oct. 11. p. 15,
- Summary: "... is pronounced by connoisseurs to be the only good sauce for enriching gravies, or as a zest for fish, curries, game, steaks, cold meat, &c. The approbation bestowed on this sauce having encouraged imitations, the proprietors deem it necessary to caution purchasers to ask for 'Lea and Perrin's [sic] Worcestershire Sauce,' and to observe that the same is embossed on Betts's metallic capsules, which they have adopted as a protection to the public. Sold wholesale, retail, and for exportation by the proprietors, Vere-street, Oxford-street; Crosse and Blackwell, Sohosquare; Barclay and Sons, Farringdon-street; and venders of sauces generally." Address: [England].
- 13. Waters, John. 1846. My uncle, the parson. The Knickerbocker: Or, New-York Monthly Magazine 27(1):14-19. Jan. See p. 18-19.

• Summary: "My uncle, accustomed as he was to the excellent specimens of what has been called parson's meat, paused for a moment... while the mutton was hot... But at his own second slice he sent Jim to the pocket of the chaise for a bottle of Worcestershire Sauce; and finding it hardly warm enough for so raw a day, produced a small flat phial with gilt edges and glass stopper that comes to us generally from Smyrna with Attar of Roses, but which was now filled with Cayenne pepper that he used as reinforcement."

The last sentence of the story reads (p. 19): "My father on the contrary, who thought the parson a little too fastidious on the subject of dress, liked the story all the better for the mistake; and the delicate fibre of some thing that I will not call malice, was to him in the narration very like a slight dash of Worcestershire Sauce to the gravy of my Uncle the Parson."

- 14. Lea and Perrins. 1846. Worcestershire Sauce testimonials (Ad). New Zealand Journal (The) No. 166. May 9. p. 107,
- Summary: "Messrs. Lea and Perrins, proprietors of the Worcestershire Sauce, beg to submit the following Testimonials, as a guarantee to the public of the superior qualities of this sauce, and also to caution purchasers against worthless imitations, by observing their names are affixed to the metallic capsule which secures the cork of each bottle, to imitate which is fraud.

"The Queen's, Cheltenham, Feb. 28th, 1846. Gentlemen,—I have no hesitation in bearing testimony to the excellent qualities of your 'Worcestershire Sauce,' as the numerous families of the first rank in this kingdom, and from the Continent of Europe, and India, who honour the Queen's by their patronage enable me to speak confidently of the very general estimation in which it is held by them, and from my own experience of its merits and usefulness, I believe it to be, of its kind, quite unequalled.

"I am, Gentlemen, Your obedient servant,

"To Messrs. Lea & Perrins. S.G. Griffith.

"(Copy of a Letter from Mr. J. Cockburn.) January 10th, 1845.

"Sir,-When about to proceed to the West Indies in August last, you favoured me with a bottle of Lea and Perrins' Worcestershire Sauce, on trial; before opening which, I submitted it to the test of a four months' voyage in the Tropics, and on coming home in December, it was opened in the latitude of the Azores, and found in the highest state of preservation. On submitting it to the cook (who is a man of great experience, having been seven years in the London Tavern, and eight years at sea) he declared it to be the best sauce ever put into his hands; and I am persuaded, from the fact of its being adapted to all kinds of dishes, that Lea and Perrins' Sauce will go far to supersede the great variety of stores hitherto indispensable on board ships when employed on long voyages.

"I am, sir, your most obedient servant, James Cockburn, Acting Providore R.M.S.P. 'Thames.'

"To Mr. John Osborn, Royal Mail Steam Packet Office, Moorgate Street, London."

Note: This is the earliest ad seen (Feb. 2012) for Worcestershire Source in New Zealand or Australia. Address: [England].

- 15. Earle (C.V.). 1846. Ex "Thomas Lowry," "Angelina," "St. George," and other later arrivals (Ad). Maitland Mercury & Hunter River General Advertiser (New South Wales, Australia). Sept. 19. p. 3.
- Summary: "To be had at the Medical Chemical Repository, opposite the Angel Inn, West Maitland,

"A various assortment of Drugs and Chemicals required in the medical profession, viz.: -

"Corrosive Sublimate,... Indian Soy [sauce], and Burgess's Essence of Anchovies,..."

"Agent for Lea's celebrated Worcester Sauce, patronized by the Royal Family."

Note: This is the earliest of 3,252 documents seen (Feb. 2012) in the Australian Newspapers database that contains the term "Worcester Sauce" (regardless of capitalization). The newspaper in which this term appears most frequently is The Mercury (Hobart) (1,091 times), followed by The Argus (Melbourne) (918 times). By category: 2,928 are advertising, 275 are news, and 49 are detailed lists, results, or guides. By decade: In 1860-69 the term appears in the most ads, articles, etc. (734), followed by 1880-89 (512).

- 16. Nichols (R.F.) & Co. 1846. Classified ad: Have in store and for sale the following articles, viz: New Orleans Commercial Bulletin. Oct. 31. p. 1, col. 6.
- Summary: "50 boxes Bitter Almonds.
 - "50 boxes sweet Shelled Almonds.
 - "20 boxes French Fruits, in juice.
 - "4 dozen Worcester Sauce.
- "50 boxes Mushroom, Walnut and Tomato Catsups." Address: [New Orleans].
- 17. Colonial Times (Hobart, Tasmania, Australia).1846. Domestic intelligence: New sauce (Ad). Dec. 11. p. 3.
- Summary: "We are those who, with Dr. Kitchner, of 'Cook's Oracle' celebrity, lean toward good things, and who, with Apicius of old, and with Quin and other epicures of more modern times, seriously opine that the inventor of a new sauce is worthy of favourable consideration. Now, Harvey, Quin, and Burgess, have already immortalised themselves in this particular achievement, as hath, also, the anonymous compounder of the celebrated 'Reading Sauce;' but another aspirant has arisen in the clever inventor of another sauce, entitled 'Worcestershire Sauce,' which, in our epicurean opinion, eclipses all of its precursors. Of what it is compounded surpasseth our knowledge; but this we can

safely affirm, that a more delicious condiment has not yet been invented for the gratification of the gustatory organs, nor one better calculated to excite an appetite in this more than warm and relaxing weather. With fish, flesh, fowl, or even 'good red herring,' it is equally good; and we can strongly recommend it to all those who, as wise men, do not despise their stomachs. We perceived by the advertisement, that Mr. Gilbert has a few cases, and perhaps other tradesmen may have a supply."

18. Gilbert (Edward). 1846. On sale at Gilbert's Grocery Store next door to the Liverpool Tea Warehouse (Ad). Colonial Times (Hobart, Tasmania, Australia). Dec. 12. p. 3. • Summary: "... 50 cases pickles. A few cases Worcestershire Sauce."

This ad also appears in *The Courier* (Hobart) on 12 Dec. 1846 (p. 3) and on 16 Dec. 1846 (p. 1).

Note 1. This is the earliest of 8,918 documents seen (Feb. 2012) in the Australian Newspapers database that contains the term "Worcestershire Sauce" (regardless of capitalization). The newspaper in which this term appears most frequently is *The Mercury* (Hobart) (4,395 times), followed by *The Argus* (Melbourne) (1,491 times). By category: 8,728 are advertising, 183 are news, and 6 are detailed lists, results, or guides, and 1 is family notices. By decade: In 1860-69 the term appears in the most ads, articles, etc. (3,205), followed by 1870-79 (2,949).

Note 2. Soy sauce was usually one of the main ingredients in Worcestershire sauce.

19. Lea & Perrins. 1846. Lea & Perrins' Worcestershire Sauce (Ad). Manchester Guardian (England). Dec. 30. p. 1. • Summary: "... so highly esteemed and patronised for fish, hot and cold meats, steaks, gravies, soup, &c. may be obtained of the most respectable dealers in sauces, universally; the wrapper and label of each bottle bearing the names of Lea and Perrins; without which, it cannot be genuine.

"Sold wholesale by Lea and Perrins, Worcester, and 6, Vere-street, Oxford street, London; Barclay and Sons, Crosse and Blackwell, and other Italian warehousemen and merchants, London." Address: Worcester.

20. Lea and Perrins. 1847. Classified ad: Appetite and digestion improved. Times (London). Oct. 6. p. 7, col. 2. • Summary: "Lea and Perrin's Worcestershire Sauce, an exquisite relish for fish, steaks, chops, meat, game, &c., and for flavouring soups and curries. It is acknowledged to contribute to health by its stomachic and digestive properties, is used and recommended by the faculty, and patronised by the nobility and gentry. The universally expressed approbation of this sauce, and the demand for it in every quarter of the globe, having induced imitations of inferior quality, purchasers are respectfully recommended, in order to secure the genuine, to see that the names of Lea and Perrins are upon the label and patent cap of the bottle. Sold by the proprietors, 6, Vere-street, Oxford-street, London, and 68, Broad-street, Worcester;..."

Note 1. This is the earliest document seen (Feb. 2012) that uses the words "health" or "digestion" or "digestive" or "stomachic" or "nobility" in connection with Lea & Perrins' Worcestershire sauce.

Note 2. This ad also appeared in the issue of 26 Jan. 1848 (p. 11, col. 1). Address: [England].

- 21. Gilbert (Edward). 1847. Important notice to the public (Ad). Colonial Times (Hobart, Tasmania, Australia). Nov. 5.
- Summary: "To the epicure... with the celebrated Worcester Sauce, direct to order from the house of Lea & Perrins. The piquant flavour this Sauce possesses is not to be surpassed by any."

Oct. 8, 1847. Address: Liverpool Tea Warehouse.

- 22. Ainsworth's Magazine: A Miscellany of Romance, General Literature, & Art (London). 1848. The angler in Norway. 14:148-53. See p. 150.
- Summary: In describing what a single angler [fisherman] should take with him on his fishing trip to Norway (p. 150): "He must also stow away a bottle of cayenne pepper, one of essence of anchovy, another of soy [sauce], and one or two of Harvey's sauce. Soy, in our opinion, is detestable, and we firmly believe it to be nothing more than the essence of crushed black beetles, so we would suggest Worcestershire, or our friend Soyer's new sauce, and one or two bottles of Chili vinegar."
- 23. Lea and Perrins. 1849. Appetite and digestion improved: Lea and Perrins' Worcestershire sauce (Ad). Observer (London). April 15. p. 1.
- Summary: "... imparts the most exquisite relish to steaks, chops, and all roast meat, gravies, fish, game, soup, curries, and salad, and by its tonic and invigorating properties enables the stomach to perfectly digest the food. Sold by the proprietors, Lea and Perrins, Vere-street, Oxford-street, London; and 68 Broad-street, Worcester; Messrs. Barclay and Sons; Crosse and Blackwell; and other oilmen and merchants in London; and by the principal dealers in sauces generally.-N.B. To guard against imitations, see that the names of 'Lea and Perrins' are upon the label and patent cap of the bottle." Address: London and Worcester.
- 24. Nathan (David). 1849. Auction sales: Will sell by auction (Ad). Daily Southern Cross (Auckland, New Zealand). Aug. 24. p. 1, col. 2.
- Summary: "On Thursday next, August 28th, 1849, at his Rooms, Shortland-st., at 11 o'clock. 5 cases Mustards. 5 ditto [cases] Worcestershire Sauce. 1 ditto Black Draughts."

Address: Shortland-st.

- 25. Knife and Fork (The) (London).1849. Gastronomic rambles about London. For 1849. p. 94-96.
- Summary: In this early "advertorial" we read (p. 95): "Let the student pass with me into Vere Street, Oxford Street, and note particularly the emporium where Lea and Perring's celebrated Worcestershire Sauce is made, and, where the exquisite essence of coffee and dandelion coffee, are sold in great quantities."
- 26. Pridham, Charles. 1849. A historical, political and statistical account of Mauritius and its dependencies. London: T. and W. Boone. xii + 410 + 16 p.
- Summary: At the end of this book is a section of ads, numbered separately. On page 14 (lower half) we read: "Worcestershire Sauce testimonials.

"Messrs. Lea and Perrins, proprietors of the Worcestershire Sauce, beg to submit the following testimonials as a guarantee to the public of the superior qualities of this celebrated Sauce, and also to caution purchasers against worthless imitations, by observing their names are affixed to the metallic capsule which covers the cork of each bottle, to imitate which is fraud.

"Testimonials: Caledonian United Service Club, Edinburgh, April 6, 1846.

"Gentlemen-Your Worcestershire Sauce has gained great celebrity in Edinburgh and is in constant use at this hotel. It is highly approved for the very agreeable zest which it imparts to gravies and made dishes, and I have no hesitation in saying that in my opinion it is an excellent sauce. I am, &c.,

"James Ellis, Caledonian United Service Club, To Messrs. Lea and Perrins, Worcester.

"South London News,' Jan. 24.-It is an old but true saying that 'good wine needs no bush,' the same remark applies to the Worcestershire Sauce, prepared by Lea and Perrins. It is only necessary for us to make this one observation, that for flavour and piquancy it exceeds all the other sauces that are now before the public, and has only to be tasted to be appreciated. M. Soyer, the celebrated chef de cuisine at the Reform Club, has given his decided approval of it, and the members of that large and magnificent establishment are among its patrons.

"Sold wholesale, retail, and for exportation, by the proprietors, Vere-street, Oxford-street; Crosse and Blackwell, Soho-square; Barclay and Sons, Farringdon-street, and by venders [vendors] of sauce generally." Address: Canning Place, Kensington, England.

- 27. Troughton (G.). 1850. Grocery, wine & spirit store (Ad). Head Quarters (Fredericton, New Brunswick, Canada). March 2. p. 4.
- Summary: "Sauces and pastes: Harvey Sauce,... Lea

- & Perrin's Worcestershire Sauce,... Tomato Ketchup, Mushroom ditto [Ketchup], Essence of Anchovies,... India Soy [sauce], Gorgona Anchovies,..." Address: Queen Street, Opposite the Stone Barracks, Fredericton.
- 28. Brigham (Mr. J.). 1850. Sales by auction: New goods. Ex "Constantinople" (Ad). New Zealander (Auckland). July 10.
- Summary: "An assortment of merchandise consisting of-... Cigars, Candles, Pipes. Butter, Worcester Sauce, Blue, &c."

Note: This is the earliest of 11,690 documents seen (Feb. 2012) in the New Zealand Newspapers database (paperspast) that contains the term "Worcester Sauce" (regardless of capitalization). The term was last used in New Zealand Newspapers on 10 March 1931.

- 29. Stoughton (Charles). 1850. Classified ad: Sundries... New Orleans Commercial Bulletin. Sept. 24. p. 1, col. 5.
- Summary: "English and American Pickles and Ketchups; Capers and Worcestershire Sauce; Jellies, Jams, Preserves and fresh Fish,..." Address: 94 Camp st. [New Orleans].
- 30. Minister & Anderson. 1850. Classified ad: Sundries... New Orleans Commercial Bulletin. Oct. 2. p. 1, col. 4.
- Summary: "50 boxes Ketchup, walnut and tomato;... 7 do [ditto = dozen] Worcestershire Sauce; 20 boxes Grant & Williams' Tobacco;..." Address: 21 Poydras [st., New Orleans].
- 31. Troughton's Grocery, Wine, & Spirit Store. 1850. Constantly on hand, at lowest rates (Ad). Head Quarters (Fredericton, New Brunswick, Canada). Oct. 16. p. 4.
- Summary: "Sauces and pastes: Harvey's Sauce,... Lea & Perrin's Worcestershire Sauce,... Tomato Ketchup, Mushroom Ketchup, Essence of Anchovies, India Soy [sauce], Gorgona Anchovies,..." Address: Queen Street, Fredericton.
- 32. Love (Andrew). 1851. Classified ad: General importer of European goods. New Orleans Commercial Bulletin. Jan. 14. p. 2, col. 6.
- Summary: "Has just received from the ships Miltiades. from Liverpool, and Lyman, from London, the following Goods, which he offers on the most reasonable terms, viz:

"Pickles and Sauces, the original Worcester Sauce, from the celebrated house of Crosse & Blackwell, London, etc., etc." Address: 106 Poydras St., New Orleans.

- 33. Hughes (Wellesley). 1851. Ex "Cresswell," from London, and on sale by the undersigned, one hundred and ninety-six packages groceries,... (Ad). New Zealander (Auckland). March 22. p. 1, col. 4.
- Summary: "... oilman's stores, fruits, &c., &c. consisting of-... Burgess Essence Anchovies. Anchovy Paste.

Mushroom Catsup. Lea and Perrin's Worcester Sauce. Brown Vinegar."

Note: Similar ads appeared in the March 23 (p. 1) and March 26 (p. 1) issues of this newspaper. Address: Auckland.

- 34. Burdick (R.M.) & Co. 1851. Classified ad: P.T. Barnum's menagerie. Hartford Daily Courant (Connecticut). June 9. p.
- Summary: "Also-Pickles, catsup, Worcestershire sauce, capers, sardines, pepper sauce, figs, nuts, prunes, preserved ginger, &c. &c."

This ad also appeared in the June 11, 12, 13, and 19 issues of this newspaper.

Note 1. This is the earliest document (and the earliest ad) seen (Feb. 2012) that mentions Worcestershire sauce in the United States. Note that it has no brand, and is thus sold as a generic commodity. Notice also that it first appears in Hartford, Connecticut, rather than in New York City.

Note 2. R.M. Burdick & Co. is probably a general retail store, and not the importer. Address: 250 Main St.

- 35. Freemason's Quarterly Magazine and Review (London).1851. Masonic intelligence-Provincial-Worcestershire. p. 202-65. See p. 250.
- Summary: "I heartily wish, brethern, both for your sakes and my own, that upon the present occasion it were in my power to flavour the *toast* which has just been so eloquently proposed, and so well received, by pouring over it a few drops of your far-famed Worcestershire sauce, which, if we may credit the advertisements, imparts an exquisite relish to everything, and possesses so many tonic and invigorating properties."
- 36. Somerville (M.). 1851. On sale-Ex "Maukin" (Ad). New Zealander (Auckland). July 26. p. 1.
- Summary: "... German Matches. Worcester Sauce, (Lea and Perrin's). Castor oil, quarts, pints and half-pints."

Note: This ad also appeared in the 29 July 1851 issue of the Daily Southern Cross (p. 2). Address: Corner of Shortland and Queen-streets, Auckland.

- 37. Ellis, Robert. 1851. Official descriptive and illustrated catalogue of the Great Exhibition of the Works of Industry of all Nations. London: Spicer Brothers,... 5 parts (cxcii + 1469 p.). See p. 58, 677-78, 857, 871. Illust. 27 cm.
- Summary: The section titled "Official illustrated catalogue advertiser" states (p. 58): "The Worcestershire Sauce, prepared by Lea & Perrins, from the recipe of a Nobleman in the country, imparts the most exquisite relish to steaks, chops, and all roast meat, gravies, fish, game, soup, curries, and salad; and by its tonic and invigorating properties enables the stomach to perfectly digest the food. The daily use of this condiment has proved most conducive to health, and established its fame throughout the world. Sold

wholesale by the proprietors, Lea & Perrins, 6, Vere-street, Cavendish-square; Crosse & Blackwell, Soho-square; and other merchants, London; and retail by the principal dealers in sauces."

In Vol. 2 (Sections 3-4): The section titled "Class 23.— Works in precious metals, jewellery, etc." under "Collis, George Richmond, Church Street, Birmingham [England]-Manufacturer" states (p. 677-788): "Inkstands. Dishcovers. Soy frame" (p. 678 L.2). The section titled "British possessions in Asia" (p. 857) begins with the "East Indies." "Class III: Agricultural produce" contains a section on "Pulses" (p. 871) which includes "Bhut (Soja hispida), from Kêmaon (Kumaon)." The next section, "Roots and Oil Seeds, &c" includes linseed, "Kisto til (Sesamum orientale)-from Calcutta," safflower, etc.

Note: This was the first major international exhibition of arts and industries, held in 1851 in London at the Crystal Palace. A great success in every way, it showed the world's latest achievements at a time when mankind was making progress at a speed never before known. Address: London.

- 38. Sover, Alexis. 1851. The modern housewife: Or, ménagère. Comprising nearly one thousand receipts, for the economic and judicious preparation of every meal of the day,... London: Simpkin, Marshall & Co. xvi + 450 p. See p. 84, 103. Illust. 18 cm.
- Summary: The section on "Condiments" states (p. 84): "Soy is obtained from the seed or fruit of an Indian plant, called dolichos soja, or soya; it is produced in a very similar way to ketchup; it enters greatly into use in the variety of sauces [such as Worcestershire sauce] that are made for the table, it being of a very strong, sweet-bitter taste; it should only be used in moderation in cookery."

In the section on Sauces, recipe 181, "Wild fowl sauce," calls for: "Walnut catsup one tablespoonful; the same of Harvey's or Worcestershire sauce, the same of lemonjuice..." (p. 103).

"Harvey sauce" or "Harvey's sauce" (the two terms are used with about equal frequency in this book) is used in small amounts to season at least 20 recipes. (p. 103, 117-18, 127, 223, etc.). Recipe "404. Hashed beef" states that the flavour may be varied with "a few spoonfuls of catsup, Soyer's, Harvey's, Soho, or Reading sauce."

Contains many recipes for catsup, including "mushroom catsup" and "walnut catsup." However the word "catchup" is not mentioned.

Note 1. This is the earliest document seen (March 2012) stating that soy sauce is used as an ingredient in Worcestershire sauce.

Note 2. Alexis Soyer (lived 1810-1858) was a French chef who became the most famous cook in Victorian London. Address: England.

39. Transatlantic rambles: or, A record of twelve months'

travel in the United States, Cuba, & the Brazils, by a Rugbæan. 1851. London: George Bell. vii + 168 p. See p. 107-08. 12mo.

• Summary: "Day and Martin, with an immense picture of the house in Holland, on a large placard, occupied a place on one wall, and Lea and Perrin's Worcestershire attracted attention from the other."

Note: He appears to have seen this in "the Brazils." Address: London.

- 40. Burdick (R.M.) & Co. 1852. Classified ad: Now is the time to secure truly great bargains. Hartford Daily Courant (Connecticut). Feb. 12. p. 3.
- Summary: "... Pickles, Catsup, Pepper Sauce,... Table Oil, Worcestershire Sauce, Corn Starch, Tapioca, Sago, Vermicelli,..." Address: 250 Main St.
- 41. New York Daily Times. 1852. New-York City. March 10.
- Summary: The section titled "The label forgeries ended" states: "Some two years ago a Pearl-street importer, named George Raphael, was indicted at the instance of Messrs. Duncan & Sons, who alleged that defendant had sold large quantities of Worcestershire Sauce, with forged labels, in the name of Lea & Perrins, the English manufacturers. The case was finally brought to trial in the Court of Sessions on Monday. James T. Brady appeared as counsel for the defendant. The Jury retired and deliberated for some hours, but returned with a verdict of Not Guilty. The defendant was therefore honorably discharged, and thus ends a two-years'

Note 1. This is the earliest document seen (Feb. 2012) that mentions "Duncan" or "Duncan & Sons", or that concerns a lawsuit, in connection with Lea & Perrin's Worcestershire sauce, or that mentions this sauce in connection with New York City.

Note 2. This article strongly suggests that Lea & Perrin's Worcestershire sauce was being sold in the United States as early as 1849; the importer at that time was probably Duncan & Sons. Address: New York.

- 42. Burdick (R.M.) & Co. 1852. Classified ad: Pure cider vinegar,... Hartford Daily Courant (Connecticut). Aug. 16.
- Summary: "... from farmers, just what every family want for pickling."

"Also-Pickles, Catsup, Pepper Sauce, Worcestershire Sauce." Address: 250 Main St.

- 43. Day, Charles William. 1852. Five years' residence in the West Indies. 2 vols. London: Colburn and Co., Publishers. See Vol. 1, p. 254. Illust. 20 cm.
- Summary: "...; but roasted meats or fowls, are always so impregnated with the pyroligneous acid of the wood-fire, as

to have a smoky, or baked taste, well known to all travellers in the Highlands of Scotland. Worcestershire sauce is now beginning to be used; but usually the only condiment beyond pepper and salt, will be a bottle of pickled peppers. Greens, or salads, are rarely seen." Address: Esq.

- 44. Fox (Chas. E.) & Co. 1853. Coopers' shred isinglass (Ad). Hartford Daily Courant (Connecticut). April 18. p. 3. • Summary: "... Lea & Perrin's Worcestershire sauce. Anchovy paste. Sardines, anchovies. India currie powder. Walnut and Tomato Catsup. Capers, Pickles in jars."
- 45. Fox (Chas. E) & Co. 1853. Classified ad: For the table-Worcestershire sauce. Hartford Daily Courant (Connecticut). Nov. 24. p. 10.
- Summary: "Royal Osborn Sauce. John Bull Sauce. India Soy Sauce. Reading Sauce. Harvey's Sauce. Warwickshire Sauce. Sauce pour Savourer."

Note: This ad also appeared in the Nov. 30 (p. 2) issue.

- 46. Putnam's Monthly Magazine (New York). 1853. The Potiphars in Paris: A letter from Miss Caroline Pettitoes to Mrs. Settum Downe. 2(11):482-86. Nov. See p. 486.
- Summary: The letter is written from Paris in October. "He sends Worcestershire sauce to the thief, or a pillow of poppies, and says to him-Friend, all of mine is thine, and all of thine is thy own. This, benighted people of Sennar, is the practice of Christian people."

Note: This article and passage appeared in a book titled The Potiphar Papers, by George William Curtis, published in

- 47. Herbert, Henry William. 1853. American game in its seasons. New York, NY: Charles Scribner. xiii + 343 p. See p. 183. Illust. 19 cm.
- Summary: The chapter titled "The salmon" describes how to cook and serve this fish (p. 183). In salted water, "let him boil quantum suff. Then serve him up, with no sauce save a few spoonsful of the water in which he was cooked, and if you please, the squeeze of a lemon, or, better yet, a limebut,... eschew the lobster sauce, and the rich condiments, as Reading, Worcestershire or Soy [sauce], for he is rich enough without, and they will but kill his natural flavor, and undo his delicacy." Address: Author [Philadelphia, Pennsylvania].
- 48. Metropolitan Mechanics' Institute. 1853. A record of the first exhibition of the Metropolitan Mechanics' Institute, held in the east wing of the patent office, February and March, 1853. Washington, DC: H. Polkinhorn, printer. 52 + 14 + 68 +11 + 8 + 3 p. See p. 7. 23 cm.
- Summary: In the first 52 pages of this book, under "Catalogue of Articles Deposited for Competition and Premium..." in Class III.-Substances used as food, we read (p. 7): "548, J.B. Kibbey & Co., assorted groceries." These

are listed under two groups: American and Foreign. Under Foreign we read: "2 flasks oil, 4 jars anchovie [anchovy] paste, 2 jars shrimp paste, 2 jars English mustard, 2 jars Worcester sauce, 2 jars Harvey sauce, 2 jars John Bull sauce, 2 bottles essence anchovies, 2 bottles India Soy [sauce], 1 bottle essence shrimps, 1 bottle walnut catsup,..." Address: Washington, DC.

- 49. New York Exhibition of the Industry of All Nations. 1853. Official catalogue of the New York Exhibition of the Industry of All Nations, 1853-54. First revised ed. New York, NY: Published by George P. Putnam & Co. for the Association. 224 + 23 p. 19 cm. 1 vol.
- Summary: In the chapter on objects from Great Britain and Ireland, under "Class 3-Substances employed as food" (p. 102), item 4 states: "Specimens of Worcestershire sauce.— Lea & Perrins, manu. [manufacturer], Worcester, England.-Agents, John Duncan & Sons, 407 Broadway, New York
- Note 1. In the original edition of this catalog, the exact same information appears on p. 98.

Note 2. The first major international exhibition of arts and industries was held in 1851 in London at the Crystal Palace. A great success in every way, it showed the world's latest achievements at a time when mankind was making progress at a speed never before known. The next international fair opened only 2 years later in New York City. Held in a huge and very impressive building made mostly of glass and steel (modeled on the Crystal Palace, but larger), it opened in July 1853. An "Official Catalog" and an "Illustrated Record" (with about 500 illustrations) were published. The building housed 5,272 exhibitors, about half of whom came from 23 foreign nations: America 1,467. Germany 639. Great Britain 581. France 418, etc. Unfortunately, the exhibition, though impressive, was a financial failure. It had to close on 1 Nov. 1854 with debts of \$300,000. In Oct. 1857 the "fireproof" building caught fire and burned to the ground in less than 30 minutes. Address: New York.

- 50. Philp, Robert Kemp. 1853. The shopkeeper's guide. London: Houlston & Stoneman. viii + 245 p. See p. 68-69. 77, 80, 82. Index.
- Summary: Describes the main items that different types of shopkeepers should have in stock. In the section titled "Electro-plated goods" (p. 68-69) is a subsection titled "Plated goods," which contains a long list (p. 69) including: "Salts, gilt inside. Soup and sauce tureens. Soy frames. Spoons and forks."

Under "Papier mache goods" (p. 77): "Card trays. Cruet, soy [sauce], pickle, and liqueur frames. Inkstands."

Under "The chandler and the oilman" (p. 80): "Burgess's essence of anchovies. Harvey's Reading sauce. Cock's ditto [Reading sauce]. Ketchup. India soy. Finest salad oil."

The grocer (p. 80-83): Under sauces (p. 82-83) – "Superior essence of anchovies. Burgess's essence of anchovies. Essence of shrimps. Essence of lobster. Real India soy. Quin sauce. Caviare sauce [Caviar?]. Coratch sauce... Harvey's sauce. Worcestershire sauce... Mushroom ketchup. Walnut ketchup." Address: Editor of the Family Treasury (Late Editor of the "Family Friend"), London, England.

- 51. Smith (James). 1854. Sale of merchandise and land (Ad). New Zealand Spectator and Cook's Strait Guardian (Wellington). Jan. 14. p. 2.
- Summary: "Mr. James Smith has received instructions from the Importers, to sell on Tuesday, 17th January next, without reserve, ex Northfleet, from London, the undermentioned desirable Merchandise, viz: -

"Bloater Paste. Worcester Sauce. Capers." Address: [Wellington, New Zealand].

- 52. New York Daily Times. 1854. Business notices. March 1. p. 4.
- Summary: "Lea & Perrin's Worcestershire Sauce.—Is the only sauce to which a medal has been awarded by the Juries in the Crystal Palace at New York, for foreign exhibitors, and in order to guard the public against numerous counterfeits the proprietors deem it requisite to state that the genuine Sauce can at all times be obtained of the wholesale agents for the United States.

"Messrs. John Duncan & Sons, New York. N.B.-This universally popular condiment not only imparts a piquant relish to all descriptions of food, but by promoting digestion, tends to preserve health."

Note 1. This is the earliest published document seen (Feb. 2012) that mentions a medal awarded to Lea & Perrin's Worcestershire Sauce; it was awarded at an exhibition in New York.

Note 2. This is the earliest document seen (Feb. 2012) concerning Lea & Perrin's Worcestershire Sauce that uses the word "counterfeits" (or "counterfeit," etc.) to refer to imitations, Address: New York,

- 53. Lea and Perrins. 1854. Classified ad: The only medal awarded by the Jury of the New York Exhibition to English or foreign sauce manufacturers... Times (London). March 30. p. 11, col. 1.
- Summary: "... has been obtained, amongst numerous competitors, by Lea and Perrins, for their Worcestershire Sauce, whereby further testimony is afforded of its being the best sauce extant.

"The celebrity of this sauce has extended to every quarter of the globe, and its efficacy in promoting the general health is becoming daily more observed and acknowledged. In the United States it is held to be the most agreeable condiment, and is esteemed for its tonic and invigorating properties, its habitual use enabling the stomach perfectly to



digest the food."

"On the continent of Europe these qualities have been testified to, by a gentleman who writes to Lea & Perrins thus-'I have carried a bottle of your Worcestershire Sauce in a tour I have just completed through Spain and Portugal, and I believe I owe my present state of health to its use. Your sauce is stomachic, and I think medicinal. I can with truth say there is nothing in a traveller's baggage so essential to his comfort, at least in these countries, as your sauce.'

"In India also, where it is found at the mess of every regiment, a medical gentleman writes from Madras to his brother in the same profession at Worcester in the following terms,-'Tell Lea and Perrins that their Sauce is highly approved in India, and that it is, in my opinion, the most palatable as well as the most wholesome sauce made.'

"This sauce is suitable for every variety of dish, and the universal demand which its excellence has created, has led to many imitations being offered to the public, under a variety of names, but the genuine may be known by the names of 'Lea & Perrins,' being impressed upon the patent metallic capsule, or patent glass stopper of the bottle, as well as the labels and wrapper.

"Manufactory, 68, Broad-street, Worcester; wholesale and export warehouse, 19, Fenchurch-street, London; and to be obtained also of Crosse and Blackwell, Barclay and Sons, London, and all the principal druggists, grocers, and Italian warehousemen throughout the United Kingdom and abroad.

Note 1. This may be the earliest document seen (Dec. 2005) concerning soybean products (soy sauce {though not mentioned}, an ingredient of Worcestershire Sauce) in Spain. This document contains the earliest date seen for soybean products in Spain (1854); soybeans as such had not yet been reported by that date.

Note 2. This is the earliest document seen (Feb. 2012) that uses the word "medicinal" (or "medicine" or "medical") in connection with Lea & Perrins' Worcestershire sauce, or

LEA & PERRINS'

PRONOUNCED BY CONNOISSEURS. TO BE THE "ONLY GOOD SAUCE" AND APPLICABLE TO EVERY VARIETY OF DISH.



EXTRACT of a LETTER from a MEDICAL GENTLEMAN at Madras, to his Brother at Worcester, May, 1861.

"Tell LEA & PERRING that their SAUCE is highly esteemed in India, and in my opinion, the mor paletable as well as the most wholesome Sence the is made."

WORCESTE

Sold universally by the principal dealers in Sauces

that mentions a letter from a man who has carried a bottle of this sauce "through Spain and Portugal."

Note 3. A graphic from *The Secret Sauce* (1997, p. 95) shows the medal more clearly than does our photocopy of the same medal, which was the only medal awarded in 1853 at the New York Exhibition to a sauce manufacturer. Address: [England].

- 54. Fox (Chas. E) & Co. 1854. Classified ad: For the table -. Hartford Daily Courant (Connecticut). May 8. p. 2.
- Summary: "... Capers, Olives, Anchovies, Tomato, Walnut and Mushroom Catsup;... Worcestershire, Royal Osborn, John Bull, Reading, Harvey, India Soy and Warwickshire Sauces, for imparting a zest to fish, chops, steaks, soups, and made dishes."

Note: This ad also appeared in the May 9 issue (p. 3) of this newspaper.

- 55. New York Daily Times. 1854. Special notices. Sept. 6. p.
- Summary: The section titled "Champagne wines..." states: "Lea & Perrin's Worcestershire Sauce, landing ex Manhattan, from Liverpool. For sale by John Duncan & Sons, No. 405 Broadway, between Walker and Lispenard

sts." Address: New York.

- 56. Sharland & Co. 1854. On sale by the undersigned, ex Joseph Fletcher (Ad). Taranaki Herald (New Zealand). Oct. 11. p. 1, col. 2.
- Summary: "1 case Child's Night Lights. 1 do [ditto = case] Lea & Perrin's Worcestershire Sauce." 1 case each "Burgess' Essence Anchovies. Burgess' Reading Sauce. Burgess' India Soy [sauce]. Burgess' Mushroom Ketchup."
- 57. Weston (Thomas) & Co. 1854. Public auction sales, in the Estate of the late Mr. Wellesley Hughes, stock in trade of groceries, &c. (Ad). Daily Southern Cross (Auckland, New Zealand). Oct. 31. p. 1.
- Summary: "Thomas Weston & Co. have received instructions to sell by Auction to-morrow, 1st November, at the premises of the late Mr. Wellesley Hughes, Shortlandstreet, at 11 o'clock, the stock in trade of groceries, &c., comprising goods lately imported from England... Packages being unbroken.
 - "3 cases muscatels.
 - "3 cases jams 2 and 1 lb.
 - "1 case Worcester sauce.
 - "16 casks carbonate soda." Address: [Auckland, New

Zealand].

58. Lea & Perrins' celebrated Worcestershire Sauce (Ad). 1854. In: Charles Pope. 1854. Yearly Journal of Trade. 24th ed. London: Printed for the proprietor. See p. 84 near end.

• Summary: At the end of this volume, and paginated separately, is Pope's Yearly Journal of Trade Advertiser [1854-5]. On page 84 is this half-page ad: "Pronounced by connoisseurs to be the 'only good sauce' and applicable to every variety of dish. Extract of a letter from a medical gentleman at Madras [India], to his brother at Worcester, May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made.'

"Sold universally by the principal dealers in Sauces." Note: This is the earliest document seen (Feb. 2012)

related to this sauce that contains (even approximately) these words: "Extract of a letter from a medical gentleman at Madras, to his brother at Worcester..." or "'Tell Lea & Perrins that their Sauce is highly esteemed in India,..." or "the most wholesome sauce made."

An illustration in the center of this add shows a bottle of the sauce. This is the earliest document seen (March 2012) with an illustration of a bottle of this sauce.

- 59. Lea and Perrins. 1855. Classified ad: Lea and Perrins' Worcestershire Sauce... Times (London). Jan. 31. p. 14, col.
- Summary: "... is universally acknowledged to be the most valuable condiment, and experience has proved its efficacy in promoting digestion and preserving health. Sold by Crosse and Blackwell, Barclay and Sons, and the principal dealers everywhere."

This ad also appeared in the 27 April 1856 issue (p. 14, col. 2) of this newspaper. Address: [England].

- 60. Fox (Chas. E) & Co. 1855. Classified ad: English sauces, pickles, &c. Hartford Daily Courant (Connecticut). May 16. p. 3.
- Summary: "Worcestershire Sauce, Royal Osborn do. [ditto = Sauce], Warwickshire do., John Bull do., Napoleon do.; Reading, India Soy and Harvey Sauces for fish, game, soups, steaks, etc... Piccallilli [Piccalilli], India Currie Powder. Mushroom, Walnut and Tomato Catsup."

Note: This ad appeared 12 more times in this newspaper during 1855 from May 17 to May 31.

- 61. Somerville (M.). 1855. Ex "Rock City" from London (Ad). Daily Southern Cross (Auckland, New Zealand). June 22. p. 2, col. 5.
- Summary: "From the celebrated Houses of Crosse & Blackwell, G.F. Coward & Batty and Company. One hundred and fifty cases fancy groceries and oilman's stores... 30 cases Chouchou, Imperial hot and mixed pickles, 6 cases Sauces

& Soyer's relish, Indiana Soy [sic, Indian Soy], China Soy, Worcester Ketchup, Harvey, John Bull, &c., in fancy vases and bottles, 20 cases Bottled vinegar, pints, quarts, and fancy decanters,..."

Note 1. This is the earliest of 177 documents seen (Nov. 2009) in the New Zealand Newspapers database (paperspast) that contains the term "China Soy." The term was last used in New Zealand Newspapers on 23 April 1906.

Note 2. The meaning of "Worcester Ketchup" is unclear. The text should probably read "Worcester [sauce], Ketchup,..." Address: Auckland.

- 62. New York Daily Times. 1855. Summer wateringplaces: Cold water. A few days' experience at a water-cure establishment. July 28. p. 2.
- Summary: The section titled "Dinner..." states: "We dine at 1 o'clock; we have no French cookery–no pastry or kickashaws [kickshaws-fancy dishes], but plenty of good beef and mutton, vegetables and fruit... They allow us salad with vinegar, oil and salt; but no pepper, mustard, Worcestershire sauces or other noxious stimulants are suffered to pollute our table."
- 63. Forester, Frank. 1855. The wigwam in the wilderness. Graham's American Monthly Magazine of Literature, Art, and Fashion 47(2):133-46. Aug. See p. 138.
- Summary: "Alf Arminger... swore that, stewed, with the suspicion of an onion, a whole red pepper pod, a table spoon of Worcestershire sauce, and a gill of Jamaica, in default of port wine, they would not go so bad for supper."
- 64. Lea & Perrins, 1855. Lea & Perrins' celebrated Worcestershire Sauce (Ad). Islander (The) (Charlottetown, Prince Edward Island, Canada). Oct. 19. p. 4.
- Summary: "Pronounced by connoisseurs to be the 'only good sauce' and applicable to every variety of dish.

"Extract of a letter from a medical gentleman at Madras [India], to his brother at Worcester. May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made.'

"Sold universally by the principal dealers in Sauces.— Wholesale for Exportation by the Proprietors Lea and Perrins, 68, Broad-street, Worcester, and 19, Fenchurchstreet, London. Barclay and Sons; Crosse and Blackwell, and other Oilmen and Merchants, London.

An illustration shows a bottle of Lea & Perrins' Worcestershire Sauce.

- 65. Merchant's Magazine and Commercial Review (New York). 1855. Mercantile miscellanies. 33(4):520-24. Oct. See
- Summary: In the section titled "Fabricated trade marks" (From the Mercantile Journal and Statistical Register,

Belfast) we read (p. 523): "Being apt and cunning, the universal Yankee nation, we are told by one of its own trade organs, tries its hand at deception, and hence imitative Champagne, Sheffield cutlery, Rowland's macassar, Cognac brandy, Worcestershire sauce, Belgium cloths, Burton ales, Irish linens, French silks, Scotch shawls, and a thousand other things, are manufactured there, and sold as the 'real originals.'"

- 66. Warner (Otis) & Co. 1856. Classified ad: Worcestershire sauce, &c. *Hartford Daily Courant (Connecticut)*. Jan. 5. p. 1.
- *Summary:* "Just received, Worcestershire Sauce in pints and half pints. Also pickles in jars and by the gallon; Capers, Pepper Sauce, Tomato Catsup, Olives, Brandy Peaches, &c." Address: 250 Main St.
- 67. Duncan (John) & Sons. 1856. Sauces of various kinds (Ad). *New York Daily Times*. Feb. 8. p. 8.
- Summary: "Lexicographers tell us there are various kinds of sauce, some of which are exceedingly appetising, while others are difficult of digestion. The old Colonists, and even our modern Yankees and Virginians, speak in their quaint rustical way of 'garden sass,' under which term they include all culinary vegetables. But there is another kind of sauce which, deriving its name from a palatable condiment, is yet, in itself, directly the reverse of palatable; we mean the sauce of a pert young gentleman or forward miss, in whose education manners have been neglected.

"The third kind of sauce is the best of all inasmuch as it gives zest to the languid appetite and flavor to viands which need its aid. These sauces are variously prepared, and are known under different names; but the one which is most celebrated, for its tonic and invigorating properties, is the Worcestershire sauce, manufactured by Lea & Perrin, and sold by their agents, John Duncan & Sons, No. 405 Broadway, New York.—*Baltimore Patriot*, Feb. 5." Address: New York.

- 68. Duncan (John) & Sons. 1856. Champagne wines, landing ex *Samuel G. Fox* (Ad). *New York Daily Times*. March 29. p. 8.
- *Summary:* "Scotch malt whiskey landing ex *Mary Morris*. "English cheese landing ex *American Eagle*.
- "Lea & Perrin's Worcestershire Sauce, landing ex *Harvest Queen*. For sale by
- "John Duncan & Sons, No. 405 Broadway." Address: New York.
- 69. Hempel, Charles J. 1856. Original communications: Much ado about nothing. Dr. Peters' Review (Letter to the editor). *Philadelphia Journal of Homeopathy* 4(12):738-44. March. See p. 741-42.
- Summary: "In the February number of the North American

Homeopathic Journal, we find an article entitled 'On fatty diseases of the heart,' by Dr. Peters. This article is an importation, in condensed form, from British soil, together with all of the allopathic absurdities and crudities with which the original composition is tainted. Under the head of 'Diet,' for instance, the patient is advised to use pepper. mustard, salt and Worcester sauce, in order to aid digestion. This is a good old English and universally recommended allopathic fashion, recommended by Dr. Chambers, and, upon his authority, by his American imitator, Dr. Peters. We do not object to usages like these, but how does such treatment agree with the use of homeopathic doses? How do these quantities of pepper, mustard, salt, and Worcester sauce agree with the *nux vomica* which Dr. Peters prescribes as an accompaniment to these condiments? Is the reader to understand that the nux is to be taken in teaspoonful doses stirred in a mixture of pepper, mustard, salt and Worcester sauce? This is a species of homeopathy which may be acceptable to the most inveterate advocate of allopathy, but which cannot but be rejected by all the thoughtful and enlightened friends of our cause. Spirit of Hahnemann!..." Address: M.D.

- 70. Duncan (John) & Sons. 1856. Among the various condiments offered to the public as a zest for Soups, Meats, Game, &c,... (Ad). *Hartford Daily Courant (Connecticut)*. April 3. p. 2.
- Summary: "... helping digestion and promoting the general health, Lee [sic, Lea] & Perrins' Worcestershire Sauce stands unequaled. The testimony of medical men in Europe and America attest to its virtues. Since the introduction of this sauce into the United States by Messrs. John Duncan & Sons of New York some fifteen years since [i.e., about 1841], the demand has become so large and its use so general, that it is now considered an 'indispensable' on the Breakfast, Luncheon, Dinner and Supper tables."
- 71. Duncan (John) & Sons. 1856. The only medal awarded by the New York Exhibition to the English or foreign sauce manufacturers... (Ad). *Hartford Daily Courant* (*Connecticut*). April 25. p. 2.
- *Summary:* "... has been obtained, amongst numerous competitors, by Lea and Perrins, for their Worcestershire Sauce, whereby further testimony is afforded of its being the best sauce extant.

"The celebrity of this sauce has extended to every quarter of the globe,...

This also appeared in the July 12 issue (p. 2) of this newspaper.

Note: The text of this long ad is almost identical to the following earlier ad: Lea and Perrins. 1854. "The only medal awarded by the Jury of the New York Exhibition to English or foreign sauce manufacturers..." *Times* (London). March 30. p. 11, col. 1. The ending however reads: "Sole agents for

the United States, John Duncan & Sons, 405 Broadway, New York." Address: 405 Broadway, New York.

- 72. Dublin University Magazine (The). 1856. The fortunes of Glencore. 48:579-94. Nov. See p. 591.
- Summary: "Chapter XXVII-The villa at Sorrento." This story takes place in Sorrento, a small city in southern Italy. Stevins opened a bag brought by a messenger and "proceeded to litter the table and floor with a variety of strange and incongruous parcels... 'Yarmouth bloaters-Atkinson's cerulean paste for the eyebrows–Worcester sauce-trade returns for Tahiti-a set of shoemaking toolseight bottles of Darby's pyloric corrector..."
- 73. Kane, Elisha Kent. 1856. Arctic explorations: The second Grinnell expedition in search of Sir John Franklin, 1853, '54, '55. Vol. II. Philadelphia, Pennsylvania. 467 p. See p. 19. Illust.
- Summary: In the chapter titled "A relishing lunch," in the entry dated Jan. 17, 1855, we read (p. 19): McGary "has foraged out some raw cabbage and spiced it up with currypowder,... This, with a piece of corn-bread,—no bad article either,-he wants me to share with him. True to my old-times habitude, I hasten to the cabbage,-cold roast-beef, Worcester sauce, a head of endive, and a bottle-not one drop less-of Preston ale, (I never drink any other.)" Address: M.D., U.S.N.
- 74. Stretton, Julia Cecelia. 1856. Margaret and her bridesmaids. 3 vols. London: Hurst and Blackett, Publishers. Successors to Henry Colburn. See Vol. 3, p. 275-76.
- Summary: "Mrs. Banks did all she intended, and welcomed dear Fred, very warmly. But she was disappointed in seeing him enjoy the feast she had prepared for him. He hardly tasted a mouthful of fish, he said it was so woolly; and he turned up his nose at the beefsteak-there was no Worcester sauce to it; and the scalloped oysters had no cayenne pepper in them." Address: Author.
- 75. Calcutta Review (The).1857. Life in the North West [of India]. 28:1-23. March. See p. 17.
- Summary: "The tiffin consists of an awful 'devil' in which mustard, cayenne, Worcestershire sauce, West India pickle, and other irritating ingredients, are mixed. This awful compound is washed down with 'a cup' and some more brandy-pawnee."

76. Blackwood's Edinburgh Magazine. 1857. Afoot. 81(498):434-49. April. See p. 445.

• Summary: "The nobleman who has magnanimously declined the immortality of associating his name with the Worcestershire sauce, how often, when a few drops of the precious condiment have given a relish to our dry chop or cold bone have we wished him all the pleasures which await on good digestion."

- 77. Turpin (Edward). 1857. Display ad: Choice liquors! New Orleans Commercial Bulletin. Oct. 2. p. 3, col. 4.
- Summary: "Worcestershire Sauce, Lea & Perrins. "English Pickles, Crosse & Blackwell's."

Note: Turpin sells mostly liquors. Illustrations show several kegs or casks. Address: 129 Common st. [New Orleans].

- 78. Bowman, Anne. 1857. The common things of every-day life: A book of home wisdom for mothers and daughters. London and New York: G. Routledge. 183 p. See p. 45.
- Summary: In the section titled "Hashes" we read (p. 45): "Let it boil down to three-fourths of the quantity, then strain off the gravy, and flavour it with a little ketchup or Worcester sauce, put in the sliced meat, and make it hot over the fire, taking care that it does not boil, and serve it with sippets of toasted bread."

Note: Sippets are small sops of fried or toasted bread used to garnish broths, soups, gravy or meat (Glasse 1747). Address: Author.

- 79. Ellet, Elizabeth Fries. 1857. The practical housekeeper; A cyclopædia of domestic economy... Comprising five thousand practical receipts and maxims. Illustrated with five hundred wood engravings. Edited by Mrs. Ellet. New York, NY: Stringer and Townsend. 599 p. Illust. Index. 23 cm.
- Summary: Chapter XXVI, "Condiments," states (p. 135): "Soy [sauce] is obtained from the seed or fruit of an Indian plant, called *dolichos soja*, or *soya*; it is made like ketchup; it enters greatly into use in the variety of sauces that are made for the table, being of a very strong, sweet-bitter taste; it should be used in moderation in cookery."

The receipts [recipes] are numbered sequentially. Soy [sauce] or Worcestershire is used as an ingredient in the following receipts: 18. Gravy soup ("a large spoonful of soy and one of mushroom ketchup," p. 161-62). 61. Mock turtle (p. 172-73). 70. Hare soup ("a spoonful of soy or Harvey's sauce," p. 178). 104. Stock for fish soup ("If meant to be browned,... a good spoonful of mushroom ketchup or India soy [should] be added," p. 185). 110. Oyster soup ("add two spoonfuls of soy or any fish sauce," p. 186). 118. Lake and pond fish soup ("but if made solely with water, then use Chili vinegar, soy, mushroom ketchup, or any of the savoury sauces," p. 188). 190. Marinade (Cut large fish into steaks. Then, instead of wine or cider, "a quart of table-beer, a glass of soy, one of essence of anchovies, and one of ketchup, may be used," p. 189-90). 133. To collop halibut ("a spoonful of soy or fish sauce," p. 192).

153. To cook trout ("eat with salt and lemon-juice, or with shrimp or lobster sauce; or a dash of Worcestershire or Harvey sauce; though I think these bad taste." p. 195-96). 254. For all sorts of fish ("Take a spoonful of vinegar, on

of Indian soy, the same of mushroom ketchup and Harvey's sauce, with a little cayenne. Add three large spoonfuls of melted butter; stir all well and heat it over the fire," p. 214). 256. Brown sauce ("simmer it in a glass of port wine, with a tablespoonful of soy and walnut ketchup," p. 215). 291. Epicurean sauce ("Indian soy, two ounces; walnut and mushroom ketchup, of each eight ounces; port wine, two ounces," p. 222).

292. Carrack or Indian sauce for cold meat ("Two heads of garlic sliced, five spoonfuls of soy, five spoonfuls of mushroom ketchup, eight spoonfuls of walnut pickle, fifteen anchovies, or five spoonfuls of essence of anchovies, three spoonfuls of mango pickle, one quart of vinegar-mix in a bottle and set in the chimney corner; shake daily for a month," p. 222).

313. Sauce, Harvey ("Chop twelve anchovies, bone and all, very small, with one ounce of cayenne pepper, six spoonfuls of soy, six ditto of good walnut pickle, three heads of garlic chopped not very small, a quarter of an ounce of cochineal, two heads of shalots [shallots] chopped rather large, one gallon of vinegar; let it stand fourteen days, stir it well twice or thrice every day, then pass it through a jelly bag, and repeat this till it is quite clear; then bottle it, and tie a bladder over the cork." p. 225-26).

398. A l'espagnole (or Spanish sauce) ("If it wants flavor, add soy," p. 238). 396. Carachi [a sauce] ("three tablespoonfuls of soy, three of mushroom ketchup, three of walnut pickle, six anchovies dissolved, two or three spoonfuls of mangoe or India pickle liquor, and a pint of the best vinegar, with sufficient cochineal to color," p. 239). 459. Rump of beef stew ("a spoonful or soy and Oude sauce," p. 252). 500. To stew tongue ("season with soy, mushroom ketchup," p. 262). 704. Haricot of mutton (p. 302). 977. Turkey pulled and grilled (or devilled, p. 360).

1153. Camp vinegar ("two teaspoonfuls or real soy, two of walnut ketchup," p. 400-01). 1166. Walnut ketchup (Irish mode, p. 403).

1172. Artificial sauces for fish ("Those most commonly used are soy and anchovy, merely mixed from the cruets into melted butter by each individual of the company... The savory store sauces for fish, as prepared and sold in the shops, are all to a certain degree agreeable to some palates, but anchovy and soy seem the prevailing sort for fish," p. 405). 1173. Store sauces (No. 1, An excellent and not common Pickle, called 'Salade,' {"Pour in a wine-glass of soy"}, Quin's sauce {contains no soy}, p. 405-06).

Mackenzie's Perigord pie ("Worcester sauce, good with savory pies, is said to be made on a basic of good walnut ketchup, with additional spices," p. 418-19). Note 1. Perigord is a former province of France, which corresponds roughly to the current Dordogne département in the Aquitaine region of southwest France.

Note 2. Elizabeth Fries Ellet lived 1818-1877. This comprehensive cookbook "captures American culinary arts just prior to the Civil War."

Note 3. This is the earliest English-language document seen (Feb. 2007) that uses word "soya" to refer to the soybean plant; previously it has been used only to refer to sov sauce.

Note 4. This cookbook contains many recipes, especially meat, poultry, and fish recipes, and desserts, credited to Alexis Benoît Soyer (lived 1810-1858). Born in France, Soyer moved in 1830 to London, where he became a famous chef to fashionable society and the author of many popular cookery books. He subsequently worked for Irish famine relief and with the British army in the Crimea. In 1849 he developed a table-top cooking range (The Magic Stove, Soyer / Soyer's stove), and in 1857 his Field stove. Soyer died in London in 1848, at age 48.

80. Ockside, Knight Russ; Doesticks, Q.K. Philander. 1857. The history and records of the Elephant Club compiled from authentic documents now in possession of the Zoölogical Society. New York. NY: Livermore & Rudd. 321 p. See p. 123. Illust.

• Summary: This novel is actually by Edward Fitch Underhill (1830-1898). "Dennis had somewhere heard of ice cream," but when it arrived he did not know how to season it. Perceiving "that other people made use of bottles from the caster stand... He began with pepper, followed it with vinegar, kept on to the Cayenne, added a good quantity of oil, drowned it with ketchup, and then with unusual impartiality, not wishing to neglect any of the bottles, he poured Worcestershire sauce over the whole." Address: 1. M.D.; 2. P.B.

81. Knickerbocker: Or, New-York Monthly Magazine. 1858. Editor's table. 51(1):84-110. Jan. See p. 109.

• Summary: "'Madame, your coffee, mustard, apples, Worcestershire sauce, and Oolong tea, went by the two o'clock train."

82. Lea and Perrins. 1858. Celebrated Worcester Sauce (Ad). Age (The) (Melbourne, Australia). April 27. p. 3, col. 2.

• Summary: "Pronounced by connoisseurs to be the Only Good Sauce, and applicable to every variety of dish.

"Extract of a letter from a medical gentleman at Madras [India], to his brother at Worcester, May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome sauce that is made.'

"Extensive frauds. Lea and Perrins have discovered that several of the Foreign Markets have been supplied with spurious imitations of their 'Worcestershire Sauce,' the labels of which closely resemble those of the Genuine Sauce, and in one or more instances with the names of L. and P. forged; they have deemed it their duty to caution the public, and request purchasers to see that the name Lea & Perrins are

upon the Wrapper, Label, Stopper, and Bottle.

"L. & P. further give notice, that they will proceed against any one who may infringe upon their right, either by manufacturing or vending such imitations, and have instructed their correspondents in the various parts of the world, to advise them of such infringements.

"Wholesale and for Exportation by the proprietors Lea and Perrins, Worcester, England; Crosse and Blackwell, and other Oilmen and Merchants, London.

Note: This is the earliest document seen (Feb. 2012) that contains the words "Extensive frauds" or the words "spurious imitations" in connection with Worcestershire sauce. Address: [Worcester, England].

- 83. Duncan (John) & Sons. 1858. "The only good sauce" (Ad). New York Times. May 22. p. 8.
- Summary: "So pronounced by gentlemen of acknowledged goût [taste], prepared by Messrs. Lea & Perrins, under the name 'Lea & Perrins' Worcestershire Sauce,' and suitable for soups, fish, meats, game, gravies, curries, &c., imparting a most exquisite flavor, zest and piquancy. For sale by grocers and druggists generally. Beware of imitations." Address: Sole agents for the proprietors, 405 Broadway [New York City].
- 84. Colburn's United Service Magazine (and Naval and Military Journal). 1858. The Karlee Caves and notices of Bombay. Part II. July. p. 419-24.
- Summary: A British party is traveling near Bombay, India. On page 423 we read: "We were often amused with sundry visits from borahs, or native pedlars [peddlers], who sell us anything we ask far." There follows a bargaining session. Page 424: "We pay him eight annas, which is equivalent to a shilling... We now inspect both baskets, and make the old fellow turn out everything-pomade, jam, pickles, Warren's blacking, dress shirts, boot hooks, hair oil, metal teapots, bridles and currycombs, lead pencils, China silk handkerchiefs, and Worcestershire sauce."

Note: By July 1858 Worcestershire sauce is being sold by pedlars in India.

- 85. New York Times. 1858. Outfit for the woods... (Letter to the editor). Aug. 13. p. 2.
- Summary: "Round Lake, Bartlett's, Tuesday, July 13, 1858. Dear R.: We are finally off for a camping time... The outfit Martin gave us rather surprised me... twenty-five pounds of pork, the same quantity of Indian meal [cornmeal] and wheat flour, bread and biscuits, soda and cream of tartar, West India and maple sugar, Worcestershire sauce and current [currant] jelly, tea and chocolate were stowed away together, filling a champagne-basket full."
- 86. Duncan (John) & Sons. 1859. Captains of merchant ships (Ad). New York Times. April 1. p. 5.
- Summary: "Be particular that the steward has provided a

supply of 'Lea & Perrins' Worcestershire Sauce.' Sold by all respectable grocers and Fruiterers." Address: Sole agents, No. 405 Broadway [New York City].

- 87. Majendie, Vivian Dering. 1859. Up among the Pandies: or, A year's service in India. London and New York: Routledge, Warne, and Routledge. xii + 360 p. See Chap. 11, p. 130. 19 cm.
- Summary: A British lieutenant describes his military service in colonial British India, putting down mutinies, etc. "... we had partaken of a good breakfast, and were in a state of profuse perspiration from hot tea and military ardour, which, conjointly with "Worcestershire sauce" and curry, was burning within us, our existence, which not half an hour ago looked blank and worthless, now assumed such a delightful couleur de rose, that,..." we looked forward to our march tomorrow towards Lucknow.

Note: The "Pandies" (after a sepoy named Manghal Pandi) were those who started the Indian Mutiny, the great revolt of the Bengal native army in 1857, which led to the transference of Indian government from the East India company to the crown in 1858. Address: Sir, Lieut., Royal Artillery.

- 88. Walsh, J.H. ed. 1859. The English cookery book: uniting a good style with economy, and adapted to all persons of every clime; containing many unpublished receipts in daily use by private families. Collected by a committee of ladies... London: G. Routledge and Co. vii + 375 p. Illust. Index.
- Summary: The term "Worcestershire sauce" appears on 11 pages in this book: Stewed beef steak ("If without them [carrots and turnips], the gravy must be flavoured with Worcestershire sauce and anchovy,..." p. 116). To fry or broil rump or beef steaks ("... then add [to the gravy] a tablespoonful of ketchup (mushroom or walnut), a table-spoonful of Worcestershire sauce, and a little mixed pickle chopped up,..." p. 121). Haricot of mutton ("This will take three hours to stew. Add a little ketchup, or anchovy, or Worcestershire sauce to the gravy before serving." p. 124). Kidneys, fried ("When nearly done throw in some flour to thicken the gravy, which will be favoured by the addition of stock, or hot water flavoured with Worcestershire sauce and the juice of a lemon." p. 128).

Ragout breast of veal ("... strain the gravy through a sieve; skim off all the fat, and take as much of the liquor as is required, and thicken it with flour and butter, and flavour with lemon pickle or juice, walnut and mushroom ketchup, or Worcestershire sauce." p. 134-35). Veal cutlets ("The bone taken out of the fillet with part of the knuckle will boil down and make good stock, browning it in the usual way (see Gravies), and flavouring with a little mushroom ketchup and Worcestershire sauce;... p. 140-41). To fry pork (These "are best when fried in the French fashion, when, however, they require a made-gravy. When this is not at hand" add "a

chopped onion and a tea-spoonful of mustard to the flour, and a table-spoonful of Worcestershire sauce or pickle to the water." p. 143). To stew a hare ("... before serving, thicken the gravy with flour and butter, or arrowroot, and add two table-spoonfuls of ketchup, or one with some Reading or Worcestershire sauce, and the juice of half a lemon." p. 152-53). Beef or mutton scalloped ("... adding some good broth or gravy, with some walnut ketchup and a little Worcestershire sauce poured upon it,... p. 161). Cold beef or mutton stewed with peas ("Simmer another hour and a half, then stir in a little Worcestershire sauce, and add flour and butter, with a little flour of mustard, to thicken it." p. 161). To stew carrots brown ("... cut each carrot into as many round balls as it will make; put them into a stewpan with a pint of gravy, flavoured with a little pepper, salt, mushroom ketchup, and Worcestershire sauce;..." p. 185). Veal pie ("... then pour in some gravy from the bones, with a little mushroom ketchup, and a very small quantity of Worcestershire sauce; cover with a short crust, or good puff paste, and bake." p. 206). Address: F.R.C.S., author of "A Manual of Domestic Economy," England.

- 89. Parker (A.J.). 1860. London Club Sauce (Ad). New York Times. Feb. 3. p. 8.
- Summary: "This unrivaled Sauce, manufactured by Parker Brothers, London, can be obtained of their agent in this City, A.C. Parker,... This article is superior to the Worcestershire Sauce and can be obtained at one-half the price."

Note: This ad also appeared on June 24, p. 8. Address: No. 15 Beekman-street [New York City].

- 90. Lea and Perrins. 1860. Classified ad: Sauces.-Connoisseurs have pronounced Lea and Perrins' Worcestershire Sauce... Times (London). May 14. p. 14, col.
- Summary: "... one of the best additions to soup, fish, joints, and game. The large and increasing demand has caused unprincipled traders to manufacture a spurious article; but the genuine all bear Lea and Perrins' name on the bottle, label, and stopper. Sold by Crosse and Blackwell, London, and all respectable oilmen and grocers. Sole manufacturers, Lea and Perrins, Worcester." Address: [England].
- 91. Lea and Perrins. 1860. Sauces.-Connoisseurs have pronounced Lea and Perrins's Worcestershire Sauce one of the best... (Ad). Observer (London). July 8. p. 8.
- Summary: "... additions to soup, fish, joints, and game. The large and increasing demand has caused unprincipled traders to manufacture a spurious article; but the 'genuine' all bear Lea and Perrin's name on the bottle, label, and stopper. Sold by Crosse and Blackwell, London, and all respectable oilmen and grocers. Sole manufacturers, Lea and Perrins, Worcester."

Note: This is the earliest reference seen (Feb. 2012)

- to "Worcestershire sauce" in the Observer (London) or the Manchester Guardian, as they have been digitized by ProQuest. Address: Worcester, England.
- 92. Lea and Perrins. 1860. Classified ad: Notice.-Beware of imitations. Times (London). Aug. 4. p. 13, col. 4.
- Summary: "Lea and Perrins' Worcestershire Sauce is pronounced by connoisseurs to be the most agreeable addition to every variety of dish. See the names of Lea and Perrins on every label, bottle, and stopper. Sold by Messrs. Crosse and Blackwell, London, and by dealers in sauces generally. Sole manufacturers, Lea and Perrins, Worcester." Address: [England].
- 93. Lea and Perrins. 1860. Notice.-"Beware of imitations." Lea and Perrins' Worcestershire Sauce is pronounced by connoisseurs to be a most agreeable addition... (Ad). Observer (London). Aug. 5. p. 1.
- Summary: "... to every variety of dish. See the names of Lea and Perrins on every bottle, label, and stopper. Sold by Messrs. Crosse and Blackwell, London, and by dealers in sauces generally. Sole manufacturers: Lea and Perrins, Worcester." Address: Worcester, England.
- 94. Duncan (Jno.) & Sons. 1860. Ask for Lea & Perrins' Worcestershire Sauce (Ad). New York Times. Nov. 29. p. 6. • Summary: "The most popular and economical condiment known; delicious in soup, gravy, with fish, hot or cold meats, game, &c. The great reputation of this Sauce in all parts of the world has induced many imitations under the name of Worcestershire Sauce. Purchasers desiring the *genuine* will observe the name of Lea & Perrins' upon each bottle and wrapper. For sale by all respectable Grocers and Fruiterers." Address: Sole agents, 405 Broadway [New York City].
- 95. Lennox, William Pitt. 1860. Pictures of sporting life and character. 2 vols. London: Hurst and Blackett, Publishers, successors to Henry Colburn. See Vol. II, p. 228. Illust.
- Summary: Using a tame decoy, one can "pass an agreeable hour or two, especially with the prospect of seeing the produce served up at dinner with the following sauce:-One glass of port wine, one tablespoon Worcestershire sauce, one ditto lemon juice, four grains of Cayenne pepper, and a shallot, to be scalded, strained, and added to the gravy of the bird." Address: Lord [England].
- 96. Taylor, Charles. 1860. Five years in China: With some account of the Great Rebellion, and a description of St. Helena. New York, NY: Derby & Jackson; Nashville, Tennessee: J.B. McFerrin. xvi + 413 p. See p. 131-32. No index. 20 cm,
- Summary: Chapter 10, titled "What and how they eat," states: "The most common nuts are cocoa-nuts, walnuts, chestnuts, almonds, filberts, and ground-nuts, or, as they are

variously called in different parts of this country [USA]-peanuts, ground-peas, goobers or pindars" (p. 131).

The Chinese: "Being very fond of highly-seasoned food, they use many condiments, sauces and catsups. One of these has a taste very similar to that of the celebrated 'Worcestershire sauce'" (p. 132).

Note: Interesting that the word "catsup" is used to describe Chinese soy sauce; the Chinese word may be something like *ket-siap*. Address: M.D. (Formerly [Methodist] missionary to China).

- 97. Wraxall, Lascelles. 1860. Camp life: or, Passages from the story of a contingent. London: Charles J. Skeet. xii + 307 p. No index.
- Summary: These are sketches from the Crimean war. Chapter 5 is devoted to military details. "I had just returned to my quarters, jaded with a long day's work, and had hardly completed the preparation for my dinner. These were simple enough in all conscience: for they consisted in uncorking a bottle of Worcestershire sauce, a condiment which entered into every culinary combination. I had, then, just dug a hole in the centre of the slab peas porridge, into which the beneficent liquid would be poured, when I was startled by a heavy tap at the door" (p. 45).

Note: The author's full name is Frederick Charles Lascelles Wraxall. Address: Author, Kensington, England.

- 98. Somerville (M.). 1861. Ex "Bosworth," from London. For sale at the city mart,... (Ad). Daily Southern Cross (Auckland, New Zealand). March 12. p. 1.
- Summary: Items from Crosse & Blackwell being sold include "4 cases Lea and Perrin's Sauce" [Worcestershire]. Address: Auckland.
- 99. Sutton (F.). 1861. F. Sutton begs respectfully to inform his friends... he has greatly enlarged his premises and stock, which now comprises: (Ad). Hawke's Bay Herald (New Zealand). July 6. p. 5.
- Summary: Items being sold include "Lea and Perrin's Sauce" [Worcestershire]. "Crosse and Blackwell's Sauce, assorted."

Note: A similar ad appeared in this newspaper on July 13, 20, 27, Aug. 6, 13, 20, 27, and Sept. 3. Address: Napier.

- 100. Duncan (John) & Sons. 1861. Lea & Perrins' celebrated Worcestershire Sauce (Ad). Hartford Daily Courant (Connecticut). Sept. 3. p. 3.
- Summary: Extract of a letter from a medical gentleman at Madras [India] to his brother at Worcester. May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made.'

"Pronounced by connoisseurs to be the 'only good sauce' and applicable to every variety of dish.

"The above Sauce is not only the best and most popular condiment known, but the most economical, as a few drops in Soup, Gravy or with Fish, hot and cold Joints, Beef Steak, Game &c., impart an exquisite zest, which unprincipled Sauce manufacturers have in vain attempted to imitate.

"On the Breakfast, Luncheon, Dinner or Supper Table, a cruet containing 'Lea & Perrins' Worcestershire Sauce' is indispensable.

"To appreciate the excellent qualities of this delicious preparation, it is only necessary to purchase a small bottle of the genuine, of a respectable grocer or dealer, as many Hotel and Restaurant proprietors seldom place the pure Sauce before their guests, but substitute a genuine bottle filled with a spurious mixture.

"For sale by grocers and Fruiterers everywhere.

"John Duncan & Sons, Union Square and Fourteenth st., New York. Sole agents for the United States. A stock always in store. Also, orders received for direct shipment from England.

"Beware of Counterfeits and Imitations."



An illustration (line drawing) shows the bottle of sauce. This published ad is 4 inches tall by 2.5 inches wide.

Note: This is the earliest document seen (Feb. 2012) that mentions the word "cruet" (or "cruets"), in connection with Worcestershire sauce. However soy cruets and soy frames were being made in England as early as the 1770s (Bradbury 1912). Address: Union Square and 14th st., New York.

101. Duncan (Jno.) & Sons. 1861. A gentleman writes to Lea & Perrins thus: (Ad). New York Times. Nov. 29. p. 6.

• Summary: "'I have carried a bottle of your Worcestershire

Sauce in a tour I have just completed through Spain and Portugal, and I believe I owe my present state of health to its use. Your Sauce is Stomachic, and I think medicinal. I can with truth say there is nothing in a traveller's baggage so essential to his comfort, at least in these countries, as your Sauce.' For sale by all respectable grocers and fruiterers." Address: Sole agents, Union-square, late No. 405 Broadway [New York City].

- 102. Pestonjee Jewanjee & Co. 1861. Classified ad: Fresh supplies!!! Just landed by the undersigned, at their General Depot,... Bombay Times and Journal of Commerce (British India). Dec. 25. p. 4, col. 3.7.
- Summary: Under "Crosse & Blackwell: Quality, flavour, and price. Preserved provisions." The section on "Sauces &c." lists: "Reading Sauce, Harvey's John Bull,... Essence of Anchovies, India Soy, King of Oude Sauce,... Lea and Perrin's Worcestershire Sauce, Mushroom Catsup, Walnut ditto,..." Address: No. 1, Military Square, Bombay.
- 103. Lea & Perrins. 1862. Lea & Perrins celebrated Worcestershire Sauce (Ad). Quebec Mercury (Canada). Jan. 2. p. 1.
- Summary: "Pronounced by connoisseurs to be the 'only good sauce' and applicable to every variety of dish.

"Extract of a letter from a medical gentleman at Madras [India] to his brother at Worcester. May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made.'

"Extensive frauds. L. & P. having discovered that several of the Foreign Markets have been supplied with Spurious Imitations of the 'Worcestershire Sauce,' the labels of which closely resemble those of the Genuine Sauce, and in one or more instances the names of L. & P. forged, they have deemed it their duty to caution the public, and to request purchasers to see that the name of Lea & Perrins are upon the Wrapper, Label, Stopper, and Bottle.

"L. & P. further give notice, that they will proceed against any one who may infringe upon their right, either by manufacturing or vending such imitations, and have instructed their correspondents in the various parts of the world, to advise them of such infringements.

"Wholesale and for exportation by the Proprietors Lea & Perrins, Worcester, England; Crosse and Blackwell, and other Oilmen and Merchants, London.

"Quebec, Nov. 9, 1861.

A small illustration shows a bottle of Lea & Perrins' Worcestershire Sauce.

Note 1. This is the earliest document seen (Feb. 2010) concerning soybean products (Worcestershire sauce, whose main ingredient was soy sauce) in Québec. This document contains the earliest date seen for soybean products in Québec (May 1862); soybeans as such have not yet been

reported.

Note 2. This is the earliest document seen (Feb. 2012) in which Lea & Perrins uses the term "will proceed against" to threaten a lawsuit.

Note 3. This ad appears about 20 times in this newspaper from 1862 to 1864.

- 104. Lea & Perrins. 1862. Sauce.-Lea and Perrins Worcestershire Sauce (Ad). Quebec Mercury (Canada). Nov.
- Summary: "Pronounced by connoisseurs to be the 'only good sauce' and applicable to every variety of dish.

"Extract of a letter from a medical gentleman at Madras [India] to his brother at Worcester. May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made.'

"Caution. Lea & Perrins beg to caution the public against spurious imitations of their celebrated Worcestershire Sauce.

- L. & P. have discovered that several of the Foreign Markets have been supplied with Spurious Imitations, the labels closely resembling those of the genuine Sauce, and in one or more instances the names of L. & P. forged.
- "L. & P. will proceed against any one who may manufacture or vend such imitations, and have instructed their correspondents in the various parts of the world to advise them of any infringement of their rights.

"Ask for Lea and Perrins' Sauce. Sold Wholesale and for Export by the Proprietors, Worcester; Messrs. Crosse and Blackwell; Messrs. Barclay and Sons, London; &c. and by Grocers and Oilmen universally.

"Ouebec, Nov. 18, 1862.

A small illustration shows a bottle of Lea & Perrins' Worcestershire Sauce.

- 105. Stanton's. 1863. Classified ad: Holiday gifts... Chicago Daily Tribune. Dec. 24. p. 4, col. 2.
- Summary: "All the sauces: Harvey, Reading, Beef Steak, Worcestershire, Essence of Shrimps, Anchovy and Lobster, John Bull, Soho, Chutney, India Soy [sauce], Sultana, Cumberland, Catsups."

Note: This ad also appeared in the Dec. 31 (p. 4) issue of this newspaper. Address: 135 Lake Street.

106. Lea and Perrins. 1864. Sauce.-Lea and Perrins' Worcestershire Sauce. Pronounced by connoisseurs "The only good sauce."... (Ad). Observer (London). Jan. 24. p. 8.

• Summary: "None genuine without name on wrapper, label, bottle, and stopper. Sold by Crosse and Blackwell. Barclay and Sons, and grocers and oilmen universally." Address: Worcester, England.

107. Times (London). 1864. Classified ad: Napoleon, by the

Grace of God and the will of the nation... July 30. p. 1, col. 1. • Summary: This article describes a lawsuit in France "Between Crosse and Blackwell, manufacturers of sauces and pickles, residing at No. 21, Soho-square, London, county of Middlesex (England)...And William Knight, provision dealer, residing at Boulogne-sur-Mer, defendant,..."

"Considering that it is an established fact" that in Jan. 1864: "The plaintiffs have caused to be seized at Knights divers pickles prepared with vinegar and mustard contained in Jars, labelled Crosse and Blackwell, and bearing the designation of Imperial Mixed Pickle, Girkins, India Pickle, Piccallilli [Piccalilli], Essence of Anchovies; Considering that these jars, with their labels and contents, constitute, on the part of Knight, spurious imitations of the products of the plaintiffs, of which they declare having deposited specimens, with their trade marks, at the Registrars of the Tribunal of Commerce of the Seine, on the 12th of May, 1863, which is not disputed."

The plaintiffs are asking for damages of 600 French francs. "Considering that Crosse and Blackwell declare to release from seizure certain products labelled Lea and Perrins:-"

The plaintiffs apparently won the case, but appear to have been awarded much less money than they asked for.

- 108. Richardson. 1865. English mutton and soles for dinner on Monday (Ad). New York Times. July 30. p. 5.
- Summary: "For sale-Crosse & Blackwell's pickles. Lea & Perrin's Worcestershire sauce, Scotch oatmeal, mushroom ketchup, capers, &c." Address: No. 100 William-st., near John [New York City].
- 109. Phillips and Company, Ld. 1866. Classified ad: Provisions and stores, for town or districts, of guaranteed and quality. Bombay Times and Journal of Commerce (British India). Aug. 25. p. 7.
- Summary: In the section on "Sauces-Anchovy Essence, Harvey's Sauce, Mushroom and Walnut Catsups, India Soy,... Worcestershire, Lea and Perrins, Worcestershire, Phillip's, pint, Yorkshire relish."

Note: A new brand of Worcestershire sauce (Phillip's) is now being advertised and sold by Phillips & Company, Ltd. in Bombay-for significantly less than the price of Lea and Perrins' sauce. This is the earliest document seen (March 2012) that mentions a brand of Worcestershire sauce made by a company other than Lea and Perrins. Address: Bombay, New Oriental Bank Buildings, and Poona.

- 110. Times (London). 1866. Money-market & city intelligence. Aug. 27. p. 6, col. 4.
- Summary: "The general sense of what is due alike to the public and the interests of commerce causes the Trade Marks' Act to be enforced in nearly all places with wholesome severity. According to the recent advices from

India, the police in June last entered the premises of a printer in Calcutta and seized a large quantity of forged labels of several English manufacturers, among which were those of Allsop and Sons, Lea and Perrins, P. and J. Arnold, Day and Martin, and Crosse and Blackwell. The latter firm immediately commenced a persecution under the Trades' Marks Acts (India), section 485 of the Penal Code, which resulted in the conviction of the offender, and his being sentenced to two years' vigorous imprisonment."

- 111. Lea and Perrins. 1866. Sauce.—Lea and Perrins' Worcestershire Sauce (Ad). Observer (London). Oct. 28. p.
- Summary: "This delicious condiment, pronounced by connoisseurs 'the only good sauce,' is prepared solely by Lea and Perrins. The public are respectfully cautioned against worthless imitations, and should see that Lea and Perrins' names are on the wrapper, label, bottle, and stopper. Ask for 'Lea and Perrins" sauce. Sold wholesale and for export by the proprietors, Worcester: Messrs. Crosse and Blackwell, Messrs. Barclay and Sons, London &c.: and by grocers and oilmen universally." Address: Worcester, England.
- 112. Duncan's (John) Sons. 1867. Lea & Perrins-Celebrated Worcestershire Sauce (Ad). Hartford Daily Courant (Connecticut). June 11. p. 3.
- Summary: "Pronounced by connoisseurs to be the 'only good Sauce,' and applicable to every variety of dish." An illustration shows a bottle of the sauce.

Note: This is the 2nd earliest document seen (Feb. 2012) that contains an illustration of Lea & Perrins Worcestershire sauce.

- 113. Farmers' Cabinet (Amherst, New Hampshire).1868. Classified ads. 66(49):3. June 25.
- Summary: "Worcestershire sauce, pepper sauce, catsup, mustard, cayenne pepper, &c. at the Old Mill Store, Milford." This ad also appeared in the October 15 (1868, p. 3) issue of this newspaper.

Note: Milford is a town in Hillsborough County, southern New Hampshire. Address: Milford.

- 114. Lea and Perrins. 1869. Classified ad: Lea and Perrins' Worcestershire Sauce... Times (London). April 10. p. 2, col.
- Summary: "Lea and Perrins' Worcestershire Sauce, pronounced by connoisseurs to be 'the only good sauce.' Sold wholesale by Crosse and Blackwell, and retail by grocers and oilmen universally." Address: [England].
- 115. Jephson, Richard Mounteney; Elmhirst, Edward Pennell. 1869. Our life in Japan. London: Chapman and Hall. xviii + 428 p. Illust. No index. 23 cm. Facsimile edition reprinted in 2002 by Ganesha Publishing (London) and

EA & PERRINS-

CELEBRATED

WORCESTERSHIRE SAUCE,

Pronounced by connoisseurs to be the "only good SAUCE," and applicable to every variety of dish.

Extract of a letter from an American gentleman at Madras, his brother at Worcester, May, '51.

"Tell Lea & Perrin that their Sauce is highly esteemed India, and is, in my epinion, the most palatable as well as the wholesome most Sauce that is made.

The success of this most delicious and unrivaled condiment, having caused many unprincipled dealers to apply the name to spurious compounds, the public is respectfully and carnestly requested to see that the name of Lea & Perrin is upon the Wrapper, Label, Stopper and Bottle.

. Manufactured by

LEA & PERRIN, Worcester.

JOHN DUNCAN'S SONS.

New York, Agents for the United States.

1yd

Edition Synapse (Tokyo). Series: Japan in English, Vol. 14. • Summary: This is largely a silly book, that tries to be amusing, but ends up being foolish. It's about Englishmen riding horseback and hunting in Japan, while taking many opportunities to belittle Japanese culture and religion although there are some parts of Japanese culture that they appreciate. The authors arrived in Japan on 9 May 1866 after having been in Hong-Kong for a year. At breakfast in Japan, one of them, "suddenly changing his tone to one of reckless indifference,... tell the cook to make some more of that grill, with no end of Cayenne pepper and Worcestershire sauce in it!" (p. 62).

"Extreme cleanliness characterises not only their dwellings, but their food, manner of cooking, serving it, &c. As an instance to show how well assured we became of this, we may mention that on more than one occasion, when returning home late at night, we have partaken of the delicate seaweed soup that is hawked about in the streets of every town, and that without any fear of either the materials of the soup itself, or the cups we drank out of, being less clean than at our own table. When you come to consider that the price of the soup rendered it accessible to the meanest coolie,..." (p. 381). Note: This may well have been miso soup with wakame.

"They consume little or no meat, except in the form of soups;..." (p. 381).

"The first Japanese dinner we ever went to, caused us more wonderment at the time, and appeared to possess more novelty, than anything we had ever seen before. This was an entertainment given at Nagasaki by some of the chief officers of Prince Satsuma to the British Admiral and his friends" [on 28 July 1866] (p. 382). Every aspect of the 40-course dinner is described in great detail. "The drink was a spirit called saki, which is extracted from rice." (p. 383). It is consumed hot.

The Bill of fare, describing briefly each of the 40 courses, is given; it includes "1. Bitter Green Tea (whipped)," hot Saki, seaweed, salted plums, "14. Soup of fish and seaweed," and "27. Soup of Vermicelli, with 'Soy' [probably sauce] and Red Berries." (p. 385-86). Address: Englishmen.

116. The Indian cookery book: A practical handbook to the kitchen in India, adapted to the three presidencies; Containing original and improved recipes in every department of Indian cookery... By a thirty-five years' resident. 1869. Calcutta, British India: Wyman & Co. 2 p. +1 + 123 p. See p. 49, 79, 81. 19 cm. 1st edition.

• Summary: Recipe 156 for "Rolled mutton" (p. 49) states: "add a tablespoonful each of vinegar, mushroom catsup, soy, and lemon pickle, and a teacupful of port wine;..."

Recipe 312, "To make a quart bottle of fish or meat sauce," directs: "To half a bottle of vinegar put one ounce of cayenne, two cloves of garlic, one tablespoonful of soy, two of walnut, and two of mushroom catsup. Let it stand six days, shaking it frequently: then add the remaining half of the bottle of vinegar, let it stand another week, strain, and put it into small bottles."

Recipe 329, "Jelly for cooked birds, meats, or made dishes" notes: "; then, with a dozen cloves and the juice and rind of a lemon, boil it again, adding a tablespoonful of soy or any other dark-coloured, rich, and well-flavoured sauce;"

"Lea & Perrin's Worcestershire sauce" is mentioned on pages 35 and 76; plain Worcestershire on pages 41 and 45. "Catsup" is mentioned on 9 pages, of which 8 are "mushroom catsup" and 1 is "walnut catsup." "Harvey" sauce is mentioned only once (p. 41).

In 1880 a very similar edition was published but with different pagination (123 p.). The publishers were: Calcutta: Thacker, Spink, and Co. Bombay: Thacker & Co. Madras: Higginbotham & Co. It had a recipe index. Address: Calcutta, India.

117. Times (London). 1870. Worcester Cathedral restoration. July 4. p. 9, col. 3.

• Summary: Messrs. Lea and Perrin have promised to give 250l. [£250] each. Lord Sandys has promised 200l.

Note: Although this article does not mention Worcestershire sauce, it shows that one Lord Sandys, probably not the one who is said to have given Messrs. Lea and Perrin the original recipe for Worcestershire sauce, lives in Worcestershire (See Keogh 1997, p. 29-30). Address: [Worcestershire, England].

118. Argus (The) (Melbourne, Victoria, Australia). 1870. Tuesday, December 13, 1870. Dec. 13. p. 4-5. See p. 5. • Summary: In Melbourne: "Three other cases before the District Court yesterday... Some time was occupied in hearing a couple of cases in which the defendants were charged with selling spurious Worcestershire sauce, bearing an imitation of the label of Lea and Perrins, the well-known manufacturers. James Dunlea and James Nicholson, of 107 Elizabeth-street, and Thomas and Richard Fogarty, of Queensberry-street, Hotham, were charged, on the information of Wm. R. Virgoe, jun. [agent for Lea and Perrins], with having on the 20th November last sold certain bottles containing, an article called Worcestershire sauce, together with a forged or counterfeited trade-mark, knowing the same to be the forged or counterfeited trademark of Lea and Perrins, used by them in an article known as Worcestershire sauce.

"The evidence showed that the bottle sold by Dunlea and Nicholson was labelled in very close imitation of the genuine, the words 'equal to' being inserted unpretendingly in much the same manner as à la was used for Wild's Carlisle ale, but that sold by the Fogarty's shopman was not a close imitation, and in fact the imitation seemed to consist in calling the contents 'Worcestershire sauce.' The

defence was that there was no proof of a guilty knowledge on the part of the defendants. After hearing the evidence, the Bench said they did not feel disposed to impose a penalty in these cases. On the one hand, no person who viewed the bottles could come to any reasonable conclusion other than that they were a gross and scandalous imitation; but, on the other hand, the evidence did not show that the defendants had been knowingly aiding and abetting and gaining by the fraud. If any further sales took place the case could be very easily presented to the Bench again with a knowledge of the fraud on the part of the defendants. The facts were beyond dispute, but the great difficulty was in bringing home to the defendants that they had acted with a knowledge of and had profited by the fraud. The cases were, therefore, dismissed."

Note 1. This is the earliest document seen (March 2012) that uses the word "trade-mark" (or "trademark") in connection with Worcestershire sauce.

Note 2. An article titled "Trade-mark prosecutions," describing a different case related to Lea and Perrins' Worcestershire sauce, appeared 3 days later in this newspaper on Dec. 16 (p. 7).

- 119. Cowieson's Warehouse. 1870. Classified ad: Sauce. Scotsman (Edinburgh). Dec. 23. p. 1.
- Summary: "Sauce (Lea & Perrin's Real Worcester), 2s. 6*d*...

"Sauce (Harvey's Worcester), 9s. Doz.; Indian Soy [sauce], Chutnee, Mixed Pickles,..." Address: [Edinburgh].

120. Morning Post (New York City). 1870. Lea & Perrins Sauce. Dec. 23. [1 ref]

- Summary: Discusses cases against certain parties in this city for manufacturing and selling a counterfeit article of Lea & Perrin's Worcestershire Sauce.
- 121. Press (The) (New York City). 1870. About Sauce (Letter to the editor). Dec. 26. [1 ref]
- Summary: "To the editor of The Press.

"In the issue of the Morning Post of the 23d inst. there is an error in what is stated in reference to the cases against certain parties in this city for manufacturing and selling a counterfeit article of Lea & Perrin's Worcestershire Sauce. The fact that a counterfeit sauce was made and sold in this community was abundantly proven. The man A.A. Smythe, who was the manufacturer of the article, pleaded guilty to the charge, and was sentenced by the Court in May last.

"In reference to the case of Henry Pohl, tried Thursday last, the evidence him showed conclusively that he had been dealing in the counterfeit article and his acquittal was owing to a mere technicality. Thomas R. Patton, who is still under bail, will be tried in due course. John Duncan's Sons, special agents for the sale of Lea & Perrin's Worcestershire Sauce in the United States, intend to prosecute, to the full extent of the law, all persons whom they have or shall hereafter discover

engaged in making or selling a counterfeit of Lea & Perrin's Sauce."

- 122. Croly, Jane Cunningham. 1870. Jennie June's American cookery book: Containing upwards of twelve hundred choice and carefully tested receipts... New York, NY: The American News Company. vii + 379 p. Index. 19 cm.
- Summary: Soy [sauce] is used as an ingredient in the following recipes: Mock turtle soup (p. 25). Berkshire sauce (p. 101). A sauce for made dishes (p. 101).

The recipe for "Tomato soy" (p. 123-24) contains no "soy" sauce; the word "soy" does not appear in the body of the recipe, only in the title.

Worcestershire sauce is used as an ingredient in two recipes: Calf's head hash (p. 61). Roast ducks ("Make a rich gravy, into which put a table-spoonful of Worcestershire sauce," p. 85-86).

A quotation on the title page by the English author John Ruskin (1819-1900) states: Cookery "means the knowledge of Medea, and of Circe, and of Calypso, and of Helen, and of Rebekah, and of the Queen of Sheba. It means the knowledge of all herbs and fruits and balms and spices-and of all that is healing and sweet in the fields, and groves, and savory in meats-it means carefulness, and inventiveness, and watchfulness, willingness, and readiness of appliance. It means the economy of our great-grandmothers, and the science of modern chemists-it means much testing and no wasting-it means English thoroughness, and French art, and Arabian hospitality, and it means in fine, that you are to be perfectly and always 'ladies'-'loaf givers.'"

Note: This is a remarkable book by a remarkable woman. Born in England, she was the daughter of a Unitarian preacher, whose "unpopular beliefs reportedly led to the stoning of their house and the impetus for the family's move to the United States in 1841." She became a pioneering American woman journalist, author, feminist (in the woman's club movement), and author of *The* History of the Woman's Club Movement in America (1898) (MSU biography). Address: Author of "Talks on Women's Toppics," etc..

- 123. Lowell, James Russell. 1871. My study windows. Boston, Massachusetts: James R. Osgood and Company. 433 p. See p. 25. Jan. No index. 19 cm.
- Summary: In Chapter 2, titled "A good word for winter," we read (p. 25): "... a discourse on the probability of making missionaries go down better with the Feejee-Islanders by balancing the hymn-book in one pocket with a bottle of Worcestershire in the other..."

Note 1. James Russell Lowell, an American essayist and poet, lived 1819-1891.

Note 2. According to the Bibliography of American Literature under Lowell, this book was first published in 1871 by James R. Osgood and Co. of Boston. It went

through 4 printings during the period Jan. 20 and August 21 of 1871, each with minor changes but no changes in pagination. Address: A.M., Prof. of Belles-Lettres in Harvard College.

124. New York Times. 1871. Proposals (Ad). Feb. 2. p. 7. • Summary: "Proposals in duplicate will be received by the undersigned until 12 M [Midnight] Saturday, March 4, for the following Subsistence Stores:... 240 bottles of Worcestershire Sauce, packed 12 in a case, imported 'pints.'... Major W.W. Burns, Chief C.S. Department of East." Address: Army Building, Corner of Houston and Greene sts., New York City.

125. New York Times. 1872. Worcestershire sauce-Rival manufacturers in court. Feb. 2. p. 7.

• Summary: "Yesterday morning Mr. John P. Duncan, of the firm John Duncan's Son, grocer, of Union-square, appeared before justice Dowling, at the Tombs Police, and proferred [proffered] a complaint against Messrs. James Stevens and Edward Cole, composing the firm of Stevens & Cole, carrying on business at No. 500 Washington-street, charging them with forging the trade-mark of 'Lea & Perrin's Worcestershire Sauce' and selling a counterfeit sauce put up in exact imitation of the genuine article, of which Duncan & Son are the sole agents in this country.

"The accused were arrested later in the day and arraigned. They both waived examination, and were committed for trial at the Court of Special Sessions in default of \$1,000 bail each. Mr. Duncan stated that his firm intended to prosecute all persons found manufacturing or selling the alleged spurious sauce, and propose to make the complaint against Messrs. Stevens and Cole a test case."

126. McBean and Sons. 1872. Classified ad: Co-operative prices. Times (London). Sept. 19. p. 12, col. 3.

• Summary: "Sauces, Worcester, Lea and Perrin's..." "Sauces... India soy [sauce], 8d."

127. New York Times. 1872. Bankrupt notices. Sept. 19. p. 7. • Summary: "United States District Court, Southern District of New York.-In the matter of William B. Fiske and C.D. Lawrence, bankrupts. Notice is hereby given that the undersigned, assignee in bankruptcy of the abovenamed bankrupts will sell at public auction" the assets of the bankrupts, including "52 cases Worcestershire sauce... William H. Jackson, Assignee."

128. Duncan's (John) Sons. 1873. Caution (Ad). New York Times. Sept. 19. p. 7.

• Summary: "Lea & Perrins' Worcestershire Sauce. Buyers of this sauce are cautioned to avoid the numerous counterfeits and imitations offered for sale. John Duncan's Sons, New-York." Address: Agents for the United States,

New York.

129. New York Times. 1873. How we live: The way the money goes. Where the extravagance begins-Private life and hotel life contrasted... Nov. 22. p. 4.

• Summary: The dinner menus of 3 restaurants of different classes are listed. The section titled "House below Union Square" states: "Tuesday, Nov. 18, 1873... Relishes: Assorted pickles, apple sauce, cranberry sauce,... walnut catsup, horseradish, Worcestershire Sauce, olives, chow-chow..."

130. Manufacturer and Builder (New York). 1873. Notes & queries. 5(11):263-64. Nov. See p. 264.

• Summary: "[801] Worcestershire sauce [homemade].-This is quite a complex condiment. It is made of wine vinegar, 1½ gallon; walnut catsup, 1 gallon; mushroom catsup, 1 gallon; Madeira wine, 1/2 gallon; Canton soy [China], 1/2 gallon; moist sugar, 2½ pounds; salt, 19 ounces; powdered capsicum, 3 ounces; pimento, 1½ ounces, coriander, 1½ oz.; chutney, 1½ oz.; cloves, 3/4 oz.; mace, 3/4 oz.; cinnamon, 2/3 ounce; asafoetida [asafetida], 6½ drachams dissolved in 1 pint brandy 20° above proof. Boil 2 pounds hog's liver for 12 hours in 1 gallon of water, add water continually so as to keep up the quantity of one gallon; mix the boiled liver thoroughly with the water, strain through a coarse sieve, and add this to the above mixture. It is self-evident that no chemical examination could ever detect the presence of half the above organic products."

Note 1. This is the earliest document seen (March 2012) that contains a recipe for Worcestershire sauce.

Note 2. This is the earliest document seen (March 2012) that contains a recipe for Worcestershire sauce in which soy sauce is used as an ingredient.

131. Harland, Marion. 1873. Common sense in the household: A manual of practical housewifery. New York: Scribner, Armstrong & Co. 556 p. Index. 20 cm.

• Summary: Worcestershire sauce is used as an ingredient in 15 recipes in this book. The first three of those are: Beef soup (brown) ("a teaspoonful of Worcestershire sauce," p. 37). Vermicelli soup (p. 38-39). Giblet soup ("A little Worcestershire sauce is an improvement," p. 40-41).

There is also a recipe for "Imitation Worcestershire sauce" (p. 195) with these ingredients: "3 teaspoonfuls cayenne pepper, 2 tablespoonfuls walnut or tomato catsup (strained through muslin), 3 shallots minced fine, 3 anchovies chopped into bits, 1 quart of vinegar, half teaspoonful powdered cloves." Note: This is the earliest document seen (Feb. 2012) that contains a recipe for Worcestershire sauce or "Imitation Worcestershire sauce."

A recipe for "Green tomato soy" contains no soy sauce used as an ingredient. Moreover, "soy" is not even mentioned in the body of the recipe. The ingredients: "2 gallons tomatoes, green, and sliced without peeling, 12 goodsized onions, also sliced, 2 quarts vinegar, 1 quart sugar, 2 tablespoonfuls salt, 2 tablespoonfuls ground mustard, 2 tablespoonfuls black pepper, ground, 1 tablespoonful allspice, 1 tablespoonful cloves." "Mix all together and stew until tender, stirring often... Put up in small glass jars. This is a most useful and pleasant sauce for almost every kind of meat and fish."

Note: "Marion Harland, the pen name of Mary Virginia Terhune (lived 1830-1922), was among the most popular cookery authors of her day." She was also a renowned southern novelist (MSU introduction and biography).

132. Chicago Daily Tribune. 1874. The courts: Counterfeiting of Worcestershire sauce. March 3. p. 2.

• Summary: "Worcestershire sauce. John W. Lea, C.W. Lea, and J.D. Perkins [sic, Perrins], copartners as Lea & Perkins [sic, Lea & Perrins], of Worcester, England, and the manufacturers of the well-known 'Worcestershire Sauce,' filed a bill in the United States District Court against Charles Hastings.

"Complaintants assert that they are the original manufacturers of the 'Worcestershire Sauce', and have been for the past thirty years [i.e., since about 1844]. Their sauce is put up in bottles with the name blown in, and with a red label constituting their trade-mark, having their names and the words 'Worcestershire Sauce' printed thereon. A white label, smaller in size, containing directions, is also pasted on each bottle. These wrappers of different character are put around each bottle. They have lately ascertained that one Charles Hastings, of Chicago, is manufacturing an article similar in outward aspect to their own. The labels and wrappers are so much alike that none but an expert would be likely to detect the difference. They claim that their trade and reputation are seriously affected; that the imitation of Hastings is very close, and he is selling his production as genuine. An injunction is therefore asked and an account.

"Filed with the bill are two affidavits... and the other by Henry M. Collyer, counsel in the present case. Hastings has sold his firm his imitations as such, but alleging that it is as good as the original. Mr. Collyer, who is from New York, states that he has been as the attorney for Lea & Perkins [sic, Perrin], engaged for some years in prosecuting infringements of their sauce. Some time ago he visited Hastings at his manufactory, No. 211 South Halsted street, representing himself as desirous of purchasing some of the defendant's sauce. Hastings told him that the price of the cases was \$30 for those containing small sized bottles, and \$55 for those containing the larger size. Collyer noticed that the bottles were labeled like the genuine, the wrappers identical, and the bottles packed in hay, like Lea & Perkins'. Hastings stated that he sold his manufacture as the genuine; that no one would know the difference; that he had sold to Farwell, Steele, & Pratt, to Phil Conley, of the St. Charles Hotel, and others, and thought his article was nearly as good as the

original. Collyer however states that the component parts of the imitation are poor and often disgusting, and it does not cost so much as the original."

"Altogether, the imitation, as a bank-detector would say, is a 'very dangerous counterfeit.""

133. Chicago Times. 1874. The U.S. Circuit Court: Worcestershire sauce. March 3. p. 7, col. 5.

• Summary: "The manufacturers of this palatable article, Messrs. John W. Lea, Charles W. Lea, and James D. Perrens [sic, Perrins], all of whom are subjects of the British crown, filed a bill in this court on yesterday, in which they set forth in a boastful sort of way, that they are the only persons living, who have any show of right to manufacture stuff of this kind. They state that they have been accustomed, for some years past, to manufacture it with great care and in large quantities, and afterward to put it up in bottles, each of which is adorned with an elegant label bearing their firm name and trade mark. No other persons have any right to use these bottles or labels, or any like them, but yet one Charles Hastings, of Chicago, has dared to get up a compound in imitation of the one they prepare, and put it up in bottles similar to theirs, with similar labels, similar directions for use, etc., all of which is unlawful, as they think, and able to do them great injury. They, therefore, ask that he may be compelled to answer their bill; to give an account of all profits he may have made from the manufacture, and to turn the same over to them, and also that he may be enjoined from further trespassing on their just rights."

Note: This is the earliest reference seen (Feb. 2012) to Worcestershire sauce in a Chicago newspaper.

134. Grocer (The) (London). 1874. Sauces: Lazenby, Harvey's, Clarence's (Ads). 25(636):iv, 211-12. March 7. • Summary: On page iv are three small (1 by 3 inch) ads for sauces, including the address of each company; none of them claim to contain soy, and the first two warn against inferior imitations. (1) "E. Lazenby & Son's pickles, sauces, & condiments." (2) Harvey's Sauce. Caution. "Bears the label used so many years, signed 'Elizabeth Lazenby." (3) Clarence's celebrated sauce. "Pronounced by connoisseurs the only good sauce. It improves appetite and digestion, and is unrivaled for its flavour. Wholesale, Crosse and Blackwell; and may be had of Grocers and Italian Warehousemen." In pints and half-pint bottles.

On pages 211-12 is a buyers' and sellers' directory. Under "Pickle and sauce manufacturers" are listed (with address) J. Burgess, Carter Hales & Co., and Jacob Stower & Son. Under "Sauce manufacturers" is listed only Goodall, Backhouse, & Co.

Note 1. Lea & Perrins does not advertise their Worcestershire sauce in this magazine and they are not mentioned among pickle and sauce manufacturers.

Note 2. An Adulteration Act has been enacted to

protect consumers. Isaac Hatch & Co. of Bristol has a large ad for "Adulteration Detectors." This is "A very powerful microscope, so constructed as to show the slightest admixture of any substance with Tea, Coffee, Cocoa, Mustard, Pepper, Spices, and every article of manufacture." One confectioner was charged with selling "adulterated lozenges."

One ad is for "E.M. Bagot's Pure Extract of Meat" (March 14, p. xiii). It is used by the Admiralty, the Royal Victoria Hospital, etc. and is "pronounced to be superior to 'Liebig's Extractum Carnis,' and is considerably less in price." Another ad (March 28, p. 2) is for "Liebig Company's Extract of Meat." "As 'stock' for beef-tea, soups, made dishes and sauces; gives fine flavour and strength. Invariably adopted in households when fairly tried. Caution. Genuine with the fac-simile of Baron Liebig's signature, in blue, across Trade Mark Label." Note: The book Popular Fallacies Explained and Corrected, by A.S.E. Ackermann (1923, p. 43) contains numerous quotations arguing that "Liebig's Extract of Meat" and "Beef-tea" possess only slight nutritive properties. They are salty stimulants-not proteid foods.

Another ad (March 14, p. xiv) is for Greenwich sperm candles. The company Wilkie & Soames, of Greenwich, London, S.E., manufactures parrafine [paraffin], sperm, and stearaffine candles, hard soaps, saponified stearine, and tallow oil.

135. **Product Name:** Mellor's Worcestershire Sauce.

Manufacturer's Name: Mellor & Co.

Manufacturer's Address: Malvern, Worcestershire

[England].

Date of Introduction: 1874. March. Wt/Vol., Packaging, Price: Bottle.

New Product-Documentation: Ad in The Grocer (London). 1874. March 28. p. xii. "Mellor's Worcestershire Sauce. Ask for Mellor's Sauce and observe the green guarantee labels on every bottle. Sold by wholesale vendors everywhere. For foreign agents, see names on labels. Registered. The only sauce sold genuine at half price. Oneshilling bottles for sixpence. Two-shilling bottles for one shilling." A small illustration (line drawing) shows the bottle.

Note 1. The ad does not state that this brand contains soy sauce.

Note 2. Lea & Perrins does not advertise their Worcestershire sauce in this magazine and they are not mentioned among pickle and sauce manufacturers.

136. Chicago Daily Tribune. 1874. The courts: Another imitator of Worcestershire sauce. April 3. p. 3.

• Summary: "More Worcestershire-sauce troubles. Judging from the suits of infringement of patents brought here, Chicago must be a flourishing place for bogus manufactures. Especially does this appear to be the fact in regard to counterfeits of Lea & Perkin's [sic, Lea & Perrins] 'Worcester Sauce.' About six weeks ago Lea & Perkins filed a bill against a party on Blue Island avenue, and yesterday two more cases were commenced, one against Charles Lutz [Leitz] and William Lewis, the other against Edward Cole."

The complainants state that "Charles Lutz has for some time been engaged in the manufacture of an imitation of their sauce. The labels employed by him... state that the sauce was manufactured by 'Lewis & Co.,' of Worcestershire and London. A circular, which is issued by the spurious firm, states that they are the only manufacturers of the genuine Worcester sauce, and warns the buyer of spurious imitations, designating, with cool effrontery, the original makers, Lea & Perkins [sic], as imitators. An affidavit filed by H.M. Collyer, the counsel" for Lea & Perrins describes how about 6 weeks ago he "formed the acquaintance of this Charles Lutz at No. 85 Washington street. Lutz pretended that he imported all his sauce in bottles from England, and that it was true blue [genuine]." Collyer, however, found that the sauce was made in "the basement of a brick block on the southeast corner of State and Kinzie streets. Here he saw Lutz engaged at work with a large kettle, in which the sauce was made, with barrels to hold it when boiled, and numerous bottles, labels, and boxes for it preparatory to shipment."

"In the case against Cole, it is alleged that he was formerly engaged with a party named Stevens in New York. The labels of that firm set out in glowing colors the excellence of their article, the 'Gold Medal Worcester Sauce,' which is represented as having taken sundry prizes at various places, and as being employed to aid the digestion of majesty herself in England. Stevens appears to be a myth, and Cole, after having been sued in New York, has flown to, what he considers, a more congenial climate in Chicago." But he has now been found and caught again.

137. Duncan's (John) Sons. 1874. Sauces. Trade-mark: Worcestershire sauce (Ad). New York Times. May 16. p. 6. • Summary: "Supreme Court–General term. John W. Lea et al. against Sundry Counterfeiters. 'When it is apparent that there is an intention to deceive the public by the use of the name of a place and the word descriptive of an article, such deception will not be protected by the pretense that these words cannot be used in such a manner as to constitute a 'trade mark.'

"Where words and the allocation of words have, by long use become known as designating the article of a particular manufacturer, he acquires a right to them as a trade-mark, which competing dealers can not fraudulently invade.

"The essence of the wrong is the false representation and deceit, on proof of which an injunction will issue.'

"The concluding words of the judge's decision are: 'The order appealed from should be modified and the injunction extended so as to prohibit the use of the words

'Worcestershire Sauce' on the bills, labels, and wrappers of the defendant.'

"Lea & Perrins' celebrated Worcestershire Sauce.

"Pronounced by connoisseurs to be the 'only good sauce,' and applicable to every variety of dish."

Extract of a letter from a medical gentleman at Madras [India] to his brother at Worcester. May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made.'

"Sold Wholesale and for Exportation by the Proprietors, Lea & Perrins, Worcester, England; and Retail by Dealers in Sauces generally throughout the World.

"Ask for Lea & Perrins' Sauce. All parties infringing on the above will be prosecuted by Messrs. Lea & Perrins."

A large illustration of a bottle of Lea & Perrins Worcestershire Sauce, with the label in plain view, appears in the middle of the ad.

Note 1. This is the earliest document seen (March 2012) that mentions the Supreme Court in connection with Worcestershire Sauce.

Note 2. This is the earliest document seen (Feb. 2012) concerning Worcestershire Sauce with this illustration, or with this format or text. Address: New York.

138. Chicago Daily Tribune. 1874. The courts: Miscellaneous business transacted yesterday. May 19. p. 2.

• Summary: "A few months ago, it will be remembered, Lea, Perrin & Co. filed bills in the United States Circuit Court against various Chicago parties for infringements of their Worcestershire sauce. Among the unfortunates who were detected and enjoined from further manufacturing any spurious imitation of the plaintiffs' brand were Charles Leitz [Lutz] and William Lewis.

"Yesterday Leitz, his occupation being gone, filed a bill against his partner, Lewis, for a dissolution of partnership. Leitz states that in February last, he formed a copartnership with Lewis in the business of manufacturing table-sauce, perfumes, soaps, pomades, etc. The firm name was to be 'Charles Leitz, agent for Lewis & Co., London,' and was to continue five years. Complainant was to provide the capital...

"It is now alleged that the business of the firm has never been successful, and that Leitz has lost a good part of the \$1,800 contributed by him. Lewis has neglected his duties, overdrawn his share of the profits, and even converted large amounts to his own use out of the goods manufactured for sale..."

139. Duncan's (John) Sons. 1874. There is no relish in the world which is so universally liked... (Ad). New York Times. Dec. 24. p. 6, col. 6.

• Summary: "There is no relish in the world which is so universally liked as Lea & Perrin's [sic] famous Worcestershire Sauce. Unfortunately, much that is counterfeit and worthless is sold in this country. Messrs. John Duncan's Sons are the most reliable agents for the pure sauce."

Note: This is the earliest document seen (Feb. 2012) that contains the title or opening sentence ("There is no relish...") repeated many times hereafter. However, subsequently it was always deceptively attributed, "From New-York Times," as if were a statement or evaluation of the sauce by the *Times*, whereas, in fact, it is was originally a sentenced published as an advertisement in the *Times* by John Duncan's Sons, the New York agent for Lea & Perrins. Address: New York.

140. Duncan's (John) Sons. 1875. Trade mark: Worcestershire sauce (Ad). Buffalo Commercial Advertiser (New York). Feb. 4. p. 4, col. 5. Thursday evening.

• Summary: "Lea & Perrins' celebrated Worcestershire Sauce. Pronounced by connoisseurs to be the 'only good sauce,' and applicable to every variety of dish.

"Extract of a letter from a medical gentleman at Madras [India] to his brother at Worcester. May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made.'

"Sold Wholesale and for Exportation by the Proprietors, Lea & Perrins, Worcester, England; and retail by dealers in sauces generally throughout the world.

"Ask for Lea & Perrins' Sauce. At the breakfast table it imparts the most exquisite relish and zest to hot or cold meat, fowl, fish, broiled kidney, &c.

"At the dinner table in soup, with fish, hot joints, game, and in all gravies, it gives a delightful flavor.

"At the luncheon and supper tables it is deemed indispensable to those familiar with its estimable qualities.

"From New York Times. There is no relish in the world which is so universally liked as Lea & Perrins famous Worcestershire Sauce." An illustration shows a bottle of the Sauce.

Another small advertisement of "this delectable condiment" is found on page 3, col. 1. The quotation from The New York Times is repeated. Address: New York.

141. Lea and Perrins. 1875. Classified ad: Caution-In consequence of spurious imitations of Lea and Perrins Sauce,... Times (London). March 15. p. 1, col. 2.

• Summary: "... which are calculated to deceive the public, Lea and Perrins have adopted a new label bearing their signature, Lea and Perrins, which will be placed on every bottle of Worcestershire Sauce after this date, and without which none is genuine.-Crosse and Blackwell, Soho-square, Agents for the Proprietors.–November 1874."

Note 1. This is the earliest document seen (Feb. 2012) that mentions the plan use the Lea & Perrins' signature on the labels of their bottles to distinguish their genuine article from imitations. However the signature itself is not shown.

Note 2. This small published ad is the earliest document

seen (Dec. 2005) concerning unfair practices or deception in connection with a soy product.

Note 3. This ad also appeared in the April 19 issue (p. 1, col. 1).

- 142. Duncan's (John) Sons. 1875. Sauces. Trade-mark: Worcestershire sauce (Ad). New York Times. March 26. p. 11.
- Summary: This ad is identical to that in the Buffalo Commercial Advertiser (4 Feb. 1875. p. 4, col. 5). It also appeared in the April 23 issue (p. 8) of the New York Times. Address: New York.
- 143. Duncan's (John) Sons. 1875. Trade mark: Worcestershire Sauce. Lea & Perrins' celebrated (Ad). Montgomery Weekly Advertiser (Montgomery, Alabama) Advertiser and Mail section dated Tuesday, July 27. 1st page (unnumbered).
- Summary: "Pronounced by connoisseurs to be the 'only good sauce.' And applicable to every variety of dish.

"Extract of a letter from a medical gentleman at Madras [India] to his brother at Worcester; May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome Sauce that is made.'

"Sold Wholesale and for Exportation by the Proprietors, Lea & Perrins, Worcester, England; and Retail by Dealers in Sauces generally throughout the World.

"Ask for Lea & Perrins' Sauce. At the Breakfast Table it imparts the most exquisite relish and zest to Hot or Cold Meat, Fowl, Fish, Broiled Kidney, &c.

"At the Dinner Table in Soup, with Fish, Hot Joints, Game, and in all Gravies, it gives a delightful flavor.

"At the Luncheon and Supper Tables it is deemed indispensable to those familiar with its estimable qualities.

"From New York Times. There is no relish in the world which is so universally liked as Lea & Perrins famous Worcestershire Sauce. An illustration shows a bottle of the

Note: Inexplicably, the date of the "Advertiser and Mail" section is several days earlier than the date of the Montgomery Weekly Advertiser. Address: New York.

- 144. Lea & Perrins. 1875. Lea & Perrins' is the only genuine Worcestershire Sauce (Ad). Atlanta Constitution (Georgia).
- Summary: A tiny ad. Note: This is the earliest reference seen (Feb. 2012) to Worcestershire sauce in a Georgia newspaper.
- 145. New York Times. 1875. Life in hotels: A phase of American boarding. Oct. 31. p. 5.
- Summary: The dinner "bill of fare" [menu] is given to help the reader get a better idea of life in hotels. It includes: "Relishes: Mixed pickles, olives, celery, chow chow,

horse-radish, Worcestershire Sauce, currant jelly, lettuce, tomatoes."

- 146. Notes and Queries (London). 1876. Lea & Perrins. 5(106):39. Jan. 8. Fifth Series.
- Summary: "In consequence of Spurious Imitations of Lea & Perrins' Sauce, which are calculated to deceive the public, Lea & Perrins have adopted a New Label, bearing their Signature, thus-...

"Which will be placed on every bottle of Worcestershire Sauce, after this date, and without which none is genuine... Retail by dealers in Sauces throughout the world.-November, 1874."

- 147. Boston Daily Globe. 1876. Worcester sauce (Ad). March
- Summary: "This well-known table sauce for game, steaks, roasts, soups, etc. is manufactured by William Espenmuller, 281/2 Indiana Place; is composed of the best and most delicate ingredients, and is said to be superior to all others in the market. It is now mostly used by first class hotels, restaurants and families. The price has been reduced to \$1.50 per gallon, delivered to all parts of the city."

Note: This is an early "Worcester sauce" made in the United States.

- 148. New York Times. 1876. The household. April 28. p. 9. • Summary: Because of the lively interest in this department of *The Sunday Times*, the usual number of receipts [recipes]
- are printed. They include Tomato catsup, from R.A.M. The receipt for "The Cornish method to marinate shad" includes 11/2 tablespoons of Worcestershire sauce, from J.L.V.
- 149. Times (London). 1876. High Court of Justice, July 26, Chancery Division. (Before the Master of the Rolls.) Lea v. Millar. July 26. p. 11, cols. 1-2.
- Summary: "This bill was filed by Messrs. Lea and Perrins, of Worcester, to restrain the defendant from using the name 'Worcestershire' in connection with a sauce made and sold by himself under the style or firm of Richard Millar and Co., such name being claimed by the plaintiffs as exclusively belonging to the sauce manufactured by themselves from a recipe imparted to their predecessors in business by a nobleman of the county about the year 1835."

"The defence was that the name had become common property... The plaintiffs' counsel declined to contest that part of the case any further, and addressed themselves to the subsidiary question, whether the defendants had infringed the plaintiffs' rights by imitating their wrappers and labels. In the result.

"The Master of the Rolls said that he was of the opinion that the plaintiffs' case had wholly failed, and that Messrs. Lea and Perrins would have been better advised if they had not instituted the suit... It appeared to his Lordship to be

established that Messrs. Lea and Perrins' predecessors in business either invented or obtained the recipe for an article to which they gave the name of Worcestershire sauce, and that they were the first persons to sell an article by that name. This was about the year 1836, and within a very few, probably not more than two, years afterwards other people, of whom one Batty seemed to be the first, began to sell an article under the same name. Indeed the name, within a very few years after it was first used by Messrs. Lea & Perrins, appeared to have become a common name in the trade;..."

The "plaintiffs' sauce was sold at a shilling, and the defendant's at 6d. or 4½d. per bottle, according to the conscience of the retail dealer."

No damages appear to have been sustained. The "defendant's article was sold in any inferior class of shops and to a lower class of customers than those who were accustomed to buy Messrs. Lea and Perrins' more expensive compound."

"His Lordship of opinion that that the plaintiffs had not shown due diligence in prosecuting infringers, and... had in November, 1874, adopted a new label bearing their own signature as the distinctive mark, and had in the most public manner abandoned the old label, which they now sought to protect. His Lordship then dismissed the bill with costs." Address: [England].

150. Griffis, William Elliot. 1876. The Mikado's empire. New York, NY: Harper & Brothers, Publishers. 625 p. Illust. Index. Map. 23 cm. [25+* ref]

• Summary: Book 1. History of Japan from 660 B.C. to 1872 A.D. Book 2. Personal experiences, observations, and studies in Japan, 1870-1874.

This is a remarkable book, beautifully written by an American teacher and traveler in Japan who loves the culture and the people, who lived and traveled widely among them in both the countryside and cities during his four years in Japan (29 Dec. 1870 to 25 July 1874), and who speaks Japanese. He has a deep knowledge of many aspects of Japanese history, including the history of Japanese religions (incl. Buddhism). He was invited to Japan to organize a scientific school on the American principle in Fukui, Ichizen, and to give instruction in the physical sciences. This is the 1st of 18 books he wrote about Japan. He returned to Japan in 1926 the receive the Order of the Rising Sun.

Among the Aino [Ainu] in Hokkaido [Yezo] (p. 31): They sit, like the Japanese, on their heels. Their food is mainly fish and sea-weed, with rice, [soy] beans, sweetpotatoes, millet, and barley, which, in Southern Yezo, they cultivate in small plots."

Describing the Japanese origin myth, with the Sun Goddess (Amaterasu), Izanami, Izanagi, etc. (p. 48-49): "The God of Clay and the Goddess of Fresh Water married. Their offspring was Naka musubi. From his head grew the mulberry and silk-worm, and from his navel sprang the

five cereals, rice, wheat, [soy] beans, millet, and sorghum." "Reporting the matter in heaven, Amaterasu was angry at Sosanoö, and degraded her (the Moon-goddess) from joint rule, and condemned her to appear only at night, while she, the Sun-goddess, slept. Amaterasu then sent a messenger the second time to see whether the Food-goddess was really dead. This was found to be the case. Out of the dead body were growing, millet on the forehead; silk-worms and a mulberry-tree on the eyebrows; grass on the eyes; on the belly, rice, barley, and large and small beans." Note 1. Large beans are soybeans; small beans are azuki.

Page 208: The native sauce, shô-yu, made of fermented wheat and beans, with salt and vinegar, which the cunning purveyors of Europe use as the basis of their high-priced piquant sauces [such as Worcestershire sauce], was made and used as early as the twelfth century. The name of this saline oil (shô, salt; yu, oil) appears as 'soy' in our dictionaries, it being one of the three words (soy [sauce], bonze, moxa) which we have borrowed from the Japanese." Note 2. The author's derivation is incorrect; shô does not mean "salt," but rather hishio or jiang, which is the mash, having the consistency of applesauce, before the liquid is pressed out.

Page 357: In the cooper shops is a "dazzling array of wood-work, so neat, fresh, clean, and fragrant... There are two coopers pounding lustily away at a great rain-tank, or saké-vat, or soy- tub" [vat]. An illustration shows two coopers at work hooping a vat.

At the pagan temple (p. 381): "Several old women have stands, at which they sell holy [soy] beans, pious pease, and sanctified rice. These are kept ready in tiny earthen saucers. The orthodox buy these, and fling them to the cloud of pigeons that are waiting on the temple eaves, and fly, whirring down, to feed. Ten thousand sunbeams flash from their opaline necks..."

Page 420: "The village houses were built of a frame of wood, with wattles of bamboo smeared with mud, and having a thatched roof. Within, the floor was raised a foot or so above the ground, and covered with mats. When the rooms had partitions, they were made of a frame of wood covered with paper, and made to slide in grooves. In the middle of the floor was the fire-place. From the ceiling hung pot-hooks, pots, and kettles-one for tea, one for rice, another for radishes, beans, or bean-cheese [tofu]. In these villages good-nature and poverty seemed to be the chief characteristics of the people."

Page 426-27: "The seller of fish, vegetables, oil, and bean-cheese, each uttering his own trade trade-cry, ambled on."

Page 455: "Men or women itinerants carry a small charcoal brazier under a copper griddle, with batter, spoons, cups, and shoyu sauce, to hire out for the price of a cash each to the little urchins, who spend an afternoon of bliss making their own griddle-cakes and eating them."

Note 3. This is the earliest English-language document

seen (June 2010) that uses the term "Shoyu sauce" (regardless of capitalization of hyphenation) to refer to soy

Page 496: "... a shop to which the élite of the epicures of Yedo [today's Tokyo] resorted daily for the delicacy of eels fried in soy [sauce]. The appetizing odor was wafted" into the neighborhood.

Page 516: "May 1st [1871]-During the past month I have made many excursions on horseback through the country round. staying overnight at the village inns. Sasaki and Iwabuchi have been my companions. I have seen the paper manufactories, oil-presses, the sake breweries, soyvats...."

Page 542: Jan. 22d, 1872. For dinner: "Rice, beancheese, daikon, mushroom, fish, are served."

Azuki beans (red beans, small beans) are also mentioned on pages 454 and 469. The population in 1872 was 33.3 million. On pages 587-88 is a sort of bibliography.

William Elliot Griffis lived 1843-1928.

Note 4. This is the earliest English-language document seen (Jan. 2008) that uses the term "bean-cheese" (hyphenated, with a space before the word "bean") to refer to tofu. Address: A.M., Late of the Imperial Univ. of Tokyo; presently in New York.

- 151. Philadelphia International Exhibition, 1876. Official catalog of the British section. 1876. London: Printed by George E. Eyre and William Spottiswoode. Part I. 424 p. Published by authority of the Lord President of the Council. 23 cm.
- Summary: The book contains an interesting chapter titled "Exhibitions-Their origin and progress." Prior to 1851 there had been many local exhibitions worldwide, dating back to Biblical times. The first international exhibition was held in London in 1851. To date there have been five international exhibitions: London (1851, 1862), Paris (1855, 1867), and Vienna (1873). These have been attended by a total of 32,959,097 visitors. The Annual International Exhibitions at South Kensington in 1871, 1872, 1873, and 1874 did not realize the expectations of their promoters; public interest rapidly died out and the scheme was abandoned. The first exhibition of the Japanese Empire was held at Kiôto (Kyoto) and contained the objects destined for the Vienna exhibition of 1873. This Kyoto exhibition opened on 17 April 1872 and was so successful that the original limit of 50 days was extended, and the Exhibition did not close until the end of July. The next year the Mikado (emperor) decreed an exposition on a much wider basis, presenting a comparison between the past and present, and even affording a glimpse into the future of Japan. Note 1. This is the earliest document seen (Aug. 2011) that contains the Japanese word "Mikado," meaning Emperor of Japan.

In terms of classification of products, Agriculture is Department VI, in the agricultural building. Agricultural

products are classes 620-629; cereals, grasses, and forage plants are class 620, and leguminous plants and esculent vegetables are class 621. Animal and vegetable products are classes 650-662; preserved meats, vegetables, and fruits, dried or in cans or jars. Meat and vegetable extracts is class 656. Vegetable oils is class 662. Horticulture is Department VII, in the horticultural building.

Note 2. This is the earliest English-language document seen (May 2006) that contains the term "vegetable extracts" (or "vegetable extract"). The context shows that they resemble meat extracts. It would be very interesting to know of what and how they are made, and how they are used. By 1896 a type of soy sauce named "Dr. Lahmann's Japan Soja" was described as a "vegetable extract."

An alphabetical list [directory] of exhibitors includes Crosse & Blackwell (Soho Square, London; classes 656, 660, 662), and Lea & Perrins.

On page 246 is the following: "Cl. [Class] 656, 203. Lea & Perrins, Sauce Manufacturers, Worcester, Worcestershire Sauce. (917) Exhibitors, New York, 1853 (Medal)."

On page 77 begins a "List of articles of produce and manufactures chargeable with duty on being imported into the United States." A table titled "Of articles of produce and manufactures chargeable with duty on being imported into the United States" shows (p. 289) that the duty on "Soy" [sauce] is 35 per cent. This is the only reference to soy seen in this book.

Note 3. This is the earliest document seen (April 2001) that contains a directory including listings related to soy. Address: England.

- 152. Henderson, Mary F. 1877. Practical cooking and dinner giving: A treatise... New York, NY: Harper & Brothers, Publishers. 376 p. Illust. Index. 20 cm.
- Summary: Worcestershire sauce is used as an ingredient in 4 recipes in this book: To bake a fish with wine (p. 103-04). Sauce aux fines herbes (p. 128). Fricassee of chicken ("a teaspoonful of Worcestershire sauce," p. 174). Deviled chicken, with sauce ("two table-spoonfuls of Worcestershire sauce," p. 175).

The section titled "Salads" begins (p. 219): "In an English book it is told of a famous French salad-dresser who began very poor, and made a fortune by dressing salad for dinners in London. He would go from one place to another in his carriage, with a liveried servant, and his mahogany case. This case contained all the necessaries for his business, such as differently perfumed vinegars, oils with or without the taste of fruit, soy [sauce], caviar, truffles, anchovies, catchup, gravy, some yolks of eggs, etc... A Frenchman thinks he cannot eat his dinner without his salad. It would be well if every one had the same appreciation of this most wholesome, refreshing, and at the same time most economical dish." Mary Foote Henderson lived 1842-1931. Address: St. Louis, Missouri.

- 153. Lea and Perrins. 1878. In consequence of spurious imitations of Lea and Perrins' Sauce,... (Ad). Observer (London). April 28. p. 8.
- Summary: "... which are calculated to deceive the Public, Lea and Perrins have adopted a new label, bearing their Signature, 'Lea and Perrins,' which signature is placed on every bottle of Worcestershire Sauce, and without which none is genuine. Sold Wholesale by the Proprietors, Worcester; Crosse and Blackwell, London; and Export Oilmen generally. Retail, by dealers in sauces throughout the World."

Note: No signature is displayed. Address: Worcester, England.

- 154. New York Times. 1878. Information wanted. Dec. 8. p. 9. • Summary: "A receipt [recipe] for a sauce of the same quality as Worcestershire sauce."
- 155. Chicago Daily Tribune. 1878. The courts:... The Worcestershire-Sauce case. Dec. 18. p. 5.
- Summary: "Worcestershire sauce: Another case of considerable general interest was that of Lea & Perins [sic, Perrin], of London, England, against Frank Deakin, agent of Miller & Co., England. This was a suit to prevent the defendants from infringing complaintants' trade-mark of 'Worcestershire Sauce.', The case was very bitterly contested, and a very large amount of testimony was taken. The brand of sauce sold by defendant was imported from England, and was marked 'Improved Worcestershire Sauce.'

"The Judge, in deciding the case, said the evidence showed that there had long been known a sauce called Worcestershire sauce, used for a table condiment. It was a generic term used by various persons and probably was first used by some party in Worcestershire, England, to designate has brand of sauce. But sauces of that name were manufactured in other places than Worcestershire, and it would not be fair that parties residing in that place should now have a monopoly of the name. The complainants had been aware that the term was used by rival firms, and for years had taken no steps to prevent it, thus giving a tacit acquiescence to the use of such name. Finally, however, they filed a bill against Miller & Co., in London, to prevent the use of the words 'Worcestershire sauce,' but were defeated, their right to the use of such trade-mark being declared invalid. That decree was a bar to any action in this country on the same grounds for the same relief, and the bill would therefore be dismissed."

156. Tyree, Marion Fontaine Cabell. 1878. Housekeeping in old Virginia: Containing contributions from two hundred and fifty ladies in Virginia and her sister states,... Richmond, Virginia: J.W. Randolph & English. 528 p. Index. 20 cm.

• Summary: Soy [sauce] is used as an ingredient in 2 recipes

in this book: Roast veal and chicken-bone soup ("Color with a little soy or catsup," p. 79). Mushroom sauce, for fried or broiled fish ("This makes a nice flavoring for any sauce or gravy mixed with soy or lemon pickle," p. 203).

Worcestershire sauce is used as an ingredient in 4 recipes in this book: Clear tomato soup (p. 83). Raw oysters (p. 93). Cat-fish chowder or hog-fish (p. 99). Kidneys grilled (p. 148).

Note: Written by the granddaughter of Patrick Henry, this book contains more than 1,700 "favorite recipes from 250 famous families of Virginia." Address: St. Louis, Missouri.

- 157. Sarnia Observer (Ontario, Canada). 1879. Farm and garden: Household recipes. May 30. p. 7.
- Summary: "Worcestershire sauce.—One quart of thin tomato catsup made and spiced the usual way, with the addition of cayenne pepper and a sufficient quantity of crushed garlic, added to the catsup while boiling and before it is strained, to give it a decided garlic taste. Then add enough soy sauce-to be obtained at almost any good grocery store-to make the catsup a deep chocolate color; two tablespoonfuls will probably be sufficient."

Note 1. By 1879 "soy sauce" was apparently available "at almost any good grocery store" in the area of Sarnia, in southwestern Ontario. Sarnia is located where the upper Great Lakes empty into the St. Clair River.

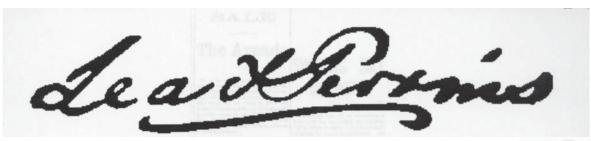
Note 2. This is the earliest document seen (Feb. 2010) concerning soybean products (soy sauce) in Ontario, Canada. This document contains the earliest date seen for soybean products in Ontario (May 1879); soybeans as such have not yet been reported.

158. Chicago Daily Tribune. 1879. Injunction bonds. Nov. 25. p. 12.

• Summary: Several years ago, Lea & Perrins, "manufacturers of "Worcestershire Sauce,' filed a bill against Deakin here to prevent him from infringing their trademark or Worcestershire, to denote a kind of sauce. Deakin's attorney, Mr. C.E. Pope, went to work in a most energetic manner, and collected enough testimony to show that Lea & Perrine [sic, Perrin] had no exclusive use of the above word so as to give them any exclusive right thereto, and, on a final hearing, their bill was dismissed by Judge Drummond for want of equity.

"When the suit was begun a temporary injunction was granted under a bond for \$5,000, and subsequently another bond for a like amount was given at the defendant's motion. After the bill was dismissed, Deakin began two suits on these bonds to recover the damages for the issuance of the injunction." Deakin received no compensation.

159. Duncan's (John) Sons. 1880. Display ad: Great reduction in price: Lea & Perrins signature on the bottle of



the genuine Worcestershire sauce. San Francisco Chronicle. Jan. 5. p. 2, col. 4.

• Summary: Printed to the left of the bottle: "It imparts a most delicious taste and zest to soups, gravies, fish, hot and

Printed to the right of the bottle: "Extract of a Letter from a Medical Gentleman at Madras [India], to his brother at Worcester, May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is in my opinion the most palatable as well as the most wholesome Sauce that is made.'

"Sold and used throughout the world. Travelers and tourists find great benefit in having a bottle with them."

Large illustrations show: (1) The "Lea & Perrins" signature. (2) A bottle of the sauce.

Note 1. This ad appeared in the Jan. 26 and March 1 issues of this newspaper (both on p. 2). After that, no ad for Worcestershire sauce was seen until 1889.

Note 2. This is the earliest document seen (Feb. 2012) that shows the actual "Lea & Perrins" signature in an ad for this sauce. Address: Agents, 26 College Place and 1 Union Square, New York [City].

160. Duncan's (John) Sons. 1880. Worcestershire sauce: The great sauce of the world (Ad). Washington Post. May 13. p.

• Summary: Below the title of this display ad is the signature "Lea & Perrins." "Signature is on every bottle of genuine Worcestershire Sauce. Imparts the most delicious taste and zest to soups, gravies, fish, hot & cold meats, game &c.

"Extract of a letter from a medical gentleman at Madras [India] to his brother at Worcester. May, 1851. 'Tell Lea & Perrins that their Sauce is highly esteemed in India, and is, in my opinion, the most palatable as well as the most wholesome sauce that is made.'

"Sold and used throughout the world." In the center of the ad is an illustration of a bottle of Lea & Perrins Worcestershire Sauce with the front label in plain view. Address: New York.

161. Washington Post. 1880. The increasing desire to visit the various countries of the world... May 13. p. 4.

• Summary: "... and observe the different habits and modes of living, indicates a growing intelligence. The observing traveler will notice the different style of houses, dress, social customs, the change of air, water, cooking etc., at the poles and in the tropics, but all over the world, in every

clime, the renowned Lea & Perrins' Worcestershire Sauce will be found the same appetizing and delicious, when used on meats, game, fish, in soups, gravies, etc., retains its original excellence in all countries, and is known and prized evervwhere.

Note: This is the earliest reference seen (Feb. 2012) to Worcestershire Sauce in the Washington Post. It seems to be an early "advertorial."

162. New York Times. 1880. Ten days in the Arctic: The Yukon cruising on the Alaskan coast. May 22. p. 8.

• Summary: The writer is exploring aboard the U.S. schooner Yukon. "The Cape Lisburne folks live in halfunderground huts... They wear labrets of bone, ivory, stone, glass &c. One shiftless individual had a pair of Worcestershire sauce bottle stopples in his lower lip instead of the usual form of labret; 'de gustibus non est disputandum' [there is no disputing about tastes] evidently rules the fashionable world here. Two labrets are the correct thing; one under each corner of the mouth in the lower lip."

Note 1. Cape Lisburne is on the northwest coast of Alaska, on the Chukchi Sea.

Note 2. A labret (a word first used in 1857) is an ornament worn in a perforation of the lip.

163. Lea & Perrin. 1880. Lea & Perrin's [sic] (Ad). Chicago Daily Tribune. June 15. p. 8.

• Summary: "The increasing desire to visit the various countries of the world, and observe the different habits and modes of living, indicates a growing intelligence. The observing traveler will notice the different styles of houses, dress, social customs, the change of air, water, cooking, etc. At the poles, in the tropics, and all over the world, in every clime, the renowned Lea & Perrin's [sic] Worcestershire Sauce will be found the same, appetizing and delicious, when used on meats, game, fish, in soups, gravies, etc. Its retains its original excellence in all countries and is known and prized everywhere."

164. Jevne (C.). 1880. Holiday goods: Bill of fare for ye joyful festivity of ye Xmas '80 (Ad). Chicago Daily Tribune. Dec. 5. p. 5, col. 2.

• Summary: "Pickles, Cross & Blackwell's,... Catsups, Capons.

"Sauces: Worcestershire, Halford, Royal Sultana, John Bull, Chili, India Soy [sauce], Tabasco, Soho, Athenæm,

Chutney... Essence of Anchovies, Harvey's Fish Sauce, Reading Sauce, Salad Cream, Salad Dressing, Curry Powders." Address: 110 & 112 Madison-st.

165. Walker, Francis A. ed. 1880. International Exhibition, 1876 [at Philadelphia]. 10 vols. Washington, DC: Government Printing Office. 24 cm. No index.

• Summary: This, the sixth international exhibition and the first held outside of Europe, also celebrated the 100th anniversary of America independence. Unfortunately the many volumes covering this exhibition are extremely poorly organized and difficult to use. They contain no indexes, either for the entire set or for each volume. The table of contents of each volume does not match the actual contents of that volume. Since there seems to be no logical sequence, one must look page by page.

In Vol. I (p. 600), the section on "Animal and vegetable products (used as food or as materials)" includes: Class 650-Sponges, sea weed. Class 655-As musk, civet, ambergris. Class 656-Preserved meats, vegetables, and fruits. Dried, or in cans or jars. Meat and vegetable extracts. Class 662-Vegetable oils.

The next section, "Textile substances of vegetable or animal origin" (p. 600) includes hemp, flax, jute, ramie, and silk. Note: This is the earliest English-language document seen (June 2002) that uses the term "animal origin."

In Vol. IV, Groups III-VII (1880), is a section titled "Group IV. Animal and vegetable products, and the machinery for their preparation" (p. 2) by Ryland T. Brown. In Group IV, under "Reports on Awards" (p. 94-95) we read: "487. Lea & Perrins, Worcestershire, England. Worcestershire sauce. Report.-Commended for the following reasons: 1. Excellent taste. 2. Very carefully prepared." "496. Naga-oka Zenpachim Tokio, Japan. Sauces. Report.-The Shoyu sauce, to be used with meat and fish for the purpose of flavoring gravies and soups, is excellent; the preparation is most careful, and it recommends itself strongly for its purity and flavor."

The 11th volume (bound in 2 volumes) in the series of reports on the International Exhibition of 1876 is titled "Report of the Board on behalf of United States Executive Departments at the International Exhibition, held at Philadelphia, Pennsylvania, 1876." For more details, see the Official Catalog of the British Section in the exhibition. Address: Chief of the Bureau of Awards.

166. New York Times. 1881. Hints for the household: A chapter upon crabs and lobsters. March 6. p. 9.

• Summary: "The crab may be served cold in his shell... or he may come to the table mixed with an equal portion of grated cocoa-nut, a saltspoonful of curry powder, a little salt, and a dash of walnut or Worcestershire sauce. The chief dish of the feast shall be a bisque of crab."

167. New York Times. 1881. Healthful-Palatable. March 31. p. 4.

• Summary: "The chief pleasure of life is the enjoyment of good health, which is largely promoted by wholesome and appetizing food... A legion of articles are presented to the public for flavoring, many of which are deleterious to health and offensive to taste, but the popular Lea & Perrins' Worcestershire Sauce is approved by all. On meats, game, fish and in soups, gravies, etc., it is indispensable. Half a century's test [i.e. since 1831] in the different countries of the world pronounce it the best sauce extant."

168. Thurber, Francis Beatty. 1881. Coffee: From plantation to cup. A brief history of coffee production and consumption. New York, NY: American Grocer Publishing Co. xiv + 416 p. No index.

• Summary: This book contains a very long Appendix that covers many different subjects unrelated to coffee. In the section titled "Chinese notes" (p. 279+) is a subsection on "Canton manufactures—Sweetmeats, preserved ginger, soy, etc." which includes the following (p. 294): "Soy' has always been a mystery to me, as I fancy it has been to most other people who have dealt in or used it. I was therefore anxious to see a soy factory, and taking a boat one day we proceeded two or three miles up the river to where one was in operation. I found that the principal ingredient or base is a white bean known as 'paktoh,' which, so far as I could judge, is very like any other small white bean. These are boiled, heavily salted, and put into big earthen jars, holding, perhaps, half a barrel each, where they are allowed to remain for about ten days, during which period fermentation takes place. They are then mashed up with a species of olive [sic], which is picked and boiled, and this mixture is placed into neat cloth bags, into which water is poured and allowed to percolate. The liquid is then taken out, placed in clean jars, and thickened with a heavy-bodied Chinese molasses, and this is soy. Thinned down with water, the Chinese use it as a sauce, and although when thick it is rather disagreeable than otherwise, when thin it has certainly a toothsome flavor and gives a zest and relish to meats, fish, etc. Most of the soy manufactured here is shipped to England, where it is used in large quantities as a base for the manufacture of sauces."

Note: Maybe the soy sauce used to make Worcestershire sauce in England came from Canton! In what other sauces was it used in England at this time?

169. Fox & Co. 1882. English sauces! (Ad). Hartford Daily Courant (Connecticut). Sept. 20. p. 2, col. 4.

• Summary: "L. & P. [Lea & Perrins] Worcestershire Sauce, Bengal Chutney Sauce, Harvey Sauce, Anchovy Sauce, Mushroom Sauce, India Soy [sauce], John Bull Sauce. Wholesale and retail." Geo R. Clark, Jas. H. Parker [proprietors].

Note: This ad also appeared in the Sept. 22 (p. 2) issue

of this newspaper. Address: 17 Central Row.

170. Lea and Perrins. 1882. In consequence of imitations of Lea & Perrins' Sauce... (Ad). Illustrated Sporting & Dramatic News (The). Oct. 14.

• Summary: "... which are calculated to deceive the Public, Lea & Perrins beg to draw attention to the fact that each Bottle of the Original and Genuine Worcestershire Sauce bears their Signature, thus [the Lea & Perrins signature is written1.

"Sold wholesale by the Proprietors, Worcester; Crosse and Blackwell, London; and Export Oilmen generally. Retail by Dealers in Sauces throughout the World."



Note: This ad, containing an illustration of a bottle of Lea & Perrins Worcestershire Sauce, is 2.5 inches wide and 2.75 inches high.

- 171. Spon, Edward N.; Spon, Francis N. 1882. Spons' encyclopaedia of the industrial arts, manufactures, and commercial products. Vol. 5: Soy. London and New York: E. & F.N. Spon. p. 1537-2142. See p. 1814. Edited by Charles G. Warnford Lock.
- Summary: In the section titled "Spices and condiments" we read: "Soy.-This useful condiment [soy sauce], said to form the basis of almost all the popular sauces [such as Worcestershire sauce] made in Europe, is prepared by the Chinese and Japanese from the fruit of Glycine Soja [Soja hispida], which holds an important place among the oil-yielding plants, and has been described under the article on Vegetable Fatty Oils (p. 1378). The condiment is prepared by boiling the beans with an equal quantity of roughly-ground barley or wheat, and leaving it covered for 24 hours to ferment; salt is then added in quantity equal to the other ingredients, water is poured over, and the whole is stirred at least once daily for two months, when the liquid is

poured and squeezed off, filtered, and preserved in wooden vessels, becoming brighter and clearer by long keeping. Its approximate value in the London market is 2s. 3d. to 3s. a gallon for Chinese, and 2s. 4d. to 2s. 5d. for Japanese. [Note: The Chinese sauce is more expensive]. It is not specified in the trade returns, but doubtless forms the chief item in the unenumerated spices imported from China."

Note 1. This is the earliest English-language document seen (Sept. 2003) that contains the term "fatty oils"—which refers to edible oils that are liquid at room temperature (see also p. 1360).

Note 2. This is the earliest English-language document seen (Sept. 2006) that contains the terms "oil-yielding" or "oil-yielding plants" in connection with the soybean.

Also discusses: Varnish–Hempseed oil (p. 2024). Address: England.

- 172. Washington Post. 1883. Talmage on evolution: "An anti-Bible, anti-science, anti-commonsense doctrine." Jan. 15. p.
- Summary: In the Brooklyn Tabernacle, New York, on the morning of Jan. 14, Rev. T. DeWitt Talmadge, preached upon "Evolution," using the biblical text of I Timothy, verses 6 and 20. Nowadays the air is filled with talk of evolution as advocated by Charles Darwin and Herbert Spencer.

"A dinner is given at Delmonico's last November in honor of the great original discoverer of evolution. And the guests sat around the table eating beef and turkey and roast pig; according to the doctrine of evolution eating their own relations, slicing their own cousins, picking the bones of their own uncles, and thrusting the carving fork into the bosom of their own blood relations, dashing Worcestershire sauce and bedaubing mustard all over members of their own family,..." Address: New York.

173. Los Angeles Times. 1883. The city. March 11. p. 0_4. • Summary: "Chutney sauce, Worcestershire sauce, and a great variety of such things always to be had at Burch & Boal's, opposite the postoffice."

Note: This is the earliest document seen (Feb. 2012) in the Los Angeles Times that mentions "Worcestershire sauce."

- 174. Dohme & Duffy. 1883. Positive facts (Ad). Atlanta Constitution (Georgia). Nov. 10. p. 8.
- Summary: "We have just received a very large stock of the following goods:... China Soy [sauce], Mushrooms, Prince Albert Sauce,... Walnut, Tomato, Worcestershire and Mushroom Sauces,..."

Note: This ad also appeared in the Nov. 11, 13, 14, and 17 issues of this newspaper. Address: 88 Whitehall Street [Atlanta].

175. New York Times. 1884. History of Worcestershire sauce. Feb. 9. p. 3.

• Summary: "From the London World: Although inferior in money-making power to a pill, a sauce, too, can make the guineas roll briskly in, and notably has this been the case with Lea & Perrins's Worcestershire. A scrutiny of the label will show that it is prepared 'from the recipe of a nobleman in the county.' The nobleman is Lord Sandys, and Messrs. Lea & Perrins's connection with the sauce came about rather curiously.

"Many years ago Mrs. Grey, author of 'The Gambler's Wife' and other novels, well known in their day, was on a visit at Ombersley Court, when Lady Sandys chanced to remark that she wished she could get some very good curry-powder, which elicited from Mrs. Grey that she had in her desk an excellent recipe, which her uncle, Sir Charles, Chief-Justice of India, had brought thence and given her. Lady Sandys said that there were some clever chemists in Worcester, who perhaps might be able to make up the powder; at all events, when they drove in after luncheon they would see.

"Messrs. Lea & Perrins looked at the recipe, doubted if they could procure all the ingredients, but said they would do their best, and in due time forwarded a packet of the powder. Subsequently the happy thought struck some one in the business that the powder might, in solution, make a good sauce. The experiment was made, and by degrees the thing took amazingly. All the world, to its remotest ends, now knows of Worcestershire sauce as an article of commerce; and, notwithstanding that, in common with most good things, it is terribly pirated, an enormous trade is done in it. The profits, I am told, amount to thousands of pounds a year, and I cannot but suppose that liberal checks, bearing the signature of Lea & Perrins, have passed from that firm to Mrs. Grey, to whom it is so indebted for its prosperity."

Note: This is the earliest document seen (Feb. 2012) that mentions Lord Sandys in connection with Lea & Perrins or Worcestershire sauce. Note that it was published in the USA where people knew little about Lord Sandys or about the history of this product or its manufacturer.

176. Hills & Smith. 1884. Christmas! (Ad). Hartford Daily Courant (Connecticut). Dec. 22. p. 2.

• Summary: "Imported Sauces-Bengal Hot Chutney, Anchovy, Reading, London Club, John Bull, Beef Steak, Worcestershire and China Soy [sauce]. Catsups–Mushroom, Walnut, Shrewsbury and Tomato."

Note: This ad also appeared in the Nov. 11, 13, 14, and 17 issues of this newspaper. Address: 368 Asylum Street (Batterson's Block).

177. Lincoln, Mary Johnson. 1884. Mrs. Lincoln's Boston cook book: What to do and what not to do in cooking. Boston, Massachusetts: Roberts Brothers. xiv + 536 p. Illust. Index. 20 cm.

• Summary: Worcestershire sauce is used as an ingredient

(often optional) in 8 recipes in this book: Mock turtle soup (p. 137-38). Fish chowder (p. 155-56). Remnants of cooked fish (p. 169-70). Scalloped oysters (p. 177). Devilled lobster (p. 183). Tartar sauce (Hot for broiled fish, p. 194). Veal cutlets (p. 240-41). Salamis of game (p. 270).

In the section titled "Explanation of terms used in cookery" is the earliest definition of soy [sauce] found in a U.S. cookbook (p. 506): "Soy. A Japanese sauce prepared from the seeds of Dolichos Soja. It has an agreeable flavor and a clear brown color. Used to color soups and sauces."

In the section on "Bread and bread making" we read (p. 42): "Health-Food Flour.-A still better method of converting wheat into flour, and one which is indorsed by leading scientists and physicians, has been recently introduced by the Health Food Company of New York. Only the choicest kinds of wheat are used. The outer husk is first removed by moistening the grain, and subjecting it to a gentle rubbing by what is termed the 'attrition process.' This softens the woody fibre of the outer bran, which is easily removed by sifting, but does not affect the hard gluten coats. The grains are dried, then pulverized into various grades by a compressed cold-air blast, which dashes the grains into atoms with tremendous force. This is called whole-wheat flour, the name indicating that the whole of the gluten, or nutritive part of the flour, is retained. It is not sifted like other flours, but pulverized into all the varieties of crushed wheat, coarse granulated and fine granulated wheat; each variety, even the finest flour, containing all that is valuable as food. Bread made with this flour has been found, after repeated trial, to be sweet and agreeable to the taste, light and spongy in texture, with none of the objectionable features of Graham bread, and answering fully all the demands of perfect nutrition.

"Cheap inferior Graham flour, made of poor flour mixed with bran, is worse than no food at all." "The Arlington, the Franklin, and some other brands of whole-wheat flour, are highly indorsed by those familiar with them."

Note: Perhaps the most influential cookbook published in America before 1900, and "one of the most innovative, original cookbooks of all time, and precursor and predecessor of the most-enduring American cookbook, Fannie Farmer's Boston Cooking School Cook Book (1896)." "One reviewer at the time wrote: 'It is the trimmest, best arranged, best illustrated, most intelligible, manual of cookery as a high art, and as an economic art, that has appeared." "Lincoln's methods, often referred to as 'scientific cookery,' required cooks to understand systematic measurements, nutrition, digestion, and the chemistry of cooking, as well as the basics of keeping an orderly kitchen and serving as a gracious hostess."

Mary Johnson Lincoln lived 1844-1921. In the late 1870s, when her husband suffered from failing health, she "worked as a domestic to maintain an income... It was at this time that the Woman's Education Association (WEA) of Boston decided to establish a cooking school-the Boston Cooking School-which would become the most famous of the first American cooking schools." Lincoln wrote that the determining influence in its organization "was the return of Mrs. Sarah T. Hooper... who had seen the work at the South Kensington School on her way through London, and came home filled with enthusiasm to have similar work in Boston, especially for the benefit of the poor and those who would work out as cooks.' Hooper, an active member of the WEA, became the first president, and hired Joanna Sweeney and Maria Parloa to teach classes." Lincoln soon became a teacher as well (MSU biography). Address: Boston Cooking School, Boston, Massachusetts.

178. New York Times. 1885. Wants to get his judgment. July 3. p. 1.

• Summary: "Chicago, July 2.—Five or six years ago Lea & Perrins, an English firm, manufacturers of Worcestershire sauce, filed a petition to prevent Frank Deakin from infringing on their trade mark. For a time they obtained an injunction, but it was dissolved, Judge Drummond holding the trade mark invalid. Deakin subsequently, after many vicissitudes, obtained a decree for over \$9,000 against Lea & Perrins. Their sureties on the injunction bond not having been able to collect the amount, he has filed a creditor's bill against Lea & Perrins, their New-York agents, and all the leading wholesale grocery firms of this city, to reach any money the grocers may owe to Lea & Perrins for goods bought of the latter. Among the defendants are Franklin MacVeagh, the new Government Director of the Union Pacific Railway; L.C. Pardee, and C. Jevre."

179. Kenney-Herbert, A.R. (Arthur Robert; pseudonym "Wyvern"). 1885. Culinary jottings. A treatise in thirty chapters on reformed cookery for Anglo-Indian exiles, based upon modern English, and continental principles,... 5th ed. Madras, India: Higginbotham & Co.; London: Richardson and Co. x + 553 p. Index. First edition published in late 1878 or 1879. 4th ed. was 1883.

• Summary: The need for "... a more modern description than that time-honoured and, in its day, excellent work 'Indian Domestic Cookery' [Riddell 1849] must have been long felt by the busy housewife of Madras" (p. 1)

"All native cooks dearly love the spice box, and they all reverence 'Worcester Sauce.' Now, I consider the latter too powerful an element by far for indiscriminate use in the kitchen, especially so in India where our cooks are inclined to over-flavour everything. If in the house at all, the proper place for this sauce is the cruet-stand where it can be seized in an emergency to drown mistakes, and assist us in swallowing food that we might otherwise decline" (p. 16). Note: Throughout this book (it is mentioned on 7 pages) it is called "Worcester Sauce."

"Amongst sauces I consider 'Harvey' the best for general use; Sutton's 'Empress of India,' is a strong sauce

with a real flavour of mushrooms; Moir's sauces and "Reading sauce" are very trustworthy, and there are others which, no doubt, commend themselves to different palates, but I denounce 'Worcester sauce' and 'Tapp's sauce' as agents far too powerful to be trusted to the hands of the native cook. Sutton's essence of anchovies is said to possess the charm of not clotting, or forming a stoppage in the neck of the bottle. I have a deep respect for both walnut and mushroom ketchup, soy [sauce], and tomato conserve" (p.

This book contains three chapters titled "Sauces." All of the recipes are written in prose form rather than in modern recipe form with a list of ingredients followed by the process. Yet recipe names and amounts are given.

"Harvey sauce" is mentioned on 8 pages, always favorably. "Ketchup" is mentioned on 26 pages; of these 19 mention "mushroom ketchup" and 3 mention "walnut ketchup."

Note: The author, under his real name, also wrote a popular book on vegetarianism (1904-1907). Address: Colonel, Ooyacamund [Udagamandalam, a popular hill station in the Nilgiri Hills, in today's southeast Indian state of Tamil Nadu],.

180. Hills & Smith. 1886. Olives! (Ad). Hartford Daily Courant (Connecticut). Jan. 7. p. 4.

• Summary: "Imported Sauces! Worcestershire, Watkins, Anchovy, China Soy [sauce], Reading, John Bull, Harvey, London Club, Cashmere Chutney, Indian Mangoe Chutney."

Note: This ad also appeared in the Jan. 8 and 15 issues of this newspaper. Address: 368 Asylum Street (Batterson's Block).

- 181. Sunshine, Susan. 1886. Woman and home: Silk stockings as lares and penates. Los Angeles Times. June 13.
- Summary: "Deviled crabs: Take cooked crabs and pick the meat up fine; make a mayonnaise salad dressing, with plenty of mustard and vinegar and cayenne pepper, a pinch of tyme [thyme] and a little finely chopped onion; season with Worcestershire sauce, mix with your meat,..."
- 182. Forman, Allan, 1886. New York's China-town: A dinner in Mong Sing Wah's restaurant. Washington Post. July 25. p.
- Summary: This restaurant is at 18 Mott Street. The proprietor is a "Celestial Delmonico." "The only condiment is seow [Cantonese: shi-yau or si-yau, meaning "fermented black soybean sauce"], a sort of Celestial cousin to Worcestershire sauce, and, in fact, its probable original. The evolution of Worcestershire sauce was somewhat as follows: Seow was taken from China to India, where hot spices were added to tickle the palates and livers of the English East Indians, who relished Chili sauce, army powder and

red pepper. There it was known as soy [sauce]. From the East Indies to England, where it was still more spiced and flavored and patriotically called Worcestershire sauce. But the average Chinaman uses but little flavoring in his food, he prefers the natural taste."

Includes 4 illustrations, three of the restaurant and one titled "Position of the hand while using the chop sticks."

Note: This is the earliest English-language document seen (Sept. 2008) that mentions "chop-suey." The Chinese host orders "Chow-chop-suey" and several other dishes with Chinese names at the restaurant.

183. Mataura Ensign (Otago, New Zealand). 1887. The household. 6(636):2. Jan. 21

• Summary: "Worcestershire Sauce–Mix together 1½ gallons white wine vinegar, 1 gallon walnut catsup, 1 gallon mushroom catsup, 1/2 gallon Maderia [Madeira] wine, 1/2 gallon Canton soy [sauce; from China], 2½ pounds moist sugar, 19 ounces salt, 3 ounces powdered capsicum, 11/2 ounces each of pimento and coriander, 1½ ounces chutney, 3/4 ounce each of cloves mace and cinnamon, and 61/2 drams of assafoetida [asafoetida] dissolved in 1 pint brandy 20 above proof. Boil 2 pounds hog's liver for 12 hours in 1 gallon of water, adding water as required to keep the quantity; then mix the boiled liver thoroughly with the water; strain it through a coarse sieve. Add this to the sauce."

184. Hills & Smith. 1887. Relishes! (Ad). Hartford Daily Courant (Connecticut). April 8. p. 4.

• Summary: "Imported Sauces: Worcestershire, Reading, John Bull, China Soy [sauce], Harvey, Beefsteak, Essence Anchovy, London Club, Mango Chutney and Cashmere Chutney, Mushroom Catsup, Walnut Catsup and Shrewsbury Catsup." Address: 368 Asylum Street (Batterson's Block).

185. Gillette, Fanny Lemira. 1887. White House cook book: A selection of choice recipes... Chicago, Illinois: R.S. Peale & Co. 521 p. + [5] leaves of plates. Illust. Index. 26 cm.

• Summary: Worcestershire sauce is used as an ingredient in 9 recipes: Game soup (p. 26). Fish soup (p. 38). Baked halibut (p. 49). Roast wild duck (p. 85-86). Roast beef pie with potato crust (p. 103). Roast loin of veal (p. 111-12). Pork tenderloins (p. 129-30). Fish sauce No. 2 (p. 139). Brown sauce (p. 142). "Soy" [sauce] is not mentioned.

Peanuts are mentioned in 4 recipes: German custard. Roast chestnuts. Nut molasses candy. Candy roly poly.

Note: The term "White House" in the book's title is a marketing ploy; the book contains no information about White House cookery except for a few photos of White House First Ladies. Later edition's, however, were coauthored by White House steward Hugo Ziemann. Fanny Lemira Gillette lived 1828-1926 (MSU introduction). Address: New York City.

186. Cornwell (G.G.) & Son. 1888. Sauces (Ad). Washington Post. Jan. 22. p. 2.

• Summary: "Anchovy Sauce. Harvey Sauce. John Bull Sauce. Soho Sauce. Shrimp Sauce. Indian Soy Sauce. Worcester Sauce... Halford Sauce. Tobasco Pepper Sauce. Mushroom Catsup. Walnut Catsup. Shrewsbury Tomato Catsup. Gordon and Dilworth Tomato Catsup."

Note: This ad appeared 17 more times in this newspaper during 1888 from Jan. 24 to Feb. 12. Address: [1412 and 1414 Pa. {Pennsylvania} Av., Washington, DC].

187. Lea and Perrins. 1888. Lea & Perrins Sauce (Ad). Chicago Tribune. June 1. p. 8.

• Summary: "Lea & Perrins, the original and genuine Worcestershire Sauce, has been before the public over half century [i.e., since at least 1838]. Like all popular favorites, it has long been the standard of comparison and the pattern for counterfeiters, who not being able to imitate its excellence, offer to the public, imitations in bottling, labels and style of putting up.

"They dare not counterfeit the signature of Lea & Perrins, which is on the red label of every genuine bottle, and of which this is a facsimile." The signature is shown in large script.

"To be sure of obtaining the genuine article, see that the above signature is on the label."

188. Chicago Tribune. 1888. An eel dinner in a Tokio cafe. An appetising meal that is manipulated with chop sticks. June 9. p. 16.

• Summary: From Rumah in St. Louis Globe Democrat: "A specialty of Tokio houses of refreshment is eel houses." "We celebrated a recent anniversary day by an eel dinner at a famous eel house."

"The feast began with a soup or stew of eels, the bottom of the bowl being filled with a delicate white curd [tofu], and the flavor of the dish being as mild and evasive as flaxseed tea... The plain broiled eels are called white eels, and after them came black eels, or eels dipped in soy [sauce] before and during the broiling. They acquire a rich brown tint and a most piquant flavor by this treatment, and the soy, or bean sauce, with which the Japanese always improve their fish and birds, might be used in the same way in other countries. Japanese soy is the foundation of Worcestershire sauce, and is much better before it is charged with all the spices and cayenne that convert it into the English condiment."

189. Law Journal (The) (England). 1888. The Birmingham Vinegar Brewery Company v. The Liverpool Vinegar Company: Chancery Division, North J., June 11. 23:99-100. Notes of cases, June 23.

• Summary: "Trade-name-Unauthorized use-Injunction. "This was a motion by the plaintiffs for an order

restraining the defendant company and one Holbrook from

selling or representing any goods manufactured by the defendant company as being 'Holbrook's Worcestershire Sauce,'..."

"The plaintiffs and their predecessors in business were manufacturers of sauces, and in the year 1870 they engaged the defendant Holbrook as their traveller. In the year 1875 they manufactured and sold a sauce (at the suggestion of the defendant Holbrook) under the name of 'Holbrook's "Worcestershire Sauce,' and the sauce had acquired a reputation in the market under that name. This arrangement continued down to December, 1887, when Holbrook left the employ of the plaintiffs and entered into some arrangement with the defendant company, under which he assigned to the defendant company the right to use his name in connection with sauces manufactured by them.

"The defendant company had recently issued advertisements, stating that they were the sole proprietors of 'Holbrook's Worcestershire Sauce,' and that they had purchased from Holbrook the right to manufacture the sauce bearing his name.

"The plaintiffs now moved for an interlocutory injunction."

Note: A sauce with this same name was being advertised and sold as recently as 1966 (Pacific Islands Monthly, PIM, Vol. 37, p. 52. "Holbrooks Worcestershire Sauce"), 1980 (Rainbow's End: A Memoir of Childhood, War and an African Farm [in Rhodesia], 2008, p. 118. "Holbrook's Worcestershire sauce"), and 1999 (Drum: A Magazine of Africa for Africa, p. 109. "Holbrooks Worcestershire Sauce").

190. White, Sallie Joy. 1888. Housekeepers and homemakers. Boston: Jordan, Marsh & Co. vii + 260 p. No index. • Summary: The Preface states: The 26 chapters in this book have all appeared previously in The Boston Herald. The author gives special thanks "to my devoted teacher and friend, Mrs. Mary A. Lincoln, under whose training I learned so much that has been of inestimable value to me in my housekeeping experience."

In the chapter "About breads" (p. 10-22) we read (p. 19-20): "For those who like hygienic food, I will give here the rule for 'Dr. Trall's Perfect Bread.' Some of you may not know that Dr. Trail was, for a long time, the apostle of 'plain living;' and that although he did carry his notions to the extreme, as any early advocates of a movement are pretty sure to do, yet he did have a very good influence on the American people in regard to better and more careful preparation of food. This 'perfect bread' is nothing more nor less than the hard Graham rolls which are used by hygienists. It is perfectly healthful, and is highly relished by those who have become accustomed to it, whose appetites are healthful and natural, and who require or crave 'no spice but hunger.' It is made by simply mixing cold water, the colder the better, with good Graham or whole-wheat flour,..." Another recipe

for a "fine Graham Bread follows (p. 20-21).

Chapter 4, titled "Cereals and health foods" (p. 28-45) indicates that many of America's early health food products and recipes were based on cereal grains, and special ways of processing them. "Health foods" are mentioned on pages 28, 31-32, 34-36. Products made by "The Health Food Company" of New York are highly praised and mentioned on pages 30 ("The best grain preparations are without much question those prepared by the Health Food Company"), 31 ("The Health Foods, as they have come to be understood, are the new methods of preparing cereals used by the Health Food Company of New York, and introduced by them"), 69 ("The whole wheat that is prepared by the Health Food Company of New York makes very nice gems..."), and 208 ("These [whole wheat crisps] are made from the fine granulated wheat flour that is prepared by the Health Food Company, and are at once healthful and palatable").

Whole-wheat flour is mentioned on pages 20, 31-32, 34, 41, 69, and 208.

In chapter 10, "Made-over dishes" [how to use leftovers] (p. 94-106) the author states that seasoning is the key to success. Worcestershire sauce is mentioned on pages 96-98, 101, and 103. Chapter 19 is titled "Pickles and catsups" (p. 179-99). Catsup is mentioned on pages 100 (walnut catsup), 103, 190, 194 (tomato catsup; "Lemon, oyster, and mushroom catsups are delicious:..."), 195 (mushroom catsup), 196 (grape catsup), and 197.

On pages 191-92 is a recipe for "Tomato soy" which (despite the name) uses no soy sauce or other soy ingredients, and which "is not unlike piccalilli" ("Greentomato sauce").

191. San Francisco Chronicle. 1889. Classified ad: Lea & Perrins' sauce. Jan. 31. p. 2, col. 3.

• Summary: "Lea & Perrins, the original and genuine Worcestershire Sauce, has been before the public over half a century. Like all popular favorites, it has long been the standard of comparison and the pattern for counterfeiters, who not being able to imitate its excellence, offer to the public imitations in bottling, labels and style of putting up.

"They dare not counterfeit the signature of Lea & Perrins, which is on the red label of every genuine bottle and of which this is a facsimile" (the signature is written in large cursive script).

"To be sure of obtaining the genuine article, see that the above signature is on the label. [American Analyst]."

Note: An illustration near the bottom of the ad shows the "Lea & Perrins" signature.

192. **Product Name:** Gawne's Worcestershire Sauce.

Manufacturer's Name: Gawne (W.).

Manufacturer's Address: Dunedin, New Zealand.

Date of Introduction: 1889. May.

How Stored: Shelf stable.

New Product-Documentation: Ad in Southland Times (Otago, New Zealand). 1889. May 4. p. 3. This ad in the "Wanted, &c." section states: "Gawne's Worcestershire sauce, Equal to imported, at half the price, try it. H. Hawson, Agent for Invercargill [New Zealand]."

Ad in Southland Times (Otago, New Zealand). 1891. March 6. "H. Hawson, importer. Wine, spirit, and general merchant. Tay and Wood Streets, Invercargill. Agent for... W. Gawne, Dunedin, Sauce manufacturer."

Ad in Mataura Ensign (Otago, New Zealand). 1900. Sept. 6. p. 5. "What the newspapers say about Gawne's Worcestershire Sauce." The company, named "Messrs. W. Gawne & Co.," is located at George St., Dunedin. This is the last ad seen for this sauce.

193. Hawson (H.). 1889. Wanted, &c.: Gawne's Worcestershire sauce,... (Ad). Southland Times (Otago, New Zealand). May 4. p. 3.

• Summary: "... Equal to imported, at half the price, try it." Note 1. This is the earliest document seen (Feb. 2012) that mentions Gawne's Worcestershire Sauce, made in Dunedin, New Zealand. Does it use soy sauce as an ingredient? If so, how and from what manufacturer does it obtain that soy sauce.

Note 2. This ad appeared in this newspaper on May 4, 11, 18, 28, 29, June 1, 6, and 26, 1889.

Note 3. This in one of at least 506 issues of New Zealand newspapers from 1891 to 1900 that mention "Gawne's Worcestershire." In Sept. 1900 the company, named "Messrs. W. Gawne & Co.," was located at George St., Dunedin. Address: Agent for Invercargill [New Zealand].

194. Los Angeles Times. 1889. The housekeeper. Nov. 27. p.

• Summary: The third recipe, for "Green tomato sauce," calls for Worcestershire sauce as an optional ingredient.

195. Allen, Grant. 1889. Falling in love, with other essays on more exact branches of science. London: Smith, Elder & Co. 356 p. See p. 205. 22 cm.

• Summary: The chapter titled "Food and Feeding" states (p. 205): Foods that taste bitter, pungent, fiery, or acrid are usually poisonous or bad for humans to eat. The fore part of the tongue warns us. If so, then why do we purposely use such things as mustard, pepper, curry-powder, and vinegar? Because, in small quantities, used as condiments, they act as agreeable stimulants. "Still, very young children dislike all these violent stimulants, even in small quantities; they won't touch mustard, pepper, or vinegar, and they recoil at once from wine or spirits. It is only by slow degrees that we learn these unnatural tastes, as our nerves get blunted and our palates jaded; and we all know that the old Indian who can eat nothing but dry curries, devilled biscuits, anchovy paste, pepper-pot, mulligatawny soup, Worcestershire sauce, preserved ginger, hot pickles, fiery sherry, and neat cognac, is also a person with no digestion, a fragmentary liver, and very little chance of getting himself accepted by any safe and solvent insurance office. Throughout, the warning is a useful one; it is we who foolishly and persistently disregard it. Alcohol, for example, tells us at once that it is bad for us; yet we manage to dress it up..."

"The middle region of the tongue is the part with which we experience sensations of taste proper-that is to say, of sweetness and bitterness. In a healthy, natural state all sweet things are pleasant to us, and all bitters... unpleasant. The reason for this is easy enough to understand. It carries us back at once into those primæval tropical forests, where our 'hairy ancestor' used to diet himself upon the fruits of the earth in due season. Now, almost all edible fruits, roots, and tubers contain sugar; and therefore the presence of sugar is, in the wild condition, as good a rough test of whether anything is good to eat as one could easily find. In fact, the argument cuts both ways: edible fruits are sweet because they are intended for man and other animals to eat; and man and other animals have a tongue pleasurably affected by sugar because sugary things in nature are for them in the highest degree edible. Our early progenitors formed their taste upon oranges, mangoes, bananas, and grapes; upon sweet potatoes, sugar-cane, dates, and wild honey. There is scarcely anything fitted for human food in the vegetable world (and our earliest ancestors were most undoubted vegetarians) which does not contain sugar in considerable quantities."

"But besides the natural sweets, we have also taken to producing artificial ones. Has any housewife ever realised the alarming condition of cookery in the benighted generations before the invention of sugar? It is really almost too appalling to think about. So many things that we now look upon as all but necessaries-cakes, puddings, made dishes, confectionery, preserves, sweet biscuits, jellies, cooked fruits, tarts, and so forth-were then practically quite impossible. Fancy attempting nowadays to live a single day without sugar; no tea, no coffee, no jam, no pudding, no cake, no sweets, no hot toddy before one goes to bed; the bare idea of it is too terrible."

Note: Grant Allen lived 1849-1899. Address: The Nook, Dorking [Surrey, England].

196. Manchester Guardian (England). 1891. The Wesley centenary: Unveiling the statue in London. Address by Archdeacon Farrar. March 3. p. 8.

• Summary: "... this unsavoury mass of tag, rag, and varieties-(laughter)-before them that they could give them as much Naseby pepper and Worcester sauce as they would have stomach for.-(Applause)."

197. Duncan's (John) Sons. 1891. Display ad: The original and genuine (Worcestershire) Lea & Perrins' sauce. San

Francisco Chronicle. May 14. p. 6, col. 2.

• Summary: Printed to the left of the bottle: "Extract of a Letter from a Medical Gentleman at Madras [India], to his brother at Worcester, May, 1851. 'Tell Lea & Perrins' that their Sauce is highly esteemed in India, and is in my opinion, the most palatable as well as the most wholesome Sauce that is made.' Printed to the right of the bottle: "It imparts a most delicious taste and zest to soups, gravies, fish, hot & cold meats, game, Welsh-rarebits, &c.

"Beware of imitations; see that you get Lea & Perrins' [signature].

"Signature on every bottle of Original & Genuine." Large illustrations show: (1) A bottle of the sauce. (2) The "Lea & Perrins" signature.

Note 2. This is the earliest document seen (Feb. 2012) concerning Worcestershire Sauce that mentions the words "Welsh-rarebits" (or "Welsh-rarebit"). Address: New York [City].

- 198. Gawne (W.). 1892. Why buy a small bottle of Lea and Perrin's [sic] Sauce when you can buy a large bottle of Gawne's Worcestershire Sauce,... (Ad). New Zealand Tablet (National). Jan. 15. p. 16.
- Summary: "... of equal quality, and nearly double the quantity, for about half the price... It has a peculiar Relish and Piquancy; is a thorough Appetiser and Tonic, and will agree with the most Delicate Stomach. Gawne's Worcestershire Sauce is all that the most exacting connoisseur could wish, and should find a place in every household."

199. New York Times. 1893. A sale of bottles. March 14. p. 4. • Summary: From the Manufacturer (Philadelphia): "Messrs. Craven Brothers of the Salem Glass Works, Salem, New Jersey, are about shipping five carloads of glass bottles to England by a steamer of the White Star Line. This, it is stated, is the first time that bottles manufactured in this country will be brought into competition with the Englishmade article in its own market. The first shipment will include 1,000 gross [1 gross = 12 dozen = 144] of longnecked bottles [i.e., 144,000 bottles]. They will be packed in boxes made to hold 2 gross each. The order was received by cable from Lea & Perrin, manufacturers of Worcestershire sauce."

Note: This article is largely about protective duties and tariffs, to which it is opposed.

- 200. Hawson (H.). 1893. See what the newspapers say about Gawne's Worcestershire sauce (Ad). Southland Times (Otago, New Zealand). July 29. p. 2.
- Summary: Contains a long list of praiseful testimonials from the following New Zealand newspapers: Southland Times, Evening Star, Otago Workman, Taieri Advocate, New Zealand Tablet, Globe, Southern Standard, Cromwell

Argus, Oamaru Mail, Otago Daily Times, West Coast Times, Palmerston and Waikonaiti Times, Christchurch Press, and Dunstan Times.

Messrs. Gawne and Co., George street, Dunedin-which [as of Feb. 2010 is the second-largest city in the South Island of New Zealand, and the principal city of the region of Otago] make this sauce.

"Why buy a small bottle of Lea and Perrin's Sauce when you can buy a large bottle of Gawne's Worcestershire Sauce?" It is locally made and sells for about half the price of the imported article. Address: Agent [New Zealand].

- 201. Parker & Co. 1893. Imported sauces (Ad). Hartford Daily Courant (Connecticut). Sept. 30. p. 4.
- Summary: "L. & P. [Lea & Perrin's] Worcestershire Sauce. Mushroom Catsup. Walnut Catsup. Essence of Anchovies. Sayer's Sultana Sauce. Harvey Sauce. China Soy [sauce]. Green Mango Chutney. Sliced Chutney. Chasmere [sic, Cashmere] Chutney. Bengal Hot Chutney. Tobasco Pepper Sauce [Tabasco], etc., etc."

"Successors of Fox & Co. Wholesale and retail grocers." Address: 17 Central Row.

- 202. Japan, Dep. of Agriculture and Commerce, Agricultural Bureau. 1893. A descriptive catalogue of the agricultural products exhibited in the World's Columbian Exposition. Tokyo: Printed at the Seishibunsha. 115 p.
- Summary: Discusses 38 commercial products, with most divided into basic information and products made from the crop. Includes: Rice ("The manures applied to rice fields" include "green manures, farm yard manures, composts, ordures, fish manures, Sake kasu, Shoyu kasu, rape seed cake, and soy bean [cake] {p. 11}), barley ("It is much used as the material for making miso. Miso is prepared by pounding together boiled soy bean, salt, and the Koji {yeast}* prepared from common barley or naked barley; and is one of the most common articles of food in Japan." (Footnote: *"Eurotium oryzae). It [barley] is also used for making ame $\{p. 23\}$).

Wheat ("Wheat is used principally for preparing soy [sauce], vermicelli, onmen [sic, somen?], undon [sic, udon], and several kinds of confectionary" {p. 27}. It is also used for making fu or wheat gluten; "Roast 'fu' is used as food by boiling it with soup, soy, mirin, etc." {p. 29}), naked barley (Hordeum nudum; hadakamugi), Job's tears (Coix lacryma; hatomugi), soy bean (Soja hispida; daidzu), adzuki (Phaseolus Radiatus, [azuki]), sasage (Dolichos Umbellatus), haricot bean (Phaseolus vulgaris), peas, buckwheat ("Sobakiri" and "Kôri-soba" are both seasoned with soy sauce {p. 46}), rape seed (Brassica chinensis, natane) and rape seed oil (natane abura), sesame seeds (yellow {kigoma}, white {shirogoma}, and black {kurogoma} are displayed) and sesame oil (made from only yellow and white sesame), yegoma (Perilla occimoides), hemp, shiitake, chilli

(Capsicum Longum; tôgarashi; "The fresh unripe fruit and leaves of certain varieties are eaten by cooking them with soy, sugar, "Katsuwobushi" [katsuobushi],* etc." {p. 103}). Also discusses: Dried daikon (p. 109-11), konjak flour (Conophallus konjak; konniak-ko, konnyaku; "For cooking, it is cut into small pieces and boiled with soy, soup, mirin, sugar etc." {p. 112}), kampio (Lagenaria vulgaris; kampio [kampyo, kanpyo]; "It is used as an article of food by boiling with water, soy, sugar, mirin etc." {p. 113}), wine.

Concerning the soy bean: In 1887, the total area of arable land devoted to soy bean cultivation is 4,633,152 tan (1 tan = 0.245 acre; thus 1,142,472.2 acres or 462.352.16)hectares). The total production of soy bean in the Empire was estimated to be 3,253,790 koku (1 koku = 180 liters, and 1 bushel = 35.2390 liters; thus 585,682,200 liters = 16,620,284 bushels).

Note 1. From the above figures, a yield of 14.53 bushels per acre can be calculated.

From 1887 to 1891 the price of soybeans per koku ranged from 4.180 yen in 1888 to 5.319 yen in 1890. Four specimens of soybeans were exhibited: Green soy bean (awo-daidzu). Black soy bean (kuro-daidzu). Common soy bean.

"Daidzu or soy bean is extensively used in Japan to prepare various kinds of foods indispensable for the daily meal, such as 'soy' or 'shôyu,' 'tamari' (a kind of soy), tofu, and miso. It is also largely used as a food for horses and manure [bean cake].

A analysis of the percentage composition of 3 kinds of soy beans analyzed by the Sanitary Experiment Station at Tokio is given; Green soy beans have the highest crude protein content (42.85% with 12,28% water). White soy beans (shiro-daidzu) have the highest ash content (5.00% with 13.46% water). Black soy beans have the highest fat content (18.26%, and the 2nd highest crude protein content 40.25%, with 11.09% water). Soy bean (Itachi-daidzu) from Saitama prefecture.

Although daizu is abundantly produced in Japan, since its daily consumption by all classes of people is great, it is now imported from China and Korea in large quantity. However imported soy bean is never used to make first class shoyu or soy, since the imported beans are inferior to those produced in Japan.

A table shows the quantity (in *kin*) and value (in *yen*) of soy bean exported from Japan from 1887 to 1891; 2.1 million kin were exported in 1889.

Four specimens of soy sauce are on display. Two brands (the trade marks are shown) are made by Mr. Mogi Shichiroyemon, and two are made by Mr. Mogi Saheiji. All are made at Noda-machi, Chiba prefecture, Japan. Brands (a) and (c) are of the first quality; brands (b) and (d) are of the second quality.

A table shows the amount of shoyu made in Japan each year from 1887 to 1891; the amount ranges from 1,304,551

koku in 1888 to 1,157,982 koku in 1890. Since 1 koku = 180liters, the amount made in 1888 is 234,819,180 liters. The total number of shoyu manufacturers in 1889 was 10,682. A table shows the price (in yen) of various brands and quantities of shovu from 1887 to 1892. A brief description of the process for making shoyu is given. The word "barm" is used instead of koji. Either barley or wheat can be used with daizu to make the barm. The "mixture is kept for about 25 months, stirring it occasionally with a paddle, say twice a day during winter and three times in summer, and when it is fermented to the required degree, soy is extracted by means of a soy press. The clear liquid thus obtained is pasteurized by heating to about 130° F. and when entirely cooled, it is transferred into casks."

As shoyu is manufactured from daizu, wheat, etc., "it naturally contains a large quantity of albuminous matter. Shoyu is used in Japan as table salt is in Europe and America; consequently it is indispensable for daily use for cooking fish, meat, vegetables. etc. It has a remarkable merit when applying it in the place of sauces (like 'worcestershire') for beefsteak, fry, stew, etc. It answers better than salt when used with cold meat.

"Japanese soy or 'Shoyu' has long been exported to various parts of Europe where those who once taste it never fail in extolling its flavour. It is said that in Holland, Japanese soy has been used by many people from long years ago and highly esteemed by them." A table shows the chemical composition of shoyu.

"Since the fine flavour of Japanese soy has recently become known to people abroad, several trial consignments were made both to Europe and America, and the result, though it has obtained a high reputation among them, still it has not yet become a leading article of export." A table shows the annual amount and value of shoyu exported from Japan from 1887 to 1891. It ranges from 1,302.71 koku worth 11,091 in 1887 to 3,749.01 koku worth 41,028 yen in 1891. Thus the exports are growing rapidly.

Three specimens of tamari are one display, one dilute and one concentrated. The first two are made and sold by Mr. Ishima Mosaku. The 3rd (regular tamari) is made and sold by Mr. Morimoto Chôhachi. All are made at Yokkaichi in Miye [Mie] prefecture. Tamari is made chiefly in the prefectures of Miye, Aichi and Gifu [in central Japan]. Tamari is very similar to show except that no wheat is used in manufacturing tamari.

Tofu (bean curd): "Tofu is one of the most favourite foods of Japanese and sold in all places both in towns and villages. The specimen here exhibited is called Yakidofu and is prepared by roasting partially dried 'Tofu' over a charcoal fire." "As 'Tofu,' sometimes called bean curd, being a coagulated vegetable albumen of soy beans, it contains a large proportion of nutritious matter, most important to human life, especially, to those who subsist mainly upon vegetables." The price of this Yakidofu is 18 yen per 10

dozen.

Note 2. This is the earliest English-language document seen (Nov. 2009) that mentions grilled tofu, which it calls Yakidofu.

A specimen of Kôri-tôfu or frozen bean curd is displayed; it is made in Minami Adzumi-gun, Nagano prefecture. "As it can be preserved for many years it is a suitable for provision for vessels undertaking long voyages."

Concerning adzuki: There are both red adzuki and white adzuki. Early varieties are sown in the spring; late varieties {called aki-adzuki in the autumn}. "It is mostly used for preparing "An"-a pulpy mixture of boiled Adzuki flour and sugar, and in that state is largely used for making various kinds of confectionary." It is also used to make "Sarashi-an or refined flour of 'adzuki," and "shiruko-a juice prepared by boiling the flour with a suitable quantity of water and adding sugar..." Note 3. Shiruko could be described as adzuki bean soup with mochi (rice cake).

Concerning rape seed: "Rape was formerly cultivated to a great extent but since the introduction of Kerosene Oil, the acreage of its cultivation has been much diminished, yet it is grown in nearly all parts of Japan and forms one of the important farm crops."

203. Flett (W.H.), Limited. 1894. Classified ad: To Messrs. Lea and Perrins, Worcester. Times (London). Feb. 3. p. 1, col. 3.

• Summary: "We the undersigned, W.H. Fleet, Limited, of Everton-valley, Liverpool, hereby express our Regret at having Used a Label for our Worcestershire Sauce having on it two medallions or circles containing representations of game, and a border with diagonal lines, which you consider to be an infringement of your rights in respect of the labels registered by you as Trade Marks, and we undertake not to use it again, or any other, in infringement of your rights. And in consideration of your abstaining from legal proceedings against us, we are willing that you should publish this our apology in such a manner as you may think fit.

"Dated the 9th day of January, 1894. (Signed) W.H. Flett, Limited. J.A. Shearer, Secretary." Address: Liverpool [England].

204. Morrell, Dora M. 1894. Relishes: Cooking them at table-Variety and abundance. Los Angeles Times. Feb. 11. p.

• Summary: The last recipe, for "Deviled almonds," calls for "two tablespoonfuls of Worcestershire sauce."

205. American Druggist and Pharmaceutical Record. 1894. Queries and answers: Worcestershire sauce. 24(14):171. April 5. Whole No. 293.

• Summary: "J.F.G.-The Scientific American says that this is quite a complex condiment. It is made of wine vinegar, 1½ gals.; walnut catsup, 1 gal.; mushroom catsup, 1 gal.;

Madeira wine, 1 gal.; Canton soy [sauce; from China], ½ gal.; moist sugar, 2½ lbs.; salt, 19 ozs.; powdered capsicum, 3 ozs.; pimento, 1½ ozs.; coriander 1½ ozs.; chetney [chutney], 1½ ozs.; cloves, ¼ oz.; mace, 3/4 oz.; cinnamon, ¹/₄ oz.; asafoetida [asafetida], 6½ drms [drams]. Dissolve in 1 pt. brandy 20° above proof. Boil 2 pounds hogs' liver for 12 hours in 1 gal. of water; add water continually so as to keep up the quantity of 1 gal.; mix the boiled liver thoroughly with the water, strain through a coarse sieve, and add this to the above mixture. It is self-evident that no chemical examination could ever detect the presence of half the above ingredients."

Note: Soy sauce is an ingredient, as are two types of Western-style catsup.

206. Parker & Co. 1894. Lee [sic, Lea] & Perrin's Worcestershire Sauce (Ad). Hartford Daily Courant (Connecticut). May 23. p. 5.

• Summary: "Harvey Sauce, Mushroom Catsup, Walnut Catsup, India Soy [sauce], etc.

"Successors of Fox & Co. Wholesale and retail grocers." Note: This ad also appeared in the June 2, 5, 9, and 12 issues of this newspaper. Address: No. 17 Central Row.

207. Thompson (T.) and Son Co. 1894. We might give you a much longer list than this one... (Ad). Evening Star (Toronto, Canada). June 21. p. 4.

• Summary: Groceries:... "Tomato Catsup 10¢, large bottle. Worcestershire Sauce 8¢ bottle. Epps' Cocoa 10¢ package."

Note: This is the earliest document seen (Feb. 2012) that mentions Worcestershire sauce (one of whose main ingredients was soy sauce) in Canada.

208. Parker & Co. 1894. Sauces! (Ad). Hartford Daily Courant (Connecticut). Aug. 30. p. 4.

• Summary: "Lea & Perrin's Worcestershire, Harvey's, Halford's, Sultana, Indian Soy [sauce].

"Catsup: Mushroom, Walnut, Shrewsbury, Snider's." Note: This ad also appeared in the Aug. 31, Sept. 1 and Sept. 5 issues of this newspaper. Address: 17 Central Row.

209. Lea and Perrins. 1894. Classified ad: Lea and Perrin's sauce. Times (London). Nov. 20.

• Summary: "Original and genuine Worcestershire. Purchasers should see that every bottle bears the signature of Lea and Perrins.

"Lea and Perrins' signature is now printed in Blue Ink Diagonally across the outside wrapper of every bottle of the original and genuine Worcestershire sauce.

"The most economical in use.

"Beware of imitations."

Note: These four messages are repeated over and over until they fill up an entire column. The bottom four lines read: "The original and genuine Worcestershire Sauce

sold wholesale by the proprietors, Worcester. Crosse and Blackwell, Ltd., London, and export oilmen generally. Retail everywhere." Address: [England].

210. Cavendish, Alfred Edward John; Goold-Adams, Henry Edward. 1894. Korea and the sacred white mountain: Being a brief account of a journey in Korea in 1891. London: George Philip & Son. 224 p. Illust. (40 original, many color). Maps. Index.

• Summary: This book is an amplification of the author's diary kept during a stay of a few weeks in Korea. Soy is mentioned as follows: Page 12: "Chefoo is the wateringplace for Korea, Pekin, Tientsin, and Shanghai, but the foreign portion of it is very small, with three indifferent boarding-houses, but good pears and good bathing, if you do not mind a naked fisherman or two about. The chief exports appear to be straw plait for hats and bean-cake for manure."

Page 33-34: Korean ponies, which carry foreign travelers and their belongings, are very small. The forage ration consists of about 2 lbs. of beans and millet boiled in water, and the whole poured hot into a trough; the average feed is two gallons of this mixture, given three times a day, and supplemented by 2 lbs. of chopped straw (rice or millet)." "Other means of transport are found in donkeys, cattle, and coolies."

Page 48: Beans are becoming largely grown in Korea, for the demand for them in Japan is increasing, as they are used in the manufacture of Bean-curd, Miso, and Soy [sauce], while the Japanese are growing instead mulberries for sericulture. Wheat, barley, and rice, the latter of two kinds, one of which grows in dry soil, are also increasing, the export of these in 1890 being-barley, 5,260,533 lbs., value \$50,341; beans, 87,950,800 lbs., value \$1,004,762; wheat, 5,869,466 lbs., value \$60,381; rice, 116,622,000 lbs., value \$2,057,868." Page 54. "Besides flax, maize, and cotton, there were fields of the small millet (Setaria italica), substitute for porridge, and of the tall millet, Susu or Kaoliang (Holcus Sorghum), with stems 8 to 12 feet high and as thick as a man's thumb, turning to golden yellow or bright mahogany colour; from the latter kind the Koreans make the coarse cloth of which their rough garments are composed, when they do not use Manchester shirtings; also fields of beans, food for cattle and men, and the foundation of Japanese soy [sauce] and our Worcestershire sauce."

Pages 146-47: "He produced some samshu, a muddy fluid which smelt and tasted like Kaffir beer, with strong spirit in it; this peculiar taste is due to the bean-water [water in which soy beans have been boiled] which they mix with the spirit distilled from rice or millet. We were given a bottle of this liquor by the head-man, and the cook bought another of Chinese make, which was quite clear and less diluted with bean-water."

Pages 195-96: "Whilst waiting in the inn to-day, I had plenty of opportunities of observing the nauseous smell

of the food greedily devoured by the Koreans. Five or six little dishes, containing various preparations of meat or fish, chillies, [soy] beans, cabbage, rice, &c., were ranged on a little table a foot high, and gave forth a most evil odour. A Korean likes his viands very highly seasoned, and in eating takes a little of every dish into his mouth, that he may enjoy the pleasant mingling of the different flavours." Note: At least one of these dishes probably contained Korean-style soy sauce or miso-but we cannot be sure.

Bean or beans (usually noted in passing as a crop with other crops) are mentioned on pages 66, 67, 68, 134, 138, 150, 191, 194, 199. Address: 1. Captain, F.R.G.S., 1st Argyll and Southern Highlanders, now in Edinburgh; 2. Captain, R.A..

211. Ranhofer, Charles. 1894. The epicurean: A complete treatise of analytical and practical studies on the culinary art,... making a Franco-American encyclopedia. New York, NY: Published by the author. 1183 p. Illust. Index. 28 cm. • Summary: The recipes in this book are numbered sequentially. "Soy" (sauce) is used as an ingredient in 2 recipes: 545. "Soya sauce (Sauce Soya). Reduce one pint of velouté (No. 415) or espagnole (No. 414) with two gills of essence of either chicken, game, or fish, and when the sauce is of a sufficient consistency, add to it two tablespoonfuls of soya sauce, and two ounces of fresh butter; beat slowly with a whip" (p. 317).

557. "Victoria sauce (Sauce à la Victoria) ("a teaspoonful of vinegar, the same of soya sauce," p. 319).

The following recipe for pompano fish has "soya" in the title but neither "soya" nor "soy" are used as an ingredient, nor are they mentioned in the body of the recipe. 1226. Pompano à la soya (*Pompano à la soya*) (p. 452).

Worcestershire sauce is used as an ingredient in 8 recipes: 299. Chicken okra gumbo. 332 Ox tail soup à la Soyer. 451. English sauce. 632. Tartar sauce, English style (also calls for Harvey sauce). 1396. Minced tenderloin à la Beckman. 1571. Sweetbreads, English style, with brown English sauce. 1591. Mutton chops Soyer. 1721. Minion fillets à la Landgrave.

"This book is simply the best way to answer any question about how the upper classes were dining in late Victorian America. It is the magnum opus of the great Chef, Charles Ranhofer, who ruled the kitchen at the famed Delmonico's restaurant in New York City. This is a huge treatise: 1183 pages, 800 illustrations, over 3000 recipes. By and large, the recipes are in the classic French tradition. However American recipes are not neglected... This opus shows well why Delmonico's was the premier dining room of its day" (MSU introduction).

For an excellent history of Delmonico's Restaurant and business operations in New York see www.steakperfection. com/ delmonico/ history.html. The business (a small cafe and pastry shop) was started in 1827 by two Swiss-born brothers

at 23 William St. in New York City. But the restaurant opened in 1830 in the adjoining building at 25 William Street; the cafe and pastry shop continued to thrive next door. The restaurant featured a bill of fare (called a menu today), which was itself new. Address: Chef of Delmonico's, Madison Square [New York City].

212. Woodward & Co. 1895. Sauces. Ketchups (Ad). Hartford Daily Courant (Connecticut). Jan. 24. p. 12.

• Summary: "Sauces: Lea & Perrin's Worcestershire, quarts 75ϕ , pints 45ϕ , ½ pints 25ϕ . Holbrook's Worcestershire, pints 35¢, ½ pints 18¢. A 1 International 40¢. Tabasco 45¢." Halford's. Sultana, Chili, Anchovy.

Ketchups: Shrewsbury's, Snider's, Flacus, "Crosse & Blackwell's Mushroom, pints 40¢, Walnut 40¢,... India Soy [sauce], Paprica [Paprika],..." Address: 217 Main Street, Hartford, Connecticut.

213. Boston Daily Globe. 1895. Our cooking school. March 10. p. 27.

• Summary: "Worcestershire sauce: One and a half gallons of white wine vinegar, 1 gallon of walnut catsup, one gallon of mushroom catsup, ½ gallon of Madeira wine, ½ gallon of Canton soy [sauce; from China], 2½ pounds of moist sugar, 19 ounces of salt, 3 ounces of powdered capsicum, 1½ ounces chutney, 3/4 ounce each of cloves, mace and cinnamon and 6½ drachms assafoetida [asafoetida, a spice] [drams; 1 dram = 1/16 ounce = 1.772 gm], dissolved in 1 pint of brandy 20 above proof. Boil 2 pounds of hog's liver for 12 hours in 1 gallon of water, adding water as required to keep up the quantity; then mix the boiled liver thoroughly with the water; strain it through a sieve. Add this to the sauce. Cayenne pepper may be added to it." From: Weaver, Olneyville, Rhode Island.

A second recipe, with a modification, is given by J.H. (of Fall River, Massachusetts), who has used it for over 10 years. It includes: "Canton soy, ½ gallon;..." The modifications include: "Indian soy, 1 ounce;... The Indian soy is an imported article; it is sometimes imitated by boiling one gallon of dwarf kidney beans in water till soft, adding 1 gallon of bruised wheat, keeping in a warm place for 24 hours, then adding a gallon of salt and 2 gallons of water, and keeping 2 or 3 months, in a tightly corked jar, after which the liquor is pressed out."

Note 1. Following the above instructions for homemade "Indian soy" will not work at all; the result will not even vaguely resemble soy sauce. Note 2. This is the earliest document English-language document seen (Feb. 2012) that uses the term "dwarf kidney beans" in connection with soybeans or soy sauce.

214. Evening Star (Toronto, Canada). 1895. The label on the bottle: Crosse & Blackwell, and Lea & Perrin may be heard from. Said to be on the trail of those who refill bottles: An

effort to be made to stop the fraud. March 21. p. 1.

• Summary: "There is a species of fraud that has been practiced generally all over, that will likely before long be suppressed, for steps have already been taken in that direction, not only in Toronto, but also in other parts of the province."

An Englishman is here in the interest of several English sauce and pickle manufacturers, who think that their bottles and their labels are being too freely used to hold bulk articles of an inferior quality.

The label and the bottle: You have noticed in restaurants and hotels, even of good name, that the bottles containing Worcester sauce, and Crosse & Blackwell's pickles have labels that look as though they had been roughly handled," and that the contents of the bottle is of inferior quality.

Many of the people who fill these trade-marked bottles are apparently unaware that what they are doing is illegal. The Englishman is making a list of the names and addresses of the proprietors of such establishments.

215. Hills & Co. 1895. Macaroni! (Ad). Hartford Daily Courant (Connecticut). April 8. p. 12.

• Summary: "Sauces... we carry ten times the best assortment. Lea & Perrin's Worcestershire 28¢, 45¢, and 75¢. Holbrook's Worcestershire 22¢, 35¢, and 65¢. Mango Chutney. Sliced Mango... also China Soy [sauce], Brands A 1, Reading, Walnut and Mushroom, Chile,..."

Also sells many types of "catsup," incl. Van Camp's. Address: 368 Asylum Street.

216. Evening Star (Toronto, Canada). 1895. Ketchupspickles. Recipes for making choice relishes. July 13.

• Summary: Recipes are given for: Cold tomato ketchup. Tomato soy. Neither recipe calls for soy as an ingredient.

217. Bennett, John E. 1896. Pickle-making: An industry whose importance few appreciate. Los Angeles Times. Jan.

• Summary: An early study of the rapidly growing picklemaking industry and market in Los Angeles-with many statistics. The great staple of this industry is sauer kraut [sauerkraut]. The Foster Preserving Co., established 2 years ago, produces about 250 barrels/year of catsup and Worcestershire sauce. The Los Angeles Preserving Company, a new firm located on San Pedro street near Ninth street, makes about 500 gallons/year of Worcestershire sauce.

Lea & Perrin's Worcestershire sauce, "which made the estates of each of its manufacturers worth millions of dollars," comes into Los Angeles because of its good reputation, although its price is higher than that of locally made products.

Note: It would be very interesting to know the ingredients used in the catsup and Worcestershire sauce made by the Foster Preserving Co. Is soy sauce used in either?

218. Yeo, I. Burney. 1896. Food in health and disease. New and rev. ed. Philadelphia, Pennsylvania: Lea Brothers. viii + 592 p. See p. 383-84, 394, 399. Illust. Index. 19 cm. Reprinted in 1897, 1901

• Summary: In Part II, "Food in disease," Chapter 3 is titled "Food in diabetes." In a review of the literature, "Soya bread" is mentioned on pages 383-84. A nutritional analysis of soybean flour by Prof. Attfield appears on p. 384.

Table II, "Article permissible [in diabetic diets] in small quantities" (p. 394) includes: "English sauces.-Worcester, Harvey, anchovy, Indian soy, etc. 1 tablespoonful."

The section on "Diabetic dietaries" contains "5.-Dujardin-Beaumetz's" (p. 399) which begins: "He adopts with little modification the dietary of Bouchardat. He strongly recommends... the use of soya bread."

The author (who lived 1835-1914) mentions gluten on pages 7, 9, 67, 69, 71-76, 165, 173, 379, 381-384, 396, 398, 399, 404, 538, and 554. Address: M.D., F.R.C.P., Prof. of Clinical Therapeutics, King's College, London; Physician to King's College Hospital [London, England].

219. Farmer, Fannie Merritt. 1896. The Boston Cooking-School cook book. Boston, Massachusetts: Little, Brown and Company. xxx + 567 p. + [21] p. of advertisements. Illust.Index. 19 cm. See also the 1911 and 1918 eds.

• Summary: This book is dedicated to Mrs. William B. Sewall, President of the Boston Cooking-School. A dedication, by the English author John Ruskin (1819-1900), is the same as that found on the title page of Croly (1870).

In the Preface, Fannie states: "During the last decade much time has been given by scientists to the study of foods and their dietetic value, and it is a subject which rightfully should demand much consideration from all. I certainly feel that the time is not far distant when a knowledge of the principles of diet will be an essential part of one's education. Then mankind will eat to live, will be able to do better mental and physical work, and disease will be less frequent." She hopes that this cook book will "be looked upon as a compilation of tried and tested recipes" and "that it may awaken an interest through its condensed scientific knowledge which will lead to deeper thought and broader study of what we eat."

Chapter 1, titled "Food," begins by discussing proteids, carbohydrates, fats and oils, mineral matter (which furnishes the necessary salts), and water. "The chief office of proteids is to build and repair tissues. They can furnish energy, but at greater cost than carbohydrates, fats, and oils. They contain nitrogen, carbon, oxygen, hydrogen, and sulphur or phosphorus, and include all forms of animal foods (excepting fats and glycogen) and some vegetable foods. Examples: milk, cheese, eggs, meat, fish, cereals, peas, beans, and lentils. The principal constituent of proteid food is albumen. Albumen as found in food takes different names, but has the

same chemical composition; as, albumen in eggs, fibrin in meat, casein in milk and cheese, vegetable casein or legumen in peas, beans, and lentils; and gluten in wheat. To this same class belongs gelatine" (p. 2).

"One of the greatest errors in diet is neglect to take enough water;..." (p. 2).

"The average daily ration of an adult requires 3½ oz. [99.3 gm] proteid, 3 oz fat, 10 oz. starch, 1 oz. [28.38 gm] salt, 5 pints [10 cups] water" (p. 3).

"To keep in health and do the best mental and physical work, authorities agree that a mixed diet [from both the animal and vegetable kingdoms] is suited for temperate climates, although sound arguments appear from the vegetarian... Brain workers should take their proteid in a form easily digested. In consideration of this fact, fish and eggs form desirable substitutes for meat." But the working man needs meat (p. 3-4).

Chapter 2, titled "Cookery," begins (p. 17): "Cookery is the art of preparing food for the nourishment of the body... Progress in civilization has been accompanied by progress in cookery."

Three recipes have the word "peanut" in the title: Peanut cookies (p. 408). Salted peanuts (p. 445). Peanut nougat (p. 449). And Pistachio bisque uses peanuts as an ingredient.

Worcestershire Sauce is used in recipes throughout this book: Oxtail soup (p. 108-09). Cecils with tomato sauce (p. 188). Salmi of Lamb (199; "or one cup cold lamb gravy seasoned with Worcestershire, Harvey, or Elizabeth Sauce"). Veal cutlets (p. 202; its Brown sauce is seasoned with "salt, pepper, lemon juice, and Worcestershire Sauce"). Tartar sauce (p. 244). Sardine canapés (p. 462; "sardines (from which the bones have been removed) rubbed to a paste, with a small quantity of creamed butter and seasoned with Worcestershire Sauce and a few grains of cayenne"). Devilled bones (p. 471; also calls for "1 tablespoon Walnut Catsup").

Blanquette of Lamb (p. 199) also calls for "one tablespoon Mushroom Catsup." Thus, "catsup" is called for in only two recipes; "ketchup" is not mentioned.

"Fannie Farmer (1857-1915), the author of this book, is perhaps the best known of the great American culinary authorities of the turn of the 19th to 20th centuries. And this book is arguably the best known and most influential of all American cookbooks. It has been in print from its appearance in 1896 until the present day... The publishers, Little, Brown, evidently afraid of losing money on a cookbook, required Fanny to pay for the first printing herself;..." By the time she died in 1915 more than 360,000 copies had been sold. By 1946 some 2.5 million copies had been printed, and by 1990 about 4 million.

When Fannie was 30, she was encouraged "to enroll in the Boston Cooking School to train as a cooking teacher. The school, established in 1879 by the Woman's Education Association of Boston, fostered a more intellectual, scientific approach to food preparation and diet, and in turn, elevated the role of women not just as cooks, but as educated cooking teachers and authorities on proper diets for the healthy and sick. As a post-Civil War institution founded by reformers and philanthropists, the school gave women of modest means an entry into professional work at a time when more women needed employment and few had career options... Mary Johnson Lincoln, one such woman who began working following her husband's financial demise, served as president of the school from 1879 to 1885." Fannie "completed the two-year program in 1889 as one of the best students; she stayed on as Assistant Principal and became Principal in 1891."

Fannie Merritt Farmer lived 1857-1915. This book, her first cookbook, is actually an extensively revised version of Mary J. "Lincoln's popular work, Mrs. Lincoln's Boston Cook Book, published 12 years earlier" in 1884. "Some initially criticized the book for appropriating Mrs. Lincoln's schools recipes without acknowledgement. Nevertheless, the book stood on its own as thoroughly modern:..." (MSU biography). Address: Principal of the Boston Cooking School.

220. Smith, Ellen Goodell. 1896. The fat of the land and how to live on it. Special chapters on nuts and vegetable oils, and how to use them in cooking; milk; bakeries; feeding infants and various other subjects relating to the problem. Amherst, Massachusetts: Press of Carpenter & Morehouse. 251 + [12] p. Portrait. Illust. Index. 20 cm. At top of title page: "A practical cook and text book for general use."

• Summary: A remarkable and wholistic vegetarian (actually vegan) cookbook by a medical doctor (M.D.). A photo (frontispiece), facing the title page, shows a portrait of Dr. Ellen Smith. Dedication: "To the millions of thinkers who think in new directions, and to other millions who do not stop to think whether they should 'live to eat' or eat to live' this book is dedicated." Facing the table of contents are three quotations from Buddhist and Christian scriptures on the importance of not killing.

The Preface begins: "This book is because of the agitation and discussion upon the various phases of the food question. The title indicates its character to be vegetarian; this word however is a misnomer, but as none better has yet been coined, we will simply state that we are vegetarians because we think nature designed us to subsist on the 'fat of the land,' and not on the flesh and blood of beasts, or of any living, sentient creature."

"To be a health and dietetic reformer in the early days of this movement meant much sacrifice and often personal abuse" (p. 10).

"With no desire to set aside the work of the scientists, we accord 'honor to whom honor is due,' and may success attend their gigantic efforts, that seem to be heroically directed toward healing, protecting, and preparing the animal



world and their products for human consumption" (p. 11).

This chapter, after listing many of America's major problems, concludes: "From a vegetarian standpoint, these unhealthful conditions of mind and body are largely propagated, nourished and developed and developed from the never ending supply of slaughtered flesh and its stimulating-not nourishing-accompaniments. The moral and physical health of millions is thus undermined, and from such material is created generation after generation of imperfect human beings;..." (p. 11).

Chapter 5, titled "Milk, cream, butter, etc." begins: "Milk, cream, butter, salt and sugar are admissible in hygienic and vegetarian dietary, but in most of the recipes here given are not included... [but] in all cases salt can be added if desired, or milk substituted for water."

Chapter 6, titled "Vegetable oils," notes: "Those at present extensively used for culinary purposes are obtained from the olive, cocoanut and cotton seed." It is almost impossible to obtain olive oil unadulterated. "The American Analyst tells us that 'Two-thirds of the olive oil sold in the markets of the world is born in the cotton fields of the southern states" (p. 57). "At Manheim, Germany, cocoanuts have for many years been made into butter for general culinary use... [It] keeps indefinitely and even when exposed to the air will not become rancid like animal fat. This butter is also manufactured in England... It is now manufactured in America by the Pure Food Co., Chicago, Illinois" (p.

58). Chapter 6 concludes prophetically: "One need not be a vegetarian or even a hygienist to use these vegetable oils, for these are thousands of families using them, who also use animal food, finding economy in health and purse by so doing." Note 1. This is the earliest document seen (March 2005) that contains the term "Pure Food," probably in connection with the growing "pure food movement" in the

Chapter 10, titled "Nuts, their culture and use in cooking," (p. 141-56) discusses almonds (now largely grown in California), walnuts, pecans, Brazil nuts, and peanuts. Peanut oil is largely exported to foreign countries and doubtless returns, with olive oil, under the name of "Pure Olive Oil." "It is said that America uses 4,000,000 bushels of peanuts yearly at a cost to the consumers of \$10,000,000. Very rarely do we find these nuts on the table as an article of food, but they are consumed between meals by everybody, from the shoeless and hatless street waif to the grayhaired millionaire." "Unbelievers tell us that a vegetable diet lacks proteids or tissue building elements, and hence that vegetarians are not properly nourished. Science has demonstrated that proteids are abundant in the grains," nuts, and other foods (p. 148-49). The section titled "Nuts as food" (p. 149-53) begins: "Nuts are not only superior to flesh as an article of diet, but may be used in many forms of cookery, either whole, chopped, grated, crushed or ground into a paste or meal." "The pine nut, sold under the name of pegnolia [pignolia], is an excellent nut for cooking." Two sub-sections are titled "Nut substitute for milk" (using cocoanuts, pecans, peanuts, Brazil nuts, etc.) and "Nut butter" (one of the latest novelties). There are recipes for sandwiches with "almond nut butter," and "Peanut sandwiches" spread with a "form of nut butter which flavors so strongly of peanuts that it will make an excellent substitute for dairy butter to spread the bread and hold the crushed nuts in place." Note 2. This book contains no recipe for making peanut butter at home.

Chapter 11, "Salads," contains a long section titled "Japan Soja" (p. 164) which clearly refers to Japanese soy sauce: "A jar of the extract of Japan soja was received too late for careful testing or experiment. But coming from a German vegetarian laboratory [Dr. Lahmann's] and said to be free from injurious substances, it may prove to be a useful addition to the table. Following is a description of the Soybean from which it is made.

'Japan Soja, a substitute for flesh meat extracts such as Bovinine, etc. etc. The soy-bean or pea is a small erect herb, ("Glycine soja," or "soja hispida") of the bean family, "Papilionacees" of India and China, cultivated for its seeds; composed of 38% proteids, 17 to 20% fat, 5% cellulose and 4% ashes. The hygienist loses nothing by declining flesh meat extracts of any sort, but substantially gains by adopting Japan Soja, a safe and far more palatable flavoring for various dishes. It may not only be so employed in the preparation of dishes, prior to serving, but subsequently and similarly to Worcestershire sauce, etc.'

The odor and flavor of this preparation is very delicate and may readily supply a need in the dietary of those who are making a change from an animal to a vegetable diet."

The next (and last) paragraph of Chapter 11 (p. 165) notes that commercial samples of "Bromose and nut butter... manufactured in vegetarian laboratories and guaranteed free from animal fat" were "received at 'the eleventh hour,' too late for critical experiment... Crushed nuts, nut butter and nut meal of home make were used in all preceding recipes containing nuts."

Chapter 12, titled "Condiments and seasonings" (p. 167-71) argues against the use of salt, spices (including pepper, mustard, ginger, etc.), and commercial condiments. "Salt destroys natural flavor and gives its own flavor to all food... Salt also induces unnatural thirst,..." Instead, why not grow and use "sweet herbs" and "aromatic seeds." "Why may not sweet marjoram, sweet basil, rosemary and lavender, lemon verbena, rose and geranium leaves lend their exquisite flavors to our food? Thyme, parsley, sage and mints of various kinds..." Note 3. This general attitude may explain why Japanese soy sauce, a commercial condiment, was not considered a condiment and included in this chapter.

A "Directory" (p. 246) lists 13 sources of "pure food products" including: "Health foods: Dr. J.H. Kellogg, Battle Creek, Michigan. Nut preparations: Sanitas Food Co., Battle Creek, Michigan... Vegetable milk, etc.: Hygienic Supply Co., 203-05 Park avenue, Baltimore, Maryland... Readshaw's Forest Mills Graham Flour (Original) and cereals, Dansville, New York."

A full-page ad (p. 255) describes products made and sold by the Sanitas Food Company (Battle Creek, Michigan) titled "Pure Products of Nuts." These include Bromose, Nuttose, Nut-Butter [probably peanut butter], and Nut-Meal.

A full-page ad (p. 258) is titled "Pure. Vegetable. Nutritive," by The Hygienic Supply Co. (F. Witte), 203-205 Park Ave., Baltimore, Maryland. They are "Importers of German health goods and books" including Dr. Lahmann's Japan Soja, which "Is a pure vegetable extract, which is far superior to Meat Extract. It can be used for making soups, or may be added to other foods in order to make them more appetizing. Price per jar, \$1.00." (Note 4. According to Vegetarisches Kochbuch mit Gesundheit Regeln, by Carlotto Schultz {1886}, Dr. H. Lahmann of Stuttgart is an authority on the feeding of infants and problems related to indigestion.) Other products imported from Germany by this company include Dr. Lahmann's Vegetable Milk (for infants), Dr. Lahmann's Vegetable Extract, and Dr. Lahmann's Nutritive Cocoa.

Note 5. This is the second earliest English-language document seen (April 2010) that contains the term "Vegetable Milk." This non-soy product is an emulsion made from almonds and nuts.

Page 259 contains an ad for Health-Culture: A Journal

of Practical Hygiene by The Health-Culture Co., 341 Fifth Ave., New York.

Page 260 contains an ad for Food, Home and Garden, a periodical edited by Rev. Henry S. Clubb of the Vegetarian Society of America, 310 Chestnut St., Philadelphia, Pennsylvania.

Note 6. Notice that this book contains no chapter on main dishes or entrees; unleavened Graham bread (made with "entire wheat flour") was considered the best main dish. Very few the many recipes call for the use of dairy products, eggs, animal fats, or honey, and in each case they are optional. Chapter 13, "Pudding, pastries and cakes," convincingly questions the need for this entire category of foods, but those who must have such sweets are encouraged (p. 176-77) to use water instead of milk, vegetable fats instead of animal fats and dairy products, reduce the number of eggs and the amount of sugar used by one-half or more, and gradually eliminate spices and salt. Chapter 14, "Milk and the cow" makes a strong case for not using these animal products.

A woman cited several times (p. 68, 177) as an authority on foods is Mrs. Emma P. Ewing. Address: M.D., Pansy Park, Dwight, Massachusetts.

- 221. Washington Post. 1897. Saucemakers win a suit. June 24. p. 2.
- Summary: "The English papers contain an account of a motion made last month in the suit of Lea & Perrins against Courtenay, before Mr. Justice Romer last month, seeking an injunction restraining the defendants from holding themselves out as 'the original makers of Worcestershire sauce,' the advertisement complained of reading that the Messrs. Courtenay were 'the only producers of the original and genuine Worcestershire sauce at a reasonable price, and manufactured from the original recipe. Upon the argument the Judge at once held that this advertisement could not go on. The defendants' counsel admitted it was indefensible, and the defendants gave an undertaking to discontinue its use."
- 222. Epicure: A Journal of Taste (The). 1897. Notes from the Brussels Exhibition. 4(46):354. Sept.
- Summary: At the Brussels International Exhibition: "Another firm exhibiting is the Birmingham Vinegar Brewery Company, who show a pyramid of bottles of Holbrook's Worcestershire Sauce, 20 feet high by 20 feet square."
- 223. New-York Tribune. 1897. Dinner at the Japanese legation: There are some peculiarities in the menu, though not many. Oct. 17. p. C14.
- Summary: "Chickens, too, are served in a peculiar way. They are cut up into small squares, fried and then dressed with a sauce called 'shoyu,' which the Japanese say is the origin of the so-called Worcestershire sauce."

- 224. Fullständigaste Svensk-Amerikansk Kokbok-Swedish-English cookbook. 1897. Chicago, Illinois: The Engberg-Holmberg Publishing Co. 378 p. Illust. Index. 20 cm.
- Summary: "Soy" [sauce] is used as an ingredient in 3 recipes: Veal steak ("beef tea and a few drops soy," p. 32-33). Brown jelly for roastbeef ("color it with some soy," p. 307). Swedish caviar ("two spoonfuls dark soy and salt," p. 317).

A recipe titled "To make soy" (p. 309) states: "When in the spring, meat and pork is taken up to be smoked, the brine may be used for soy. Boil the brine, and when it curdles and looks clear, strain it. Then boil 4 ox feet with ginger, cloves, strong pepper (1/2 ounce), a pound of onions, a bunch of tarragon, thyme and marjoram. When the feet feel soft there is about ½ gallon brine left, which strain and allow to cool. Boil 3 pounds of lump sugar. Put the brine in it, and boil a while."

Worcestershire sauce is used as an ingredient in 4 recipes: Fricasse [Fricassee] of beef (p. 27). Goose with turnips (p. 50-51). Pigeons on the spit (p. 59-60). White cabbage with pork (p. 201-02). Address: Chicago, Illinois.

- 225. Grange Wholesale Supply Co., Ltd. 1898. Grocery specials (Ad). Evening Star (Toronto, Canada). Feb. 15. • Summary: "Worcestershire sauce. Lorimer's imported, 9¢
- bottle." Address: 126 King St. East, Toronto.
- 226. Times (London). 1898. "Holbrook's Worcestershire sauce," Limited. United States of America and Canadian rights (Ad). March 31. p. 3, col. 1.
- Summary: This is subscription for shares in a new company. "Share capital: £100,000, divided into 50,000 cumulative six per cent preference shares of £1 each-£50,000 and 50,000 ordinary shares of £1 each-£50,000. Total £100,000." The names of the directors and bankers are given. Address: [England].
- 227. Times (London). 1898. The money market. March 31. p.
- Summary: "Holbrook's Worcestershire Sauce (Limited) (United States of America and Canadian rights) has been formed with a share capital of £100,000... to acquire the trading rights in the sale of 'Holbrook's Worcestershire Sauce' for the United States of America and Canada from the Birmingham Vinegar Brewery Company, 1897 (Limited)."
- 228. Boston Daily Globe. 1898. Housekeepers' column: Tried and true recipes from experienced cooks. May 26. p. 8.
- Summary: "This is how I make Worcestershire sauce, and I find it keeps many years and is always appreciated. If you save the vinegar from other pickles, such as walnuts, it takes the place of white wine vinegar, and makes the sauce a better color. I strongly advise you to save the vinegar from all your

pickles in future. Proceed to make your sauce in this way:

"Pound half an ounce of cayenne pepper, half an ounce of shallot, and one-eighth of an ounce of garlic, in a marble mortar, adding gradually a quart of white wine vinegar, then press it through a hair sieve. Add a quarter of a pint [a gill] of Indian soy [sauce], then bottle and cork for use. If you find the method too tedious, after pounding the dry ingredients, put them into a jar and pour the vinegar boiling onto them. Cover closely and let it stand till the vinegar has well extracted the flavor of the ingredients, and before bottling add the soy. This sauce improves by keeping. Mrs. English."

Note: This recipe, by the same writer (Mrs. English), under the titled "Worcestershire sauce" appeared in the 8 Feb. 1899 issue (p. 8) of this newspaper.

- 229. Manchester Guardian (England). 1898. Books of the week. Aug. 16. p. 9.
- Summary: This is a book review of Gleanings of Cookery, by a Mother and Daughter. London: Horace Cox. 8vo. pp. 149.

"Perhaps the most conspicuous example of unsatisfactory flavourings is to be found in the recipe of Julienne soup, which includes ketchup and Worcester sauce, whereas the soup in question should, when finished, be perfectly clear and something like the colour of sherry."

- 230. Great Atlantic and Pacific Tea Co. 1898. Today's marketing (Ad). Washington Post. Sept. 24. p. 7.
- Summary: "Courtenay's Worcestershire Sauce at 1/2 usual price." Note: This company also goes by the name "Great A. and P. Tea Co." Address: Main store: 501-503 7th St. N.W. [Washington, DC].
- 231. Gifford, Daniel L. 1898. Every-day life in Korea: A collection of studies and stories. Chicago, New York, Toronto: Fleming H. Revell Co. 231 p. See p. 20, 53. Illust. Map. No index. 20 cm.
- Summary: Page 20: "Beans are used for food–put sparingly into the rice kettles, or decomposed for a peppery sauce which furnishes one of their side dishes. Again they are mixed with chopped straw and boiled in water, forming a hot mixture that is the sole food of cattle and horses in Korea. Beans are also an article of export." Note 1. These beans are soybeans and the peppery sauce is probably kochujang.

Page 53: "The heaping bowl of rice is then discussed, either with the brass spoon or chop-sticks. And the chopsticks descend every now and then upon the contents of the little side dishes, the brine-soaked 'mu,' or turnip, the bits of dried fish or meats, a species of sauerkraut [kimchi] composed of cabbage, shrimp, ginger, onion, red pepper, salt, etc., with an occasional dip into the bean sauce [soy sauce] (à la Worcestershire). For liquid food he drinks cold water, or the water in which the rice has been cooked."

Note 2. In 1898 Pyeng-yang [Pyongyang] was "by far

the most important city in the north of Korea,..." As of 2009, it is the capital of North Korea. Address: Rev., Mendota, Illinois. Formerly eight years a missionary in Pyeng-yang [Pyongyang], Korea.

- 232. Hills & Co. 1899. Catsups, pickles and sauces (Ad). Hartford Daily Courant (Connecticut). May 30. p. 14. • Summary: "In these lines we leave nothing that's good, to be wished for-Sauces: Watkins' Nonpareil, Reading, Essence Anchovies, Halford, Beefsteak, Brand's A-1, Harvey, John Bull, China Soy [sauce], Mushroom, Walnut, Lee [sic, Lea] & Perrin's Worcestershire, Colonel Skinner, Major Grey, Sweet Louchnow, Ripe Mango, Sweet Mango, Bengal Chutney." Address: Grocers, Batterson Bldg.
- 233. Washington Post. 1899. An interesting case settled; Decision regarding the customs duty on a proprietary sauce brought here in an unfinished state. Aug. 31. p. 7.
- Summary: "From the New York Tribune: An order was filed in the United States District Court on August 4 discontinuing, by consent of both parties, the suit of the United States vs. John Duncan's Sons. This simple incident terminated a remarkable episode in the administration of the customs laws.

"About sixty years ago [i.e., in about 1839] this firm became the American agents for the firm of Lea & Perrins, of Worcester, England, manufacturers of the well-known proprietary preparation called Worcestershire sauce.

"About twenty-two years ago [i.e., in about 1877] a change of practice was begun by Lea & Perrins and John Duncan's Sons, by which, instead of sending over here the sauce finished, bottled, labeled and ready for use, it was sent over in a partly manufactured condition in casks, and the Messrs. Duncan finished the sauce here according to a formula furnished them by the English house, and bottled and put it up for sale. This course had certain obvious advantages. It saved the firms from paying duty on bottles, labels, straw and finishing expenses, and avoided breakage. The article which was brought over was an incomplete material for the sauce, and was, of course, of no use to anybody who was not acquainted with the formula for finishing it. It was never furnished by Lea & Perrins to anybody but the Duncans, and consigned only to them. It was, therefore, one of the class of merchandise for which or tariff law provides that in determining the valuation upon which to assess duty the government officers shall ascertain the cost of production and make suitable addition to represent the manufacturers' profit.

"Lea & Perrins had furnished the United States consul with a statement of their cost of production, giving as much detail as was consistent with the inviolability of their proprietary secret. A suit was brought against the importers. They defended it, putting in an answer denying that the goods had been undervalued, and alleging good faith on their part. The attorney general directed the discontinuance of the suit on the Messrs. Duncan filing an affidavit similar to the declaration made by Lea & Perrins, on the other side, that the invoices in question had fully covered the market value of the importation. The suit was discontinued without costs, without payment of one dollar by the Messrs. Duncan, and upon the motion of the government's officers themselves.

"Lea & Perrins' Worcestershire sauce is apparently more popular than ever, and it is difficult for the manufacturers to keep up with the demand."

Note: It seems likely that Lea & Perrins imported soy sauce from East Asia, then transshipped it from England to New York, probably in the original wooden casks in which it had been sent from Asia.

- 234. Duncan's (John) Sons. 1899. Display ad: Lea & Perrins' Sauce: The original Worcestershire. San Francisco Chronicle. Sept. 4. p. 10.
- Summary: A large illustration (se next page) shows a gentleman seated at a dining table, with white tablecloth and fine dinnerware. He is wearing pince-nez spectacles and looking up at a waiter who is standing near him, holding a tray upon which is one lone bottle of Worcestershire sauce. He utters the words: "That's it." Below the illustration is written: "Beware of imitations." Address: Agents, New York.
- 235. Boston Daily Globe. 1899. Housekeepers' column: Tried and true recipes from experienced cooks. Sept. 27. p. 10.
- Summary: "Worcestershire sauce. Pound in a mortar 1/2 ounce of cayenne pepper, 1/2 ounce of garlic, and pour over 1 quart of boiling vinegar (or, if you have it, walnut pickle vinegar). When nearly cold add a gill [1/4 pint] of Indian soy [sauce], and bottle. Cork tightly, and, after six weeks, the sauce will be fit for use. Mrs. A.S."

Note: With two small exceptions, this recipe is the same as that by Mrs. English, first published in the 26 May 1898 issue (p. 8) of this newspaper.

- 236. Ralphs (Geo. A.). 1899. Our motto-"Large value at little cost" (Ad). Los Angeles Times. Dec. 7. p. 3.
- Summary: "1 large bottle catsup-10¢. 1 large bottle pickles–10¢. 1 large bottle mustard–5¢. 1 large bottle Worcestershire Sauce-10¢." Address: 601 S. Spring [Los Angeles, California]. Phone: Main 516.
- 237. Duncan's (John) Sons. 1899. Its only a ? [question] of sauce. New York, NY: John Duncan's Sons. [8] p. Illust. (color). 12 cm. *
- Summary: Advertisement in verse for Lea & Perrins' Worcestershire Sauce.
- 238. Saito, Akio. 1899. [Chronology of soybeans in Japan, 1868 to 1899, first half of the Meiji period] (Document part). In: Akio Saito. 1985. Daizu Geppo (Soybean Monthly

News). Feb. p. 11-12. [Jap]

• Summary: 1871 July-A brewing tax (jozo-zei) and patent tax are levied on clear sake (seishu), unclear sake (dakushu), and shoyu. But in 1875 the two taxes on shoyu are discontinued because shoyu is considered one of the necessities of life.

1873-At about this time a sincere farmer, Itoi Mosuke, of Akita prefecture finds a special type of soybean and names it Itoi-mame. Later the name changes to Ani and they are cultivated all over Akita prefecture.

1873 May-The Japanese government exhibits soybeans at the exposition in Vienna, Austria. And the USA becomes interested in soybeans. Also at this expo, Kikkoman uses glass bottles for their shoyu for the first time.

1875-At about this time, shoyu becomes so popular overseas that a German-made fake shovu appears.

1877-There are now 40-50 miso shops in Tokyo, centered in Hongo (which comprises the areas of Yotsuya, Fukagawa, Shiba, Shinagawa, Ooi, Oshima, etc.).

1877 Feb.–Dried-frozen tofu (kôri-dôfu) is purchased as an army supply for the Seinan no Eki war.

1877 Aug.—The first domestic exposition is held in Japan, at Ueno Park, Tokyo. Kikkoman shoyu wins an award.

1878–The quick method of miso fermentation (miso no sokujo-ho) is mentioned in a government report.

1878–The first official government statistics on soybean cultivation in Japan start to be compiled. This year the area is 411,200 hectares and production is 211,700 tonnes [yield = 514 kg/ha].

1879–The price of high-quality miso in Tokyo is 4 sen per kg. In 1980 the price is 303 yen/kg-or about 7,575 times higher. Note: From now on prices from the Meiji era come from a book titled History of Lifestyle of the Meiji, Taisho, and Showa periods as seen from prices of the day (Nedan no Meiji Taishi Showa Fuzoku Shi). It is published by the Weekly Asahi (Shukan Asahi).

1882–Around this time many small shoyu manufacturers appear and quite a few bad quality shoyu products are on the market. Shoyu loses considerable consumer confidence.

1885-The price of 1 keg (taru, 16.2 liters or 9 sho) of shoyu at this time is as follows: Highest grade (jo no jo) (Kikkoman) 1 yen, 40 sen; Middle upper grade (jo no chu) (3 makers including Yamasa) 1 yen 38 sen; Lower upper grade (jo no ge) (Kamibishi) 1 yen 25 sen; Upper middle grade (chu no jo) (Fujita) 1 yen 25 sen; Lower middle grade (chu no ge) (Chigusa) 1 yen 17 sen; Lower grade (ge) (Kinka) 80 sen. Yamaguchi Yoshibei of Yamasa Shoyu starts to sell Worcestershire Sauce, called "Mikado Sauce."

1885 May-The government reinstates the tax on shoyu to raise money for the army.

1887-Soybean production in Japan tops 400,000 tonnes (419,700 tons) for the first time.

1890-The Tokyo-Area Shoyu Brewers' and

EA&PERRINS' SAUCE

The Original WORCESTERSHIRE



Beware of Imitations John Duncan's Sons, Agents, New York Wholesalers' Union (Ichifu Rokken Shoyu Jozo-ka Tokyo Tonya Kumiai Rengokai) forms a cartel for the first time because of a 50% increase in the price of their raw materials.

1891–Mogi Kenzaburo of Kikkoman (1st generation) starts to use a special press (gendo maki assaku-ki) invented by Yamazaki Izuko to press the shoyu out of the moromi mash more efficiently and quickly.

1893-In recent years the import of soybeans to Japan has increased rapidly, and this year it reaches 96,000 tonnes. These soybeans are grown mainly in Manchuria. The average price of 2 liters of high-quality shoyu in Tokyo is 10 sen. (In 1982 it is 584 yen, or 5,840 times more than in 1893).

1894-Around this time miso soup is recognized for its value as a protein food. Dr. Sito Nesaku, an agricultural specialist, says that miso is a farm household's milk.

1894–Yabe Kikuji (1868-1936) calls natto "Japanese cheese" and presents the first academic paper on natto bacteria in Japan.

1895–Around this time the number of walking vendors of tofu, natto, and boiled whole soybeans (*ni-mame*) increased, as did the production of dried-frozen tofu (kori-dofu). The number of small shovu makers decreased dramatically as Kikkoman, Yamasa, and Higeta increasingly used advanced industrialized methods. Recipes and methods for making miso pickles (miso-zuke) using carrots, daikon, udo, and ginger are given in women's magazines such as Jokan, Katei Zasshi and Jogaku Kogi.

1896–Around this time the importation of salt starts, as shoyu makers in Noda and Chiba buy 15,000 tons of salt from England.

1897–Soybean imports this year increase to about 140,000 tonnes, which is one-fourth of Japanese consumption. Domestic soybean production is 400,000 tonnes.

1899-Mogi Keizaburo of Kikkoman of Kikkoman (1st generation) starts using a boiler for the first time in the shoyu industry. Address: Norin Suisansho, Tokei Johobu, Norin Tokeika Kacho Hosa.

- 239. Manchester Guardian (England). 1900. Food preservatives inquiry. Jan. 16. p. 11.
- Summary: "Other experiments were made to test the effect of the quantities of preservative mentioned on the digestion of breadcrumbs as compared with the effect of other condiments, such as vinegar, Worcester sauce, small quantities of alcohol, and infused tea,..."
- 240. Gawne (W.) and Co. 1900. What the newspapers say about Gawne's Worcestershire Sauce (Ad). Mataura Ensign¹/₄ (Otago, New Zealand). Sept. 6. p. 5, col. 6.
- Summary: "'Evening Star,' 22nd June, 1889, says: 'Messrs W. Gawne and Co., of George St., Dunedin, have sent us a sample of Worcestershire Sauce manufactured by them, which is in no respect inferior to the imported article, so

long celebrated for Flavoring Sauces, and as an agreeable addition to grills, fish, and steaks. We can safely recommend it as a valuable addition to our rapidly developing local manufactures. The bottles are neatly labelled and ornamental, not only for home use, but for exportation and we hope the manufacturers will realise a demand equal to the merits of the savoury article they have produced."

Note: This is the last ad seen for this sauce. Address: George St., Dunedin. New Zealand.

- 241. Prescott, Augusta. 1900. Thanksgiving dishes and how to serve them. San Francisco Chronicle. Nov. 25. p. 26.
- Summary: Contains various recipes in sentence-style format. "Oysters on the half-shell. Place shells on a plate of cracked ice, over which scatter watercresses; in the center lay a lemon shell, in which serve this sauce: One teaspoonful freshly grated horseradish, two teaspoonfuls lemon juice, one teaspoonful catsup, dash of paprika, one-half teaspoonful of salt and one-half teaspoonful Worcestershire sauce."
- 242. Speer, Robert E. 1901. The "morning calm" country— Korea: The country which Russia covets and which Japan must have. American Magazine (The) (Frank Leslie's Popular Monthly) 52(2):174-86. June. See p. 182.
- Summary: Page 182: "At the inns along the road you order your meal as 'a table of rice,...' It is brought on a low, pretty, four-legged table and set down on a floor before you. On it are rice, in a copper bowl, cucumber soup, an omelette, salt fish, shredded cabbage in salt water, salted shrimps, hard bean sauce made out of the pressed bean extract, of which great quantities are said to be shipped from China and Korea as the basis of Worcestershire sauce. But perhaps this is a fable. There are many such told in Asia."

Note: The term "hard bean sauce" probably refers to Korean-style soy sauce. But the meaning of the word "hard" is unclear.

- 243. Duncan's (John) Sons. 1901. Lea & Perrins' Sauce: The original and genuine Worcestershire (Ad). American Kitchen Magazine 16(1):p. xxv. Ads section at end. Oct.
- Summary: A 1/4-page ad. "Beware of imitations. All successful cooks use Lea & Perrins' Sauce to get the most delicious flavor for soups, fish, meats, gravy, game, salads, etc. Signature on every bottle-Lea & Perrins."

An illustration (see next page) shows a French-looking chef, with a pointed mustache, goatee, and white top hat (toque), in a kitchen pouring Worcestershire sauce from a bottle into a spoon over a dish on a plate. Address: New York.



244. Kander, Lizzie Black. comp. 1901. The "Settlement" cook book: Compiled by Mrs. Simon Kander,... Containing many recipes used in "settlement" cooking classes,... 6th ed. Milwaukee, Wisconsin. xxv + 470 p. Illust. Index. 20 cm.

• Summary: Worcestershire sauce is used as an ingredient in about 20 recipes. The first 4 of these are: Tartar sauce (p. 92). Baked trout (p. 99). Steak for the oven (p. 115). Stuffed peppers No. 4 (p. 168).

The word "vegetarian" appears in the title of two recipes: Nut butters for sandwiches-vegetarian (p. 240). Vegetarian chicken (p. 240).

Peanut butter is used as an ingredient in Cheese mixture for sandwiches (p. 236). Peanuts are used in at least 25 recipes; almonds are used in 6.

This is a "charity cookbook" published "for the benefit of the 'settlement,' 601 Ninth Street, Milwaukee. Price: \$1.20 postpaid." Address: Milwaukee, Wisconsin.

245. Faber's. 1902. Faber's (Ad). San Francisco Chronicle. Jan. 17. p. 14.

• Summary: "Worcestershire sauce–2 bottles 30¢. Lea & Perrins' and Marshall's."

246. GVT Grand Valley Times (Utah). 1902. How chop suey is made: Famous Chinese delicacy that is becoming popular dish in the United States. Oct. 10. p. 3.

• Summary: "Chop suey, the national dish of China for at least 25 centuries, bids fair to become a standard food in this country. There are some 60 Chinese restaurants scattered over the different boroughs of New York whose chief attraction is this popular composition, and several American restaurants have endeavored to take advantage of its popularity by adding it to their daily bill of fare. There is a ridiculous amount of mystery concerning this dish. It is simple, economical and easily made, according to the New York Post. The general formula (a long recipe in sentencestyle format) is as follows: One pound of moderately lean pork..."

"Some Chinese cooks use the Indian soy, which is sweeter. The effect can be imitated by adding a teaspoonful of Worcestershire sauce and another of brown sugar or a teaspoonful of molasses. An agreeable modification results."

"In Chinese restaurants the cost varies from 10 to 25 cents a plate.

Note: This "Indian soy" is clearly sweet soy sauce, which means it is different from the soy sauce made in Japan. Perhaps "Indian soy" here refers to the sweet soy sauce (ketjap manis) made in the Dutch East Indies, today's Indonesia. However ketjap manis seems to be a recentlydeveloped seasoning and term; it is first mentioned in a document in 1960 (as far as we know, as of May 2010).

247. Hills & Co. 1902. About–Turkeys (Ad). Hartford Daily Courant (Connecticut). Nov. 21. p. 18.

• Summary: Their long list of "Imported and domestic sauces" begins: "John Bull, Mushroom, Beef Steak, China Soy, Essence of Anchovies, Worcestershire Sauce,..."

248. Washington Post. 1902. Like oriental cuisine: Many Americans eat at Chinese restaurants. Nov. 30. p. 28.

• Summary: The ordinary bill of fare at Chinese restaurants in this city is bird's nest soup, or birds' nests a la Chinois; chop suey, chow fou, yet quo mien, chow mein, fou young dong and kee heong chan."

"Yet quo mien is perhaps the most popular item on the menu." "Chop suey stands next in order of popularity." The ingredients, which are listed, are hashed fine and fried in peanut oil. For cooking, the Chinese, being good Buddhists, never use lard or any other animal fat, employing in their place all manner of vegetable oils. With each dish of chop suey the waiter brings a small dish, such as is used for butter in American restaurants, filled with a peculiar brown sauce. This [soy sauce] is made in China of fermented beans, rice, and cabbage [sic], and is a great appetizer.

"Many years ago a shrewd Englishman who had been in the East India service took this sauce, and by adding certain other ingredients, evolved the famous Worcestershire sauce, which to-day is found on the tables of every hotel in the civilized world.

"It is surprising what the Chinese are able to make of beans. In the Heavenly Kingdom 'bean curd' is as staple an article of diet among the masses as bacon in this country. It is made by grinding beans moistened with water between two heavy stones, the product resembling cream. It is then taken, strained, flavored, and subjected to several processes known only to the makers, and finally pressed into long cakes like castile soap, in which shape it is cut up in slices and sold."

"There the ordinary bill of fare is bird's nest soup, or bird's nest a la Chinois; chop suey, chow fou, yet quo mein, chow mein, fou young dong and kee heong chan."

249. Rorer, Sarah Tyson. 1902. Mrs. Rorer's new cook book: A manual of housekeeping. Philadelphia, Pennsylvania: Arnold and Company. 730 p. Illust. Index. 21 cm.

• Summary: The soy bean is mentioned in two special sections: Botanical classification of our common vegetables (p. 281): "Leguminosae: Pulse family. Soy bean, peanut, kidney bean, string bean, lima bean, black bean, pea, chick pea, lentil, St. John's bread."

Soy bean (Glycine hispida, Maxim.) (p. 334-35): "Soy beans are grown principally in China where they form an important article of food; in fact, they are the richest of all in food constituents. It is also grown to a considerable extent in India [sic], where it is mixed with rice. This bean ranks high in fat and albuminoids and is their only muscle-making food. It has more than meat value. By the Chinese it is made into cheese [tofu], pastes [jiang], and sauces [Soy]. Soy sauce is used by them on all meat and fish dishes. For the English and Americans it forms the foundation for such sauces as clubhouse and Worcestershire. Soy is an agreeable seasoning to creamed meat dishes and a very pleasant addition to French salad dressing. It can be purchased in jugs at any Chinese shop, or at the American wholesale druggists by measure." A table (based on Church) gives the composition of the soy bean: Albuminoids, etc. 35.3%. Fat 18.9. Starch and dextrin 12.5. Sugar 12.0. Cellulose 4.2. Water 12.5. Mineral matter

"Soy" [sauce] is used as an ingredient in 12 recipes: Japanese fish sauce (p. 228). Japanese eggs (p. 253). Sautéd [sic Sautéed] celery ("When ready to serve sprinkle over two tablespoonfuls of soy or mushroom catsup, and send at once to the table," p. 389-90). Ginger chutney (p. 435). Japanese dressing (p. 442). Celery salad ("This is greatly improved by adding a few drops of Worcestershire sauce, soy or mushroom catsup," p. 451). Bobotee salad (p. 457). Philadelphia cream salad (p. 459-60). Shad roe salad ("one tablespoonful of Worcestershire sauce or soy," p. 469). Salad seasoning ("Agreeable seasonings to be kept on hand for salad making: Garlic, mushroom catsup, tomato catsup, Worcestershire sauce, soy, tobasco oil [sic, Tabasco], tarragon vinegar, mint sauce, capers and celery seed," p. 472). "A group of Hawaiian recipes"-To cook beef ("bake until brown. Then pour over it a half pint of sweet cream, to which you have added a tablespoonful of soy. Cook slowly for one hour, basting frequently with the cream," p. 691-92). Cream lettuce sauce to serve with fish ("a half saltspoonful

of pepper and a teaspoonful of soy," p. 695).

Worcestershire sauce is used as an ingredient in at least 25 recipes. The first four are: Ox tail soup (p. 62). Cream of cheese soup (p. 74). Mock turtle soup (p. 80). Baked carp (p.

Peanut butter is used as an ingredient in 5 recipes: Cream of peanut soup (p. 75). Lentil pie (p. 337-38). Peanut wafers (p. 535). Nut and fruit crackers (with almond butter or peanut butter, p. 537-38). Marguerites (p. 556).

The earliest recipe seen for homemade peanut butter states (p. 535): "Peanut Butter: Roast the nuts, shell and blow off the brown skins. When making it in large quantities, it will pay to have a bellows for this purpose, or put the peanuts on a coarse towel, cover them with another towel, rub them gently, then blow off the skins. If you use salt dust them lightly with it and grind at once. Pack the butter into glass jars or tumblers, cover them and keep in a cool place. This may be used plain or diluted with water."

Two recipes use almond butter as an ingredient: Almond wafers (p. 525). Nut and fruit crackers (p. 537-38). A recipe for homemade almond butter is given (p. 525).

The word "vegetarian" is mentioned in connection with 7 sections of recipes: Meats (p. 135-36). Vegetables (p. 277-78). Salsify (p. 317-18). Tomatoes and okra with curry (p. 417-18). Nuts (p. 522-23). Nut croquettes (p. 538). Sample menus-Vegetarian (p. 666). The author speaks very favorably of a balanced vegetarian diet. Scientists in general agree, she says, that animal proteids are easier to digest than vegetable proteids. "I must contend, however, that a well selected vegetable diet will give health, bodily vigor and mental strength to those who live rationally." In other countries and cultures, vegetarians are quite equal in strength to those of the same economic class who live largely on meat or on a mixed diet of proper proportions-and are most likely freer from disease. The out-door laborer would probably do better on a vegetarian diet whereas the sluggish digestive apparatus of an indoor is probably better suited to beef (p. 135-36).

"The American people, as a class, in their rushing and bustling life, prefer to take their nitrogen from animal products, which are more easily digested and assimilated than vegetables." "The Japanese, who do in their country the work performed by horses here, are practically vegetarians." The "vegetarian requires but two meals per day," yet they are more nourishing than three meals of meat. They take less time to eat, cost less, and offer more variety. "The amount of cellulose or waste in vegetable foods keeps up the peristaltic motion of the intestines and lower bowels; hence, vegetable eaters are rarely troubled with constipation and torpid livers." America has "grown into a meat-eating nation" in large part because the scullery maids who preside over the kitchen are largely uneducated, do not understand nutrition, and have never learned the subtleties of preparing vegetables (p. 277-78).

"To the vegetarian, they [nuts] are indispensable; they furnish his meat, milk and butter. They are palatable, nutritious, and, if well prepared, easy of digestion. Being of vegetable origin, they are free from the danger of disease germs. Their food value is generally overlooked by Americans as they are generally served as dessert"-on top of a heavy meal. "From the general awakening in regard to healthful diet, societies have sprung up all over the world, recommending the use of vegetable foods, especially fruits and nuts. We have well established, both in New York and London, large vegetarian societies, many with separate branches of 'fruit and nut eaters.' Personally I have tried the experiment, and find it most satisfactory" (p. 522).

The Preface notes that this "new book on Domestic Science... represents on paper The School at its highest period of development..." "A great change in the methods of living has taken place in America during the last few years." Not long ago, schools of cookery taught "fancy cookery"-"to succeed with these elaborate, dyspepticproducing concoctions as the highest ambition. All this has now changed: the teacher or cook book (an ever present teacher) that does not teach health, body building, and economy in time and money, is short lived. There are still a few women who do elaborate cooking to please the palate and appetite,... They are still at the palate stage of existence. Strive to reach a higher plane of thought-eat to live. Why should any woman be asked to stand for hours over a hot fire mixing compounds to make people ill? Is this cookery? Is the headache that follows a food debauchery more pleasant or pardonable or less injurious than that which follows drink? Results of intemperance are identical. Simple living and high thinking have the approval of learned men and women,..."

Sarah Tyson Heston Rorer (1849-1937) "is one of the great ladies of American culinary history. She was a nationally recognized cookery expert, founded and ran a cooking school in Philadelphia for 18 years, authored over 75 books and pamphlets, edited her own magazine Table Talk,... and was domestic editor of the Ladies Home Journal for 14 years." With over 1,500 recipes, tips and advice, and more than 125 recipes, this "is one of America's great cookbooks. The Ladies Home Journal reprinted it in 1970. It offers an excellent view of American cookery at the turn of the 19th to 20th centuries" (MSU introduction).

Note 1. This is the earliest document seen (Feb. 2012) stating clearly that shoyu (Japanese-style soy sauce) is used as an ingredient in making Worcestershire sauce.

Note 2. This is the earliest document seen (Jan. 2001) which states that "body building" is widely considered part of a healthy way of life. Address: Philadelphia.

250. Hopkins, Albert Allis. ed. 1903. Scientific American cyclopedia receipts, notes and queries. 22nd ed. New York, NY: Munn & Co. 629 + 105 p. See p. 768. Illust. Index. • Summary: On page 1 is a helpful list of abbreviations.

The entry for "Sauces" (p. 496-97) includes the following which call for soy [sauce]: "4. Quin's.-a. Walnut pickle and port wine, of each, 1 pt.; mushroom ketchup, 1 qt.; anchovies and shallots, chopped, of each, 2 doz.; soy, ½ pt.; cayenne, ¹/₄ oz.; simmer for 10 minutes, strain and bottle.

4b. Walnut pickle, ketchup and soy, of each 1 pt.; chopped cloves of garlic and anchovies, of each 1 doz.; cayenne and bruised cloves, of each 1 drm. [drachm]. As last [i.e., same as previous formula]."

"8. Sauce au Roi.-Brown vinegar (good), 3 gt.; soy and walnut ketchup, of each ¼ pt.; cloves and shallots, of each ½ doz.; Cayenne pepper, 1 oz.; mix and let them stand for fourteen days.

"Sauce piquante.-Soy, 1 part; port wine and Cayenne, of each 2 parts; brown vinegar 16 parts; mix and let them stand for three or four days before bottling.

"10. Soy.-Boil until soft 2 qt. of seeds of Dolichos soja (if this cannot be obtained use haricot or kidney beans). Add 2 qt. bruised wheat; keep in a warm place for one day; add 2 qt. salt and 1 gal. of water; keep for two or three months on a tightly covered stone jar. Then press out the liquor. The genuine soy is imported from China, but this is a good substitute.

"To make Quin sauce.-Walnut catsup, 21/2 gal.; mushroom catsup, 2½ gal.; soy, 1¼ gal.; garlic, 1¼ lb.; sprats 7½ lb. Boil 15 minutes, strain and bottle.

"Harvey's sauce.—Quin sauce, 24 parts; soy, 8 parts; cayenne, ½ part.

"Epicurean sauce.—Indian soy, 3 oz.; walnut catsup, 12 oz.; mushroom catsup, 12 oz.;" etc.

"Worcestershire sauce.—This is quite a complex condiment. It is made of wine vinegar, 1½ gallon; walnut catsup, 1 gallon; mushroom catsup, 1 gallon; Madeira wine, ½ gallon; Canton soy [China], ½ gallon; moist sugar, 2½ pounds; salt, 19 ounces; powdered capsicum, 3 ounces; pimento, 1½ ounces, coriander, 1½ oz.; chutney, 1½ oz.; cloves, 3/4 oz.; mace, 3/4 oz.; cinnamon, 2/3 ounce; asafoetida [asafetida], 6½ drachams dissolved in 1 pint brandy 20° above proof. Boil 2 pounds hog's liver for 12 hours in 1 gallon of water, add water continually so as to keep up the quantity of one gallon; mix the boiled liver thoroughly with the water, strain through a coarse sieve, and add this to the above mixture. It is self-evident that no chemical examination could ever detect the presence of half the above organic products."

The entry for "Soy" states (p. 530): "Genuine soy sauce is a species of thick black sauce, imported from China, prepared with white haricots, wheat flour, salt and water; but a spurious kind is made in England as follows: Seeds of dolichos soja (peas or kidney beans may be used for them), 1 gal.; boil till soft; add bruised wheat, 1 gal.; keep in a warm place 24 hours; then add common salt, 1 gal.; water, 2 gal.; put the whole thing into a stone jar, bung it up for 2 or three months, shaking it very frequently; then press out the liquor; the residuum may be treated afresh with water and salt for soy of an inferior quality."

The entry for "Vinegar and vinegars" (p. 582+) contains two formulas for "Camp vinegar" (p. 584). The first calls for 3 tablespoonfuls of soy [sauce] (plus 1½ pints walnut catsup); the second calls for 4 oz. of soy [sauce].

The first appendix, titled "Additional receipts" contains numerous formulas that call for "soy" [sauce]. In the section on "Pickles, sauces and catsups" (p. A-55+) we find the following:

"An excellent pickle (p. A-55) includes "1 wineglassful of soy."

"Soy" (p. A-55). This is a sauce frequently made use of for fish, and comes from Japan, where it is prepared from the seeds of a plant called Dolichos soja. The Chinese also manufacture it; but that made by the Japanese is said to be the best. All sorts of statements have been made respecting the very general adulteration of this article in England, and we fear that many of them are true. When genuine, it is of an agreeable flavor, thick and of a clear brown color."

Under "Sauces" (p. A-57). "Sauce aristocratique" includes "2 tablespoonfuls of soy... To every pint of the boiled liquid add vinegar, wine and soy, in the above quantities, and bottle off for use. Cork well and seal the corks. Make this sauce from the beginning to the middle of July, when walnuts are in perfection for sauces and pickling.

"Carrack sauce (for cold meat)." Includes "5 dessertspoonfuls of soy,..."

"Store sauce or Cherokee.-One-half oz. of cayenne pepper, 5 cloves of garlic, 2 tablespoonfuls of soy, 1 tablespoonful of walnut catsup, 1 pint of vinegar, Boil all the ingredients gently for about half an hour;..."

"Harvey sauce.-One dozen of anchovies, 6 dessertspoonfuls of soy, ditto of good walnut pickle,..."

"Leamington sauce" (p. A-58). "Walnuts. To each quart of walnut juice allow 3 qt. of vinegar, 1 pt. of Indian soy, 1 oz. of cayenne, 2 oz. of shalots [shallots] 3/4 oz. of garlic, ½ pint of port..."

"Reading sauce.—2½ pt. of walnut pickle, 1½ oz. of shalots, 1 qt. of spring water, 3/4 pt. of Indian soy, ½ oz. of bruised ginger,..."

Under "Catsups" (p. 59-60) are formulas for: Grape catsup. Mustapha or liver catsup. Mushroom catsup. Oyster catsup. Pontac catsup or sauce. Tomato catsup. Walnut catsup. Note: None of these catsup formulas call for soy [sauce].

"Vinegar" (p. A-60). "Camp vinegar-1 head of garlic, ½ oz. of cayenne, 2 teaspoonfuls of soy, 2 teaspoonfuls of walnut catsup, 1 pt. of vinegar, cochineal to color..."

Note: The publication date printed on the title page is 1903, however the copyright for this edition is 1900. Address: New York [Query Editor of the "Scientific American"].

251. Whitehead, Jessup. 1903. The steward's handbook and guide to party catering. 6th ed. Chicago, Illinois: Jessup Whitehead & Co., Pubs. v + 464 + 29 p. Illust. No index.

• Summary: Page 60: "Those everlasting relishes" mentions catsups, soys, Worcestershire sauce, mushroom and walnut catsups, Harvey's sauce, India soy.

Page 87: Relishes: Tomato catsup, Worcestershire sauce. Page 214: Worcester sauce.

Alphabetical: Carp (p. 267): Baked carp; gravy made with Worcestershire sauce. Chinese cookery (p. 278-80): Chinese chop soly [chop suey], a savory ragout, is the national dish of China. Incidental ingredients include "salted black beans." Chop sticks.

Cucumber (p. 299) and eggs, with vinegar and Worcestershire sauce. Devil sauce (p. 303), with Worcestershire. Drinks (p. 305): Prairie oyster, with dash of Worcestershire sauce. Garum (p. 324): "One of the two principal sauces used by the ancient Romans...; a kind of soy,..." Horseradish (p. 343): Napolitaine sauce, with Worcestershire sauce.

Japanese cookery (p. 350-51): Mentions "Japanese misoshiru [miso soup]... This is made from miso, a fermented mixture of soy, beans [sic, soy beans], wheat and salt. It has a gamey flavor all its own." "Hachimono,... a piece of sole stewed in soy." "... the brown soy-colored beans and strips of Kukirage, or ear-shaped mushrooms." "Fu, a kind of biscuit made from the glutinous part of wheat flour." A gravy "thickened with a transparent, starchy substance, obtained from the root of a climbing plant (Pueraria Thunbergiana), called by the Japanese Kuzu."

Sauces (p. 430-34): "Harvey's sauce—'A fair imitation of Harvey's sauce may be produced by working the following recipe. Mince a clove of garlic very finely, add 6 chopped anchovies, ¹/₄ oz. cayenne, 3 tablespoonfuls of Indian soy, 3 tablespoonfuls of mushroom or walnut ketchup..." "Soy-An East Indian bottled sauce; it is made of purple wrinkled morels, galangal root and spices." "Bottled table sauce-The recipe for making the genuine Yorkshire relish is probably known only to manufacturers. However, the following is said to yield a good imitation of that popular sauce: 1 oz. garlic, 1 teaspoonful cayenne, 2 tablespoonfuls Indian soy, 2 tablespoonfuls mushroom ketchup, and 1 pint vinegar."

Scottish cookery (p. 438): Mince collops—incl. a "dessertspoonful Worcester sauce..."

"Soy-A bottle sauce imported from China and India; composition uncertain."

Tripe (p. 461): Tripe a la Creole, with Worcestershire sauce. Address: Chicago, Illinois.

252. Farmer, Fannie Merritt. 1904. Food and cookery for the sick and convalescent. Boston, Massachusetts: Little, Brown and Company. xiii + 289 p. Illust. Index. 20 cm.

• Summary: Chapter 1, titled "Food and its relation to the body," provides basic information about food and the human body. It begins: "Food is that which builds and repairs the body, and furnishes heat and energy for its activities. Metabolism includes the processes by which food is assimilated and become part of the tissues, and the excretion of broken-down tissues as waste products." The body is found to contain 15-20 chemical elements. The main ones are oxygen (62.5%), carbon (21.5%), hydrogen (10%), and nitrogen (3%), plus many minerals.

"Food adjuncts are such substances as stimulate the appetite without fulfilling the requirements of food. Examples: tea, coffee, spices, flavoring extracts, condiments, etc., etc.

"While air is not classified as a food, it is essential to life. Combustion cannot take place without it, and all food must be oxidized (which is a slow process of combustion) before it can be utilized by the body."

A diagram titled "Classification of foods" (p. 2, according to Prof. Atwater), shows that all are divided into organic and inorganic (mineral matter and water). The organic are divided into protein, fats, and carbohydrates (starches, sugars, and cellulose). The protein is divided into proteids, extractives of meat, and extractives of vegetables (amides). The proteids are divided into albuminoids and gelatinoids (collagen of skin and tendons, and ossein of bones). Examples of albuminoids are albumen (white of egg), myosin (lean of meat), casein (of milk), gluten (of wheat), and legumen (or peas).

The text continues: "The chief office of proteids is to build and repair tissues, and they only can do this work... The principal animal proteids are meat, fish, eggs, and cheese; the principal vegetable proteids are cereals, peas, beans, and lentils. The proteids obtained from animal foods are more easily digested and more completely absorbed than those obtained from vegetable foods. This is due in part to the presence of the large quantity of cellulose in vegetables."

Soy is mentioned only once in this book. A table of the "Composition of diabetic flours" (p. 221) shows that "Soya bean meal" contains by far the lowest percentage of starch (26.67) according to Dr. Charles Harrington. Two diabetic flours and a wafer have "Gluten" in their name. Worcestershire sauce is used as an ingredient in Sauce fineste (p. 234).

Gluten is also mentioned in various other places: Bread and bread making (p. 90-91). "Gluten is the chief proteid of wheat... The strength of a flour is determined largely by the quantity of gluten it contains." The gluten in rye flour is less elastic and tenacious, while that in oat and barley flour are even less so. Also: Gluten nut cakes (p. 226). Almonds are also mentioned frequently.

"Although history best remembers Fannie Farmer for her Boston Cooking-School Cook Book (1896)," Fannie herself thought this book would be her greatest contribution. During her high school years in Massachusetts, Fannie (who never married) suffered a stroke with paralysis, and had to

discontinue her education. She "remained an invalid for years thereafter, recovered enough to walk with a limp for the rest of her life and spent her last several years teaching and lecturing from a wheelchair. Perhaps because of her own illness, she had always had an interest in cooking for invalids.

"She supplied lectures on that subject to training schools for nurses nationwide and lectured on nutrition at Harvard Medical School. Her work there brought her in contact with Dr. Elliott Joslin, the pioneer diabetes researchers, who credited Fannie as 'the stimulus which started me writing about diabetes.""

"In 1902, she left the Boston Cooking School to open Miss Farmer's School of Cookery, aimed not at professional cooks but at training housewives... The school continued until 1944" (MSU introduction and biography). Address: Principal of Miss Farmer's School of Cookery.

- 253. New-York Tribune. 1904. Chinese food products: Beans a leading article of diet in China. April 10. p. A9.
- Summary: From What to Eat: "Dr. Yamei Kin, a Chinese woman doctor now studying in America, gives some interesting facts about Chinese food products. One surprising thing Dr Yamei Kin tells is that Chinese soy is made from a sort of red bean ground up and fermented. While fermenting it smells like sauerkraut, only worse. The fermented product is shipped in cases to England, where it is mixed with vinegar and other products and sold as Worcestershire sauce.

"The Chinese laborer lives on beans as much as does the Boston typewriter girl. The bean in China is more like our small round cow-pea. This is ground fine, mixed with water and a little salt. Then the water is pressed out and the bean cake [tofu] is sold to the poor. This bean cake may be cooked and mixed with other things, fish, chickens, etc. It is highly nutritious and explains why the Chinese laborer can endure so much on so little food. Vegetables are eaten in quantities... Fish is popular but very little meat is eaten. An animal is never killed to be eaten until it is too old to work; hence the Chinese do not like beef, considering it too tough. Pork is popular and every family keeps one or two pigs.

"The Chinese are great cooks, and love to give elaborate dinners. This is the chief means of entertaining in China. However, the dinner consists of sixty courses, and it takes several hours."

Also appeared in the Detroit Free Press. 1904. May 1 (p. 2).

- 254. Humphreys, Mary Gay. 1904. The aesthetic housekeepers of Japan. Ogden Standard Examiner (Utah). April 29. p. 23.
- Summary: The author, an American, writing from her experience of living in Tokio, notes that Japanese housekeepers bring a strong sense of beauty or aesthetics to every part of their daily life. Concerning foods: "One of

these is bean curd, 'tofu,' a white substance that is sliced and fried like mush, with soy [sauce] for a flavor. This curd is so nutritious and so cheap that an American who lives in Japan suggested its being introduced into this country as a food. Soy is a liquid made from the black bean and is said to be the foundation of Worcestershire sauce. It enters into almost all cooking, and most agreeably."

A Tokio restaurant meal: "It was charming, a meal to be remembered, and meat thus cooked in soy [sauce] something 'Japanesy' that we might well import."

Nuta salad: "This is made of clams, rape tops and onion with a sauce of bean paste, rice, mustard and soy [sauce], rubbed into a brown liquid." One large illustration shows a Japanese woman with elaborate dress and hairdo; three others show her working at home.

255. Brunson, John A. 1904. A glimpse of Japanese life. Good Health (Battle Creek, Michigan) 39(5):237-42. May.

• Summary: A good photo (p. 239) shows a Japanese vegetable vendor carrying his goods in baskets on a shoulder pole. Page 240 notes: "Tofu, or 'bean curd,' as the foreigners call it, is a favorite dish. The beans are first ground fine in hand mills. These mills consist of two stone discs about eighteen inches in diameter, and perhaps six or eight in thickness, one being placed above the other. To the upper stone is attached a handle by which it is turned, and the motor power is supplied by two women. It is a familiar sight in Japan to see 'two women grinding at the mill.' The husks and coarser parts of the bean flour are then carefully removed, and the fine white residuum is mixed with water and pressed into squares which somewhat resemble cottage cheese in appearance. The *tofu* is then boiled, and is both palatable and nutritious, but rather concentrated."

In Japan, fish are served raw, while yet fresh, "with shoyu, a kind of Japanese Worcester sauce."

Note 1. This is the earliest article seen (Aug. 1996) with detailed information on soyfoods in Dr. John Harvey Kellogg's periodical Good Health.

Note 2. This is also the earliest document seen (Aug. 1996) that compares tofu with cottage cheese.

256. Toronto Daily Star (Canada). 1904. Madge Merton's page for women. July 16. p. 16.

• Summary: "Aunt. B.: The following recipe for homemade Worcestershire sauce sounds well. Pound once ounce of garlic, two ounces of small onions, and half an ounce of cayenne pepper. Put them in an earthen jug with half a pint of vinegar, stand in water, and simmer for three hours. Strain, add a pint of hot vinegar, and half a pint of Indian soy. Perhaps you can't get Indian soy, but at the shops where Chinese food is sold, you may get the Chinese article of the same name. Bottle your sauce and seal tightly, using a mixture of equal parts beeswax and resin."

257. Douglas (J.M.) & Co. 1904. Just a dash of the genuine: Lea & Perrins' Worcestershire Sauce (Ad)... Toronto Daily Star (Canada). Nov. 8. p. 9.

• Summary: "... is as necessary as salt to bring put the true flavor of Consomme, Bouillon, Sauce, Meats, Game, Fowl, etc. Without an equal for 60 years [i.e., since about 1844]. Ask any good cook." Address: Montreal [Quebec, Canada].

258. Fesca, Max. 1904. Der Pflanzenbau in den Tropen und Subtropen [Plant cultivation in the tropics and subtropics. 2 vols.]. Berlin: Wilhelm Suesserott Verlagsbuchhandlung. Vol. 1: viii + 278 p. See vol. 1 (Erster Band), p. 159-65. 21 cm. Suesserotts Kolonialbibliothek. [2 ref. Ger]

• Summary: In Volume 1, in the chapter on legumes (Huelsenfruechte, Leguminosen), is a long section the soybean (*Die Sojabohne*) (p. 159-63), which focuses on soybean production. Contents: Introduction. Climate. Soil and cultivation of the soil. Fertilizers. Planting / sowing. Harvest. Yields. Composition of the seeds and straw. Soybean oil and cake in China. Food uses of soybeans in China and Japan, especially "Shoyusauce" (shoyu) from which the soybean derives its name. It is used in the preparation of Anglo-American sauces such as Worcestershire sauce, etc. A description of the preparation of shoyu is given, along with its composition based on analyses by O. Kellner and E. Kinch. "The fermentation lasts from at least 20 months up to 5 years; the longer the fermentation the better the sauce. The finest quality is a mixture of 3 and 5 year sauces." An analysis of shoyu presscake (Shoyurueckstande) is also given.

Note: This 3-volume work is volumes 1-2 in *Suesserotts* Kolonialbibliothek, vol. 708. Address: Germany.

259. Lea and Perrins. 1905. Lea & Perrins' Sauce (Ad). Japan Weekly Mail (Yokohama) 43(11):24. Jan. 7.

• Summary: This black-and-white ad (5 by 4 inches) states: "The original and genuine Worcestershire. By Royal warrant to His Majesty the King."

Note: This is the earliest document seen (Feb. 2012) that contains the phrase "By Royal warrant to His Majesty the King" in connection with Lea & Perrins' Worcestershire sauce. The phrase was used frequently in ads until about 1916. Address: England.

260. Douglas (J.M.) & Co. 1905. Lea & Perrins': The genuine Worcestershire Sauce (Ad). Toronto Daily Star (Canada). June 24. p. 65.

• Summary: A large illustration shows a dignified man wearing glasses seated at a dining table with a steaming bowl of something in front of him. Behind him stands an attentive waiter.

"'James, haven't you forgotten something.'

"'Forgotten-me! Sir.'\"'What about my cold roast beef?'

"Beg pardon, Sir. Of course, Sir. Lea & Perrin' Sauce, Sir.

"Ad it for you hevery day, these thirty years, Sir. "Couldn't heat cold meats without Lea & Perrins' Sauce, could you, Sir?" Address: Canadian agents, Montreal [Quebec, Canada].

- 261. Douglas (J.M.) & Co. 1905. Lea & Perrins': The genuine Worcestershire Sauce (Ad). Toronto Daily Star (Canada). July 15. p. 19.
- Summary: A large illustration shows a waiter carrying to steaming bowl of soup to the table.

"Beg pardon, Sir.

"Alphonse says as 'ow the grocer didn't send 'im Lea & Perrins' Sauce, Sir.

"The bottle looked the same, Sir-hand 'e didn't notice the label. Sir.

"Sorry, Sir, that the soup hisn't seasoned just right, Sir. "Alphonese, Sir, says has 'ow hit wont 'appen hagain, Sir." Address: Canadian agents, Montreal [Quebec, Canada].

262. Eaton (T.) Co., Ltd. 1905. Eaton's July sale news (Ad). Toronto Daily Star (Canada). July 28. p. 12.

• Summary: The section titled "You're the doctor" states: "Pure, fresh, clean foods go a long way toward keeping you right, and that's the kind of food we offer every day."

"Lee and Langley's imported Worcestershire Sauce, special per bottle 10¢." Address: 190 Yonge St., Toronto.

- 263. Holbrook's Sauce. 1905. The soup recipe which won the Holbrook's prize (Ad). Toronto Daily Star (Canada). Dec. 23. p. 16.
- Summary: A large illustration shows a bottle of "Holbrook's Worcestershire Sauce" which savour's soup. "It helps make poor soups palatable and makes good soups better than they could be without it.

"Many recipe for soups using Holbrook's Sauce were submitted in competition for 18 prizes offered by the manufacturer. The awards were made after careful test by Miss Ida M. Hunter, the Superintendent of Domestic Science Department of the Public School of Toronto."

The first prize recipe, titled "Curl vegetable soup," is given. Address: 23 Scott St., Toronto.

- 264. The Times cook book-No. 2: 957 cooking and other recipes by California women... Brought out by the 1905 series of prize recipe contests in the Los Angeles Times. 1905? Los Angeles, California: The Times-Mirror Company. 105 p. Undated. Index. 24 cm.
- Summary: On the cover: "Los Angeles Times cook book-No. 2: One thousand toothsome cooking and other recipes including seventy-nine old-time California, Spanish and Mexican dishes-Recipes of famous pioneer Spanish settlers."

This book contains two recipes with the word

"vegetarian" in the title: Cream celery soup for vegetarians (p. 14). Vegetarian salad (p. 31).

Two recipes call for peanut butter as an ingredient: Peanut soup (p. 18). Washington salad (p. 25). The recipe for Peanut butter sandwiches (from Mary Stone Welch, San Diego, California) states: "Boil peanuts until tender; remove hulls in cold water; mash. Season with butter and salt. When cold spread between slices of bread. Good for school lunch."

Peanuts are used in 20-25 recipes including: Peanut soup. Peanut butter sandwiches. Peanut cookies. Peanut kisses. Peanut brittle (2). Peanut candy (3). Candied peanuts.

Worcestershire sauce is used as an ingredient in 10 recipes. Soy is not mentioned.

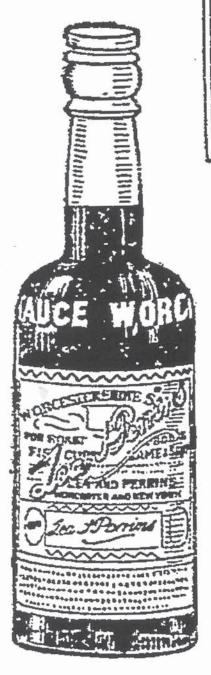
Note: Starting in the late 19th century, various media companies-newspapers, magazines, radio, the movies, and TV-all got involved in publishing cookbooks. This book provides an interesting window into Southern California and its rich Mexican and Spanish heritage. The undated book is based on the 1905 recipe contests in the Los Angeles Times (MSU introduction). Address: Los Angeles, California.

- 265. Eaton (T.) Co. 1906. Eaton's Friday bargain list (Ad). Toronto Daily Star (Canada). May 31. p. 14.
- Summary: The section titled "Friday's pure food economy" includes: "Baird's Imported Worcestershire Sauce, 5 bottles, 25¢." Address: Toronto.
- 266. Lea and Perrins. 1906. Cheese is much improved by the addition of a little Lea & Perrins' sauce (Ad). Times (London). June 23. p. 11, cols. 5-6.
- Summary: "Just a small quantity on the side of your plate. Try it." At the top of this display ad is an illustration of a large cylindrical block of cheese on a plate with a pottery cover nearby. At the lower left is a large illustration of a bottle of the sauce, showing the front panel with signature. At the lower right is a royal seal, and below it the words "By Royal Warrant to H.M. The King." Address: [England].
- 267. Lea and Perrins. 1906. Classified ad: Dinner-Soup, fish, entrées. joints, savouries, with Lea & Perrins' sauce. Times (London). July 6. p. 13, col. 6.
- Summary: To the left is a large illustration (see next page) of a bottle of the sauce, showing the front panel with signature.»

At the bottom right: "The original & genuine Worcestershire." Address: [England].

- 268. Duncan's (John) Sons. 1906. Lea & Perrins' sauce (Ad). Outlook (The) (New York City) 83(17):Unnumbered page near end of issue. Aug. 26.
- Summary: Half-page ad. "The original Worcestershire. For steaks, chops, cold meats. Fish, soups, salads, gravies, etc. The peerless seasoning." A photo shows a hand holding a bottle of Lea & Perrins' Sauce, pouring it over a large steak

Dinner



Soup, Fish, Entrées, Joints, Savouries,

with

LEA & PERRINS SAUGE.

The Original & Genuine Worcestershire. on a plate. Address: New York City.

269. Lea and Perrins. 1906. Fish, hot or cold, is rendered more agreeable and appetizing by the addition of Lea & Perrins' sauce (Ad). Times (London). Sept. 15. p. 12, cols. 5-6

• Summary: "It gives just that 'finishing touch' which makes the dish perfect." At the top of this display ad is an illustration of 3 fish on a plate. At the lower left is a large illustration of a bottle of the sauce, showing the front panel with signature. At the lower right is a royal seal, and below it the words "By Royal Warrant to H.M. The King." Address: [England].

270. Lea and Perrins. 1906. Soups, stews and hashes are rendered tasty and appetizing by the use of Lea & Perrins' sauce (Ad). Times (London). Oct. 20. p. 7, cols. 5-6.

• Summary: "The addition of this Sauce gives the finishing touch which makes the meal perfectly enjoyable." At the top of this display ad is an illustration of a large pottery tureen, with a ladle and steam coming out the top; its cover is nearby. At the lower left is a large illustration of a bottle of the sauce, showing the front panel with signature. At the lower right is a royal seal, and below it the words "By Royal Warrant to H.M. The King." Address: [England].

271. Lea and Perrins. 1906. Classified ad: Hot joints are much improved and rendered more appetizing if a little Lea & Perrins' sauce is added to the gravy. Times (London). Nov. 17. p. 8, cols. 5-6.

• Summary: "Lea & Perrins' Sauce is the best 'relish' for all kinds of meat, fish or game, and is a delicacy which should be on every dining table. An excellent digestive." At the top of this display ad is an illustration of a large, thick slice of roasted meat on a plate. At the lower left is a large illustration of a bottle of the sauce, showing the front panel with signature. At the lower right is a royal seal, and below it the words "By Royal Warrant to H.M. The King." Address: [England].

272. Otago Witness (New Zealand). 1907. Notes and queries. Feb. 20. p. 47.

• Summary: "Inquirer.—To make Worcestershire sauce mix together 1½ gallons white wine vinegar, 1 gallon walnut catsup, 1 gallon mushroom catsup, ½ gallon Maderia [Madeira] wine, ½ gallon Canton soy [sauce; from China], 2½ pounds moist sugar, 19 ounces salt, 3 ounces powdered capsicum, 1½ ounces each of pimento and coriander, 1½ ounces chutney, 3/4 ounce each of cloves mace and cinnamon, and 6½ drams of assafoetida [asafoetida] dissolved in 1 pint brandy 20 above proof. Boil 2 pounds hog's liver for 12 hours in 1 gallon of water, adding water as required to keep the quantity; then mix the boiled liver thoroughly with the water; strain it through a coarse sieve.

Add this to the sauce."

Note: This recipe for Worcestershire sauce contains soy sauce (Canton soy) as an ingredient.

273. Toronto Daily Star (Ontario, Canada). 1907. Everywoman's column. July 2. p. 17.

• Summary: A discussion of making tasty sandwiches. "Peanut butter, dates, and chopped nuts, bananas and crushed strawberries or strawberries are other fillings that meet with favor, and may suggest still others." "Worcester sauce" is also mentioned as a filling ingredient.

Note: This is the earliest document seen (Dec. 2009) in the Toronto Star that mentions "peanut butter."

274. Sydney Mail (Australia). 1907. Answers to correspondents. Oct. 16. p. 23.

• Summary: Gwen.-1... A recipe for homemade Worcestershire includes "a gill of Indian soy [sauce]."

275. John Duncan's Sons. 1908. Roast meats: Lea & Perrins Sauce (Ad). Collier's 41(5):33. April 25.



• Summary: A 1/8 page ad. Underneath the large bold words "Lea & Perrins Sauce" are written the tiny words "The Original Worcestershire." An illustration shows the bottle. "See that Lea & Perrins signature is on the label and wrappers. Beware of imitations." Address: Agents, New York.

276. Lea and Perrins. 1908. Lea and Perrins' Sauce (Ad). Japan Weekly Mail (Yokohama) 50(2):56. July 11.

• Summary: This black-and-white ad (5 by 6 inches) states: "Assists digestion and gives a delightful piquancy and flavour to all meat dishes, soups, fish, cheese, curries, game, poultry & salads. The original and genuine Worcestershire. By Royal warrant to H.M. the King." A large illustration shows a bottle of Lea & Perrins Worcestershire Sauce. Address: England.

277. Allen, Horace Newton. 1908. Things Korean: A collection of sketches and anecdotes, missionary and diplomatic. New York, Chicago, Toronto, London, Edinburgh: F.H. Revell Co. 256 p. See p. 74. Illust. (black and white photos). No index. 19 cm.

• Summary: Page 74: "Products.—The great product of Korea is rice, which is the staple of diet. Next come [soy] beans, which are largely used as a food for man and beast, being mixed with rice in the human dietary or used in the form of curd or cake [tofu], while they are indispensable for making the sauce so highly prized in Asia, and which is shipped abroad in vast quantities for the preparation of a celebrated English sauce as well as others, since it is the foundation for most of our sauces. Any one who patronizes a Chinese restaurant will be familiar with this bean sauce. Millet, rye, barley, oats, wheat and some poor corn, together with cotton and vegetables, form the chief farm crops raised in Korea after rice and beans."

Note 1. By "bean sauce" the author probably means "soy sauce," but he might also mean soybean jang (Koreanstyle soybean miso).

Note 2. The term "celebrated English sauce" clearly refers to Worcestershire sauce.

Preface: The author lived for 22 years "in China and Korea, including practically the whole period of the latter's diplomatic intercourse with the outside world,..." He spent 3 years in Korea as a medical missionary, 3 years in the Korean service, and 15 years in the diplomatic service of the United States government, "beginning as secretary of legation and ending as minister plenipotentiary." The poor Koreans are in desperate straits but opposition by them to their situation "seems at present to be unavailing if not suicidal." Sadly, the United States "deserted them in their time of need and ignored the solemn agreement we had entered into with them as an inducement for their abandoning the centuries-old position of exclusion and non-intercourse and emerging into the dazzling glare of treaty relations. Our treaty with Korea

of May 22, 1882, in its first article, makes the following promise: 'If other Powers deal unjustly or oppressively with either government, the other will exert their good offices on being informed of the case, to bring about an amicable arrangement, thus showing their friendly feeling."

The U.S. disregarded this solemn pledge at the time of the Portsmouth convention; we violated our sacred covenant. Chapter 26, "Political changes and probabilities."

1884–The haughty Chinese drove the inconspicuous Chinese from Korea and continued their traditional domination of Korea.

1894-1895–First Sino-Japanese War, over domination of Korea; the Japanese won and in Oct. 1895 the treaty of Shimonoseki was signed. During this war the world got its first intimation of the excellence of Japanese military organization and power. But diplomatic mistakes in Korea by Japan, after her victory, enabled Russia to gain the upper hand. Yet Russia to made diplomatic blunders while for 10 years Japan prepared for another war over Korea.

1904-1905-Russo-Japanese war; Japan won, gained control of Korea, and drove Russia from the entire area except in the vicinity of Vladivostok. During the 20 previous years when Korea could have fortified the country, it "played at all manner of silly pastimes." Now Korea is Japan's to exploit for herself. The U.S. position in the area has been weakened. Japan's next great objective will surely be China; it is only a matter of time. Address: Toledo, Ohio; M.D., Late Envoy Extraordinary and Minister Plenipotentiary of the United States.

278. Freshel, Maud Russell Lorraine (Mrs.). 1908. Six hundred recipes for meatless dishes. Originated, collected, and arranged by M.R.L. Sharpe. Cambridge, Massachusetts: The University Press. viii + 323 p. Recipe index. 22 cm.

• Summary: On the cover of this important, early vegetarian cookbook is written "The Golden Rule Cook Book." Later editions were published under the title The Golden Rule Cook Book in 1910 and 1926. The author's full name was Mrs. Maud Russell (Lorraine) Sharpe; thus her maiden name was Maud R. Lorraine. Born in 1867, she sometimes writes her first name "Emmarel" (i.e. for M.R.L.).

Worcestershire sauce is called for in many recipes in this book; see The Golden Rule Cook Book (1910). Address: Providence House, Chestnut Hill, Massachusetts.

279. Heppe, Kurt. 1908. Explanations of all terms used in coockery [sic]-cellaring and the preparation of drinks. Pocket dictionary. New York, NY: Published by the author. 335 p. See p. 45-46.

• Summary: The Preface begins: "This book has been specially adapted to American methods." Pages 45-46. Under the entry for "Cheese" we read: "Tao-foo cheese; Chinese cheese prepared from peas."

Under Sauces, ready-made (p. 274+) we find: Page 274:

"Catchup; from the East Indian, kit-jab, (to get the essence). Page 275: Lea and Perrins Worchester [sic] sauce; a very hot dark sauce for meats, rarebits, fish, etc.

Page 286: "- a la Soy or Soya; of Japan beans with butter, brown fish essence, velouté.

Page 313: "Soy-a ketchup of the Soy bean."

280. Jevne (H.) Co. 1909. The chef's secret (Ad). Los Angeles Times. April 17. p. II7.

- Summary: "That exquisite something you taste in Soup, Gravies, Sauces and Salads, is the clever addition of Just the proper thing-a dash or two of Worcestershire Sauce, or Tarragon-Vinegar 35¢,... or India Soy 35¢,... or any of the long list of Spices, herbs, etc. you will find in our catalogue, given upon request." Est. 1882. Address: Corner Broadway & Sixth St. and 208-210 S. Spring St. Phone: Home 10651, Sunset B'dwy, 4900.
- 281. Douglas (J.M.) & Co. 1909. What the grocers say, about Lea & Perrins' Worcestershire Sauce (Ad). Toronto Daily Star (Canada). May 4. p. 12.
- Summary: "Fraser, Viger & Co., Limited, of Montreal, have the reputation throughout Canada of catering to the highest class of the trade. This well known house also believes in telling their patrons about their best goods.

"In an advertisement which appeared in 'The Montreal Daily Star' of February 13th, Fraser" etc. said: "Among the various sauces that flood the market, Lea & Perrins', the 'Genuine Worcestershire,' is still in the lead by a big margin Its flavor is unique and most appetizing, different from all others."

Illustrations show: (1) A grocer, wearing muttonchops [sideburns] and a white apron, holding a bottle of Worcestershire sauce. (2) A large upright bottle of Lea & Perrins' Worcestershire Sauce. Address: Agents for Canada, Established 1857, Montreal [Quebec, Canada].

- 282. Duncan's (John) Sons. 1909. Lea & Perrins Sauce: The original Worcestershire (Ad). Pearson's Magazine (New York) 21(5):Unnumbered page at end. May.
- Summary: "Try it on Lobster. All varieties of Fish, are deliciously seasoned and made more appetizing with..."

"Soups, fish, steaks, roast meats, chops, gravies, game, chafing dish cooking and salad dressings are greatly improved by its use. For four generations it has stood unrivaled as a seasoning. Return substitutes."

Photos show: (1) A cooked lobster on a dish; (2) A bottle of Lea & Perrins Sauce. Address: Agents, New York.

- 283. Central Union Church (Honolulu, Hawaii), Ladies' Society. comp. 1909. Hawaiian cook book. 5th ed., revised and enlarged. Honolulu, Hawaii: Hawaiian Gazette Co. 150 p. Recipe index by category. 22 cm. 1st. ed. 1882.
- Summary: After the title of each recipe is given the

name of the person (mostly women) who submitted it. Worcestershire sauce is used to season some recipes (see, for example, soups, p. 9; fish, p. 18; beef, p. 28). For "vegetarian soups" ("for those who are forbidden meat or whose preferences are in favor of a vegetable diet") see p. 12-15.

Note: The recipes in this book are much more American than Hawaiian. The one main exception is the "Hawaiian feast" or luau (p. 130-31). Otherwise, the major Hawaiian influence is the use of tropical fruits (such as cocoanut, papaia [papaya], pineapple, mango, breadfruit, or Alligator pears), in otherwise American recipes. These recipes also show no Japanese or Chinese influence. For example, soy sauce is not used to season even one recipe in the entire book. Address: Honolulu, Hawaii.

284. Lloyd, Arthur. 1909. Every-day Japan. London, New York, Toronto and Melbourne: Cassell and Co., Ltd. xvi + 381 p. See p. 121, 124, 188. Introduction by Count Hayashi. Illust. Index. 24 cm. With 8 color plates and 96 reproductions from photographs.

• Summary: On the title page: "Written after twenty-five years' residence and work in Japan."

Chapter 22, "Life in a tea, silk, saké or shoyu district," states (p. 121): "As a striking contrast to the general poverty of appearance of districts purely agricultural-i.e. devoted to the cultivation of rice and other cereals-we have the general aspect of those districts in which tea is the principal product, where silkworms are cultivated, or saké and soy manufactured. In these districts-known as "Shoyu" districtsthere is a far larger amount of wealth, and the general standard of comfort in all classes is much higher."

Continuing on p. 124: "Saké and soy [sauce] (the latter the foundation of our Worcestershire sauce) are oldestablished industries which have generally been carried on by the same families for generations." Soy is mentioned briefly on p. 128.

Chapter 35, "Sights and cries in Tokyo streets," states (p. 188-89): The first sounds he hears in the morning are those from a Buddhist temple. "Domestic life begins at a somewhat later hour, but in the streets I can already hear the cry of "Natto, na-tto-!" which tells me that the poor are beginning to bestir themselves. Natto is a concoction of beans which have been kept until they are beginning to go bad. It is said to have a rich tasty flavour, and to be very popular with some sections of the community. It is essentially a poor man's dish. By the time the natto sellers have done their business, other itinerant vendors have begun their rounds." Address: M.A., Lecturer in the Imperial Univ., Higher Naval College and Higher Commercial School, Tokyo. Formerly Fellow of Peterhouse [UK].

285. Thomson, John Stuart. 1909. The Chinese. Indianapolis, Indiana: The Bobbs-Merrill Company. 441 p. Illust. (photos). Index. 22 cm.

• Summary: Page 118: "Eggs are preserved in a paste of saltpetre, soy [sauce] and earth for periods so long that they are blackened with their sulphur, and taste like our high school boy's experiment in sulphurated hydrogen. In Chekiang Province hams are pickled in soy sauce."

Page 120: "Cassia, mushrooms,... carambola fruit, almond custard, orange wine, steamed sharks' fins, chicken cooked with rice wine, ginger, soy [sauce], sesamum, peanut oil and herbs,-are all drawn upon by these versatile cooks in preparing their menus, especially when a foreigner is to be invited."

Page 300: "The South Manchurian Railway route, now dominated by the selfish Japanese."

Page 319: In Kowloon, "across the bay from Hong-Kong, is situated a village of soy-makers." "Behind the bamboo fences you will notice the bean poles, and the great earthenware pots, where the bean liquor is fermented, and stirred for two months in the blazing sun until it is black. The beans are skinned and made into a flour, into which gypsum is mixed. Salt and secret things are added to make this appetizing soy, which those who have learned the taste prefer to the flavored Worcestershire, of which it is the base. The soy costs only a trifle, and the workman who earns only ten cents a day will have it at his meal. The wealthy are equally proud of their national 'abettor of appetite.'" Note: Gypsum is used in making tofu, not soy sauce.

Page 408: "On the railway which the war gave her in Southern Manchuria, Japan is seeking a loan of \$150,000,000, which will be reloaned to finance these Government-Baronial Development Companies. The railway is to be broad-gaged so as to exchange traffic with the Chinese railways coming from the south and west, rather than to look for trade with the broader gaged Siberian Railway at Kwang Chau Fu. Exclusive of the revenue from military transport the South Manchuria Railway is already earning \$3,000,000 gold a year, or nineteen dollars gold a mile per day. The operating expenses are forty-five per cent. China is fighting Japan bitterly to parallel with the Fakumen Railway the Japanese South Manchurian Railway from the Russian railways down past Mukden to tidewater in Liaotung Gulf."

"Another knotty problem for the future in Manchuria is the question of taxation in the railroad zone. The Russians control the largest part of the Chinese Eastern Railway. The Japanese own as a war legacy the South Manchurian Railway. Now, if the Americans, British and French have a right to levy taxes in the settlements of Shanghai, Tientsin, etc., why have not the Russians and Japanese the same right in the railroad zones in Manchuria?"

Page 411: "On exports to Manchuria, the subsidized steamship lines, which so far are in private control, have been compelled by the [Japanese] government to reduce rates fifty per cent. During the first year after the war the government charged on its Manchurian Railway half rates

on Japanese goods, which alone came duty and likin free through Tairen (Dalny), on the flimsy pretext that Russia, which is not a manufacturing nation at all, had no customhouses on the Manchurian border."

Note: A "likin" is a former Chinese provincial tax at inland stations on imports or articles in transit.

286. Bulletin de l'Association Amicale Franco-Chinoise. 1910. Le soja [Soya]. 2(1):62-64. Jan. [Fre] • Summary: This periodical was established to promote understanding and friendship among the people of France

and China.

The name Soja or Soya comes from the name that the Japanese give to the sauce made from soybeans. In Chinese it is called *tsiang-yeou* (Cc = Chinese characters given [soy sauce]) and it is made from houang-teou (Cc [yellow soybeans]). This sauce, which is used in the well-known Worcester sauce, is widely used in China and Japan. Some Chinese residing in Paris [incl. Li Yu-ying] recently took the initiative to introduce into France this sauce, as well as several other products derived from these same 'yellow peas' (pois jaunes).

They have just built a factory near Paris in a town named Les Vallées (rue Denis-Papin), on the train line going to Saint-Germaine-en-Laye. There, perfected machines / equipment and the resources of western science allows them to obtain from the raw materials a much better yield than could be obtained using the rudimentary Chinese process. These things made it possible, at the same time, to develop many new soy products suited to European tastes.

A retail store named the Golden Jar in Paris (La Jarre d'Or, 4, rue du Renard) received the right to sell these products from Caséo-Sojaïne. And an exposition [of the soy products] was organized at the Grand Palace, at the time of the opening, last Nov. 20, of the Food Fair / Expo (Salon de l'Alimentation). There various products were offered.

A summary of the contents of an interesting brochure from that exposition is reprinted. Contents of the brochure: Introduction to the soybean. Products based on soymilk (Le lait de soja, Le lait végétal): Liquid, powdered, or fermented soymilk, soy cheese (Le fromage de soja, Le fromage végétal [tofu]) (fresh, hard, and fermented). Soy sauce. Soy oil. Sweet soya preserves (Confiture de Soja; this soy cream {crème de soja} resembles chestnut cream {crème de marron }). Soybeans used as a vegetable (dehulled dry soybeans, and soy sprouts). Other soy products (including soy flour, bread for diabetics, whole-meal bread, and soybean cakes-used as feed for animals).

Note 1. It is unclear whether the Chinese-run factory, Caséo-Sojaïne, has started to make and sell commercial soy products, or whether they are just about to. They may have started on Nov. 20 of the previous year, however there is no description of soyfood products now being sold in Paris.

Note 2. This is the earliest document seen (Aug. 2001)

that contains the term Caséo-Sojaïne, which appears to be the name of a business, not of a product. This term would soon be used to also refer to "tofu." Li Yu-ying's name is not mentioned.

Note 3. This is the earliest document seen (Sept. 2002) that mentions soy cream (crème de soja).

Note 4. This is the earliest document seen (Sept. 2002) that mentions powdered soymilk (Le Lait de Soja, en poudre).

Note 5. This is the earliest document seen (Sept. 2002) that mentions fermented soymilk (Le Lait de Soja Fermenté).

287. Brenier, H. 1910. La question du soja [The soya question]. Bulletin Economique de l'Indochine (Hanoi) 13(83):105-28. March/April. Series 2. [22 ref. Fre] • Summary: This is an in-depth look at the relevance of the soybean to France, both now and in the future. It is prompted by the rapid growth of soybean imports to Europe from Manchuria. The author has a good knowledge of the literature on soybeans and a familiarity with the crop in the field in French Indochina and China.

Contents: 1. Soybean cultivation: Species and varieties, major soybean producing countries (China, Japan, Korea, Indochina), other countries (Java and the Dutch East Indies, France, USA. The Imperial Institute of London is conducting trials in the Cape of Good Hope and Natal [South Africal, in British West Africa, and in Gambia), methods of cultivation and yield. 2. Commerce: Exports of soybeans and soybean cake (beancake, tourteaux de soja) from China and especially Manchuria (Newchwang, Dairen/Dalny, Antung, Ta tung kow, Suifenho [Suifenhe] / Sui-fen-ho), importing countries in 1908 in descending order of amount imported (Russian ports on the Pacific [Vladivostok, for re-export to Europe], Great Britain, France, Holland, Italy, Belgium, Germany), prices. 3. Soybean utilization: Chemical composition, use as a forage plant and for improving the soil, use in human foods (tofu, shoyu, Worcestershire sauce, tuong [Annamite soy sauce], miso, natto, soymilk), the soybean as an oilseed (yield of oil from various oilseeds), soybean cakes. Conclusions.

Page 109 discusses soybeans in Indochina, according to information received from M. Crevost, Curator of the Agricultural and Commercial Museum of Hanoi, and from the article by Bui-quang-Chiêu (Dec. 1905). The names of the soybean are different in the various parts of Indochina. In Cochin China (especially in the provinces of Chaudoc and Baria), in Annam (sporadically), and in Tonkin it is called dau-nanh or dau-tuong (Tuong is a sauce made with soybeans, described later under "Uses"). In Cambodia (Cambodge) it is called sandek sieng. The variety most widely cultivated in Indochina seems to be one with a yellowish-white color, more oblong than round, a little flattened (soja platycarpa of Harz [1880, 1885] (?)), different therefore from the fine (belle) varieties of Manchuria and

Japan that are well rounded and pure yellow.

A table (p. 112) shows soy bean grain exports (in 1,000 metric tons) from different Manchurian ports for the years 1905-1908. The author notes that Indochina could be exporting soybeans to France. One factor that stimulated the large exports of soybeans from Manchuria in 1908 (besides an excellent harvest in 1907) was a program to suppress the cultivation of opium by expansion of soybean acreage (p. 113). The author uses the scientific name *Phaseolus radiatus* to refer to the petit haricot vert (probably mung bean). He observed soybeans planted in mixed culture in Szechuan.

Page 116 notes that the rise of soybeans in Manchuria is due in part to the power of the Japanese commercial house Mitsui Bussan Kaisha and the large English oil mills, which joined to develop an industry that had not previously existed. At the end of 1906, Mitsui, which had a dominant commercial role in Southern Manchuria, sent one or two trial shipments of soybeans to England. Mitsui was followed mainly by the British trading houses (Samuel & Samuel, Jardine, Matheson), then by the Germans (Otto Reimers, Arnhold Karberg), and the Russians. Continued suppression of opium growing led to further expansion of soybean cultivation.

A table (p. 117) gives the price of soybeans (per picul of 300 catties = 180 kg), soybean cake (per 10 cakes of 53 catties each or 318 kg for the 10), and soybean oil (per picul of 100 catties = 60 kg) in New chwang [Newchwang] taels and in French francs in the average year from 1882-1891, and in the year 1897. Prices were up in 1897.

Page 124 states: "A factory was recently founded near Paris (at Saint Germain en Laye), with Chinese capital, for the preparation of a series of products derived from soya: milk, "caséo-sojaïne," cheese [tofu], sauce, and sweet soya preserves (confiture (?) de soja)." A footnote states: "I owe this curious piece of information to the amicability of the secretary of Ecole française d'Extrême-Orient, Mr. Ch. Maybon, who pointed it out in the January 1910 issue of the Bulletin de l'Association amicale franco-chinoise.

A table (p. 125) shows that the soybean gives the lowest yield of oil of all major oilseeds: copra (from coconut) yields 67-70% oil, sesame seeds 50-56%, poppy seed (pavot) 43-50%, castor oil plant 42-50%, rapeseed (colza) 42-45%, linseed 43%, peanuts 35-47%, cottonseed 21-26%, soybeans from Manchuria 16-18%.

Note: This is the earliest document seen (March 2000) that describes caséo-sojaïne as a product. Yet this may well be a mistake since its source of information is given as Bulletin de l'Association Amicale Franco-Chinoise (Jan. 1910)—which uses the term to refer to a business name. Address: Inspecteur-Conseil des Services Agricoles et Commerciaux de l'Indochine.

288. Duncan's (John) Sons. 1910. Try it on salads and obtain that piquancy so often lacking in Salad Dressings. Use Lea

& Perrins Sauce, the original Worcestershire (Ad). Boston Cooking School Magazine 15(50):xi. June/July.

• Summary: "Soups, fish, steaks, chops, roasts, and many other dishes are improved by its use. For four generations it has stood unrivaled as a seasoning. Shun substitutes. John Duncan's Sons, Agents, New York." An illustration (line drawing) shows a woman cooking, a man dining, and a plate of food with the sauce on the white table cloth. Address: New York.

289. Freshel, Maud Russell Lorraine (Mrs.). 1910. The golden rule cookbook: Six hundred recipes for meatless dishes. Originated, collected and arranged by M.R.L. Sharpe. New edition. Boston, Massachusetts: Little, Brown and Company. viii + 323 p. Illust. Recipe index. 21 cm.

• Summary: This important, early vegetarian cookbook was first published in 1908 (copyright 1907) under the title Six hundred recipes for meatless dishes. The author's full name was Mrs. Maud Russell (Lorraine) Sharpe; thus her maiden name was Maud R. Lorraine. Born in 1867, she sometimes writes her first name "Emmarel."

Worcestershire sauce is called for in many recipes: Black bean soup (p. 48-49). Savoury rice (p. 189). Macaroni bianca (p. 190-91). Fried eggs (p. 231; "A little Worcestershire sauce or walnut catsup heated in the pan and poured over fried eggs adds variety"). Egg savoury (p. 275; "sprinkle with Worcestershire sauce, or any good sauce,..."). Egg sandwiches (p. 283; "sprinkle with Worcestershire sauce").

A "fourth printing" (Feb. 1926 edition) was issued by Dodd, Mead and Co. in New York. Part of the title was changed slightly to read: Originated, collected, and arranged by M.R.L. Freshel. Apparently between 1910 and 1926 she had divorced Mr. Sharpe and married Mr. Freshel. Address: Providence House, Chestnut Hill, Massachusetts.

290. Hirtzler, Victor. 1910. Hotel St. Francis: Book of recipes and model menus. L'art culinaire. San Francisco, California: Putney Haight. Subscription edition. [31] + 67-307 p.. Illust. No index. 24 cm.

• Summary: The legendary Victor Hirtzler, a native of France, was one of America's first "celebrity chefs." He was chef of the Hotel St. Francis in San Francisco from 1904 (the year the hotel was built) until 1926. The lavish hotel was a success right from the start. It "was the best known hotel in San Francisco and probably the best known west of Chicago" [Illinois]. "If the hotel was a grand theater, Victor was its greatest actor; with his extravagant French accent, neatly pointed mustache and beard, and bizarre costumes, he exceeded even the Hollywood portrait of a master chef" (Source: MSU Feeding American-biography of Hirtzler,

On unnumbered pages at the front of the book are: Illustration of Hotel St. Francis, San Francisco, with trolley

car and 3 flags flying. About the Hotel St. Francis. To epicurean San Francisco. Victor Hirtzler, Chef de Cuisine, Hotel St. Francis (with full-page portrait photo). Patrons of this first, or subscription edition (8 pages of names, 2 columns per page). Recipes published in The Evening Post (SF). Foreword: Scraps of culinary information. Preface: One minute home talk by Victor.

Table of Contents. Part I: Victor's two hundred model menus, selected to provide for all ordinary and special meals. Special breakfasts. Special Luncheons. Special dinners. Special suppers and midnight bites. Part II: General advice on selections and points involving success in cooking, by Victor. Victor's own recipes: Bread, rolls, muffins, buns, etc. Soups, purees, consummes, etc. Preserves, confections, nuts, dainties, etc. Ices, coupes, fancy drinks, etc. Miscellaneous special dishes. Hors d'oeuvres, tidy bites, etc. Salads, green dishes, heavy and light preparations. Meats, entrees, dinner dishes, etc. Cocoa, coffee, beverages. Eggs-Omelettes and other forms. Sauces, dressings, gravies, etc. Vegetables, special preparations, etc. Pastries, puddings, cakes, desserts, etc. Fish, oysters, sea food, etc.

Worcestershire sauce (called simply "Worcestershire," as in "a dash of Worcestershire," in 8 recipes) is used as an ingredient in a surprising 20 recipes in this cookbook-thus clearly showing its standing as a highly respected sauce and ingredient in the USA. Most of these recipes were served at dinner and are based on animal products (fish or shellfish, meat, poultry, eggs, cheese, or milk); some are salad dressings or sauces. The recipes using Worcestershire sauce are: Manhattan clam chowder (with "a wine-glass of tomato catsup," p. 155-56). Sardine paste sandwich (p. 185). Welsh rarebit (p. 185). Venetian egg, in chafing dish (p. 186). Baked steak en casserole (p. 203). Brains with black sauce (p. 204). Curried lamb, East Indian style (p. 222). Pigeon pot pie, English style (p. 223). Baked porterhouse (p. 228). Miroton [stew containing beef with onions devilled] or beef or meat (p. 29). French dressing (p. 251). English Colbert sauce (p. 253). Devil sauce (p. 255). Parisian tomato sauce (p. 258). Curry sauce (p. 261). Bengal oysters (p. 291). Deviled crab in shells (p. 294-95). Deviled lobster (p. 301). Coquille of fish (p. 304). Crab cocktail Victor (p. 306).

Catsup / ketchup is used in many recipes, such as: Raisin cocktail ("half a pint of catsup," p. 187). English Colbert sauce ("two teaspoons of mushroom catsup," p. 253). Sauce with spaghetti ("three or four spoonsful of catsup," p. 256). Oysters a la ancienna ("putting on each bivalve a teaspoonful of catsup," p. 292). Crab cocktail Victor ("make a sauce of three-quarters cup of tomato ketchup, one teaspoonful of Worcestershire,..." p. 306). Almonds are also used in many recipes. The cruelest recipe: "How to boil a terrapin. Take two live terrapin and put into boiling water for two minutes..."

Note: Many advertisements for food and drink are scattered throughout this book. Address: Chef of Hotel St. Francis, San Francisco [California].

- 291. Lea and Perrins. 1911. Fish. It is essential, with such delicate fare, that a good sauce be used, otherwise the flavour may be spoiled instead of being enhanced (Ad). Times (London). March 3. p. 4, cols. 6-7.
- Summary: "The right sauce is Lea & Perrins' sauce. The original and genuine 'Worcestershire.'" At the top of this display ad is an illustration of a fish is the water with a hook and fishing line in its mouth; nearby is a fishing net. At the lower left is a royal seal, and below it the words "By Royal Warrant to H.M. The King." Address: [England].
- 292. Times (London). 1911. Wills and bequests. March 31. p. 11, col. 2.
- Summary: "Mr. Francis Barnitt, of Woodside, Larkhill, Worcester, a member of the firm of Lea and Perrins, sauce manufacturers, who died on February 27, aged 77, left estate valued at £118,401 gross, and net personalty [personal property], £114,497. He bequeathed £250 to the Worcester Infirmary, unless he had given such a sum in his lifetime." Address: [England].
- 293. Lea and Perrins. 1911. Lea & Perrins' sauce for travelers and sportsmen (Ad). Times (London). May 26. p. 6,
- Summary: "A most delicious and appetizing relish for meat dishes, fish, cheese, salads, preserved meats and fish, sandwiches, &c. The only original and genuine 'Worcestershire.'"

Near the upper left this display ad is an illustration of huge ocean liner steaming away at sea. At the center of the ad is a circular illustration of well-dressed men and women seated at a table on board ship; a bottle of what appears to be Worcestershire sauce is at the front right corner of the table. At the lower right is a large royal seal, and above it the words "By Royal Warrant to H.M. The King." Address: [England].

- 294. Figart, D. Milton. 1911. Notes from Malaysia. Daily Consular and Trade Reports (U.S. Bureau of Manufactures, Department of Commerce and Labor) 14(135):1114-16. June 10. See p. 1116.
- Summary: "The valuable soya bean: The soya bean has lately come into some prominence by reason of its extensive uses in the manufacture of oil and soap, and also because it forms return cargoes for tramp steamers bringing coal to the East. Dr. Gilbert Brooke, port health officer of Singapore, describes some new uses for the article:

"The object of this paper is to show that we have at hand an article of diet which is cheap, which can be grown over large areas of the globe, which is palatable, which is not attacked by any known insect or fungus, which forms valuable by-products, and-most important of all-which contains, more nearly than any other known animal or vegetable substance, all the essential and properly proportionate constituents of a perfect diet.

"Rice is a very badly balanced food, consisting mainly of starch, having next to no nitrogen, and hardly any fat or salts. In this rice stands, in the scale of food values, almost at the bottom, whereas the soya bean stands at the top. But it is remarkable that nature and experience seem to have taught rice-eating races that one of the best accompaniments to rice is some form of leguminous food, such, for instance, as dhal, the small yellow pea so much used by natives of India. Following out this analogy it would seem to be most desirable to foster among Asiatic races that depend mainly upon rice as a staple the simultaneous consumption of the soya bean as supplying in abundance those essential food elements that can not in the least be derived from rice.'

"Among the economic products derived from the soya Dr. Brooke enumerates these:

- "(1) Bean curd. A most nutritious jelly can be made from the soya bean. This has been known and widely used by all classes in north China for the last 2,000 years.
- "(2) Bean milk. The beans are dried, very finely ground, and made into an emulsion with water. This forms a valuable milk, which resembles cow's milk in that it coagulates when heated and acidified. The possibility of this is due to the fact that the proteid is composed of casein, as in the case of animal milk.
- "(3) Bean cheese. A nutritious cheese [tofu] is frequently made in Japan from bean milk.
- "(4) Bean flour. The dried and pulverized bean is most valuable as a soup basis. It is also useful for making biscuits and infant foods. Soya biscuits, produced by a Scotch firm, are supplied on several P. & O. mail boats.
- "(5) Bean oil. There is a very high percentage of fat in the soya bean. This is of commercial value. It is edible, and also forms an excellent basis for candle and soap manufacture.
- "'(6) Bean cake. The seed cake left after expression of the oil from the soya bean forms one of the most valuable and rich cattle foods known.
- "'(7) Bean sauce. The soya bean ground up and steeped in vinegar or brine forms a basis for Worcestershire and other sauces.
- "(8) Bean coffee. A substitute for coffee may be made from the soya bean, by dry toasting and grinding it, then adding boiling cow's milk or hot soya milk.
- "(9) The straw surpasses in nitrogenous value that of wheat or even hay. It is quite possible that the leaves or root may have medicinal properties, but this has not yet been worked out." Address: Vice Consul General, Singapore.
- 295. Lea and Perrins. 1911. Lea & Perrins' sauce for travelers and sportsmen (Ad). Times (London). July 23. p. 16, col. 1.

• Summary: "Adds much to the enjoyment of hot or cold luncheon, dinner or supper. The only original and genuine 'Worcestershire.'"

Near the upper left of this display ad is an illustration of large, fancy hotel. At the center of the ad is a circular illustration of a well-dressed man and woman seated at a table in the hotel. Behind them is a waiter with what appears to be a bottle of Worcestershire sauce on his upheld tray. At the right center are some people in a motor car. At the lower right is a large royal seal, and above it the words "By Royal Warrant to H.M. The King." Address: [England].

296. Harland, Marion. 1911. Marion Harland's helping hand. Chicago Daily Tribune. Nov. 16. p. 9.

• Summary: "At least a dozen women have asked... for the recipe which follows... I am asking you to print what I know to be the best thing of its kind ever published for the housewife's use: Worcestershire Sauce-Vinegar, one gallon; garlic, one ounce; black pepper, one-half ounce; nutmegs, grated, two; lemons, twenty; salt, one ounce; cayenne, onequarter ounce; mace, one ounce; mustard, two ounces. One pint of Chinese soybean sauce greatly improves this sauce.

"Cut each lemon half-way through; peel garlic and put in lemons whole. Mix other ingredients together; divide equally between lemons and place in lemons. Put lemons in an earthen dish and cover with plate; bake until quite brown, then turn into vinegar in a covered earthen jar. Stir several times a day. It is ready to bottle in ten days. I have tried it and I know it is good! I don't know where I got it, but copied it from somewhere. R.M.C."

297. Farmer, Fannie Merritt. 1911. The Boston Cooking-School cook book. Revised. Boston, Massachusetts: Little, Brown and Company. xv + 648 p. + [30] p. ofadvertisements. Illust. Index. 19 cm. See also the 1918 ed. • Summary: Contains 125 new recipes. As in the original 1896 edition, Worcestershire sauce is called for in many recipes in this book (p. 117, 180, 182, 188, 189, 197, 207, 212-13, 223, 227, 231, 273, 333-34, 344, 371, 372, 554,

Catsup is called for much more and in many new forms compared with the 1896 edition: Oyster cocktail (p. 180; "1 tablespoon tomato catsup"). Lobster cocktail (p. 186; "two tablespoons, each, tomato catsup and Sherry wine"). Blanquette of lamb (p. 223-24; one tablespoon Mushroom Catsup, or any other suitable table sauce"). Asparagus salad (p. 329; "serve with French Dressing, to which has been added one-half tablespoon tomato catsup"). Oyster and grape fruit salad (p. 344; "season with six tablespoons tomato catsup,..."). Breast of quail Lucullus (p. 376; "Serve with one and one-half cups rich brown sauce seasoned with tomato catsup..."). Devilled bones (p. 565; "1 tablespoon Walnut Catsup").

Concerning vegetarian diets: In Chapter 1, titled "Food,"

he section on "Correct proportions of food" states (p. 3): "To keep in health and do the best mental and physical work, authorities agree that a mixed diet [from animal & vegetable sources] is suited for temperate climates, although sound arguments appear from the vegetarian... Brain workers should take their proteid in a form easily digested. In consideration of this fact, fish and eggs form desirable substitutes for meat."

Near the end of the book is an ad (on an unnumbered page) for "Works on cookery." The first of these is *The* Golden Rule Cook Book: Six hundred recipes for meatless dishes, by M.R.L. Sharpe. "A new edition of the best of all books on vegetarian food and cookery." Address: Of Miss Farmer's School of Cookery.

298. Ward, Artemas. 1911. The grocer's encyclopedia— Encyclopedia of foods and beverages. New York, NY: Published by the author. 748 p. Illust. (color). 29 cm.

• Summary: Soy-related entries: Bean (p. 49-54): "The bean of European history is the Broad or Windsor variety,..." "The principal beans of United States cultivation are the Kidney and Lima, both of them believed to be native to South America.

"The Kidney Bean is the Haricot of the French and in Great Britain is sometimes called the French bean." The many varieties can be classified into "tough podded" and edible podded." "The 'tough podded' class produces the bulk of the dried beans of commerce, variously known as 'Kidney Beans,' 'Navy Beans,' 'Marrow Beans,' 'Black Beans,' 'Turtle Beans,' etc., in many colors, shapes and sizes." "Flageolets' are cultivated with special regard to the consumption of the fresh seeds or beans." To the "edible podded" class of kidney beans belong Wax or Butter Beans, the Cranberry Bean or Red Speckled Bean, String Beans, Snap Beans, French Beans. "Pea Beans are the Cowpeas of the agriculturist." "Among numerous other 'special' varieties are the Soy Bean (which see), Asparagus Bean, Frijole, Lab-lab (or Egyptian Kidney), Red Bean, and Scarlet Runner." Asparagus Beans are known as Tou Kok by Chinese gardeners in California.

"Catsup, Catchup, Ketchup: a word derived from the name of an East Indian pickle, which was formerly applied specifically to the boiled spiced juice from salted mushrooms, but is now freely attached to various sauces (sold both bottled and in bulk) which consists of the pulpbottled, strained and seasoned-of various fruits, as tomatoes, green walnuts, etc." Note: At "Catchup" and "Ketchup" we are told to see "Catsup."

Locksoy ([Lock Soy], p. 346): "Rice boiled into a paste and drawn into threads, imported from China. It is used to thicken soups."

Nuts (p. 412-13): A table shows the nutritional composition of all major American nuts, including almonds, chincapin [chinquapin] or water chestnut, chufa (earth

almond), cocoanut, peanut, and peanut butter. "Many special nut foods, such as malted nuts, meat substitutes, etc., have been devised and extensively advertised by manufacturers for general dietetic use and for the special needs of vegetarians and fruitarians. It is said that some of these products contain soy beans, but apparently the peanut is very important in their composition.

Sauces (p. 552-53): In bottled sauces, vinegar is the most common liquid ingredient. "Commercial sauces of the Worcestershire kind, if of good quality, generally have Soy (which see) as their chief character ingredient. A typical formula of Worcestershire-style includes, in addition to Vinegar and Soy, a considerable percentage of lime juice, onions and tamarinds and small quantities of garlic, fish (as anchovies or pickled herrings), red chilies and spices. The product, after cooking, is strained through fine hair sieves. Leicester Sauce resembles Worcestershire in general characteristics but is less pungent."

Soy (p. 576): "A brown sauce, valuable to the commercial sauce market, made from the Soy Bean, a native of Southeastern Asia [sic] and widely grown in China and Japan. The beans are boiled, mixed with ground wheat or other grain, salt, etc., and allowed to ferment for a month or 6 months. The liquid is then strained off and clarified. Molasses is frequently added. In appearance it resembles Worcestershire Sauce, of which it is an important ingredient. It should not be too salt [salty] or too sweet, and although thick and syrupy, should be clear. When shaken in a bottle or glass it should, if it is genuine, leave a bright yellow film on the glass. Being a very desirable article, it is often counterfeited."

Soy bean (p. 577): "Commercial and government circles, both in Europe and this country are devoting increased attention to the cultivation of the Soy Bean as a food product, as it contains a large percentage of protein and a fair amount of fat, thus resembling meat in general nutritive value. The cell-walls of the raw bean are very tough, but thorough cooking makes it readily digestible. Boiled with bacon and other fatty broths until soft and then seasoned, the result is a vegetable dish very pleasing to the average palate. If the beans are dry, a preliminary soaking to remove the skins is necessary.

"The Soy Bean is largely consumed in Japan, China and other parts of Asia as an adjunct to rice and other foods, taking the place of meat in the popular dietary. It is most popular in these countries in fermented form, the best known types being *Shoyu* or Soy Sauce; *Tofu*, a kind of cheese; *Miso*, Soy Bean 'Milk' [sic]; *Yuba*, the evaporated product of 'Miso" [sic], and *Matto* [sic, *Natto*], a product obtained by simple fermentation of the boiled beans. The various degrees and styles of fermentation serve the double purpose of rendering the beans more easily digestible and producing new flavors, just as by the fermentation of milk and cream we produce the different flavors of cheese.

"The plant is an annual, growing chiefly in bush form..."
The different varieties are classified principally by the color of the beans: "Black, Yellow, White and Brown,... Types of all these four classes are grown to some extent in Germany, Austria, and Switzerland, and the first three also in this country, in North Carolina and other Southern States. Under favorable conditions a single plant may bear a hundred or more pods.

"Because of the fact that the beans contain little if any starch, they have been recommended as a desirable food for diabetics, and Soy Bean Bread and Soy Bean Meal are prepared for that purpose in Paris. The dried beans are also used in Switzerland and elsewhere as a coffee substitute." An illustration shows the top of a soy bean plant, with leaves, pods, and flowers.

Note 1. This book is full of fascinating information about the food system in the USA in 1911, with entries such as cold storage (first attempted in 1860, it has grown to extraordinary proportions), coloring matter (great improvements, no longer harmful), ice and refrigeration (ice manufacture dates from about 1870; today nearly 200 companies produce ice for general sale, mostly using the compressor and anhydrous ammonia). Dictionary of food names in five languages (English, French, German, Italian, and Swedish, p. 710-724) and a dictionary in English of "Culinary and bill-of-fare terms" (p. 741-45).

Note 2. The author, Artemas Ward, lived 1848-1925. His father was Henry Dana Ward (1797-1884), his grandfather was Thomas Walter Ward (1758-1835), and his great-grandfather was Artemas Ward (1727-1800), the first Commander-in-Chief of the colonial troops before the arrival of George Washington (a little-known Virginia planter) on 3 July 1775. Thereafter he served as second in command after Gen. Washington and was a Major General in the American Revolutionary War. Address: Formerly (from 1874) founder and editor of *The National Grocer*, 30 Union Square, New York.

299. *Pure Products (New York)*.1912. Products of the soy bean. 8(3):157-60. March.

• Summary: "Three very interesting food products are manufactured from the soy bean, one known as vegetable milk, another known as vegetable cheese or vegetable casein, and soy sauce." "Vegetable milk, like animal milk, may be may be homogenized; that is to say, it may be passed through an apparatus known as a 'homogenizer'..." Concentrated or "condensed vegetable milk has a characteristic odor, but this can be improved by adding a little coumarin or vanillin, which corrects the taste so as to make it more nearly resemble that of cow's milk."

Vegetable cheese is coagulated "by the addition of a white mineral powder known as tchach-kao, which consists largely of plaster of paris."

"Soy sauce, or fermented soy,... may well serve as the

basis of sauces of the Worcestershire type." Address: USA.

300. New York Times. 1912. This is not in China, but in New York City: Farms in Steinway, near Long Island City, where natives of the Far East raise supplies for the chop suey restaurants of New York. Aug. 25. p. SM11.

• Summary: "Chow chop-suey is, next to rice, the Chinese national dish. Rice is, of course, on every table. The Chinese eat it instead of bread, and no one can cook rice like a Chinaman. Every grain is distinct, yet perfectly soft, and it is piled up in the bowls like mounds of snow. It is boiled, or rather steamed, without seasoning, and the condiments are supplied by the seow [Cantonese: shi-yau or si-yau, meaning "fermented black soybean sauce"], the immediate progenitor of the soy of the English East Indies and the Gastronomic father of Worcestershire sauce."

Six photos show Chinese at work on their farms on Long Island.

Note that the term "chop suey restaurants" in the title is apparently synonymous with "Chinese restaurants."

301. Skinner, Robert P. 1912. Soya beans and their products in Germany. Daily Consular and Trade Reports (U.S. Bureau of Manufactures, Department of Commerce and Labor) 15(269):827. Nov. 14.

• Summary: "A growing business is being carried on in Hamburg in soya beans and their manufactured products, although official trade statistics are not yet available. The trade to a large extent has been built up in foreign tributary markets, because in Germany cattle are usually kept in stalls and, having little exercise, are apt to have digestive disorders when overfed with soya bean cake. In Denmark, on the other hand, where grazing is more usual, the demand for this feed has progressed steadily." Crushers use naphtha as a solvent. Prices of soya bens and products are given.

"Last year one Hamburg concern sent a shipment of beans to Houston, Texas, for planting, the results being excellent, according to reports from the importers. In England sauces [e.g., Worcestershire] are manufactured from soya beans, and in Hamburg one concern has produced a coffee substitute, or material to be added to cocoa, by roasting and grinding the beans. It is stated that this article has not met with much commercial success.

"All contracts in this country are made according to the terms of the Incorporated Oil Seed Association of London. These contracts consist of 13 lengthy articles, and provide, among other things, that all disputes arising out of contracts shall be referred to arbitration in London." Address: Consul, Hamburg.

302. Kuijper, J. 1912. Soja [Soya]. Departement van den Landbouw, Suriname, Bulletin No. 29. p. 24-29. Nov. [Dut] • Summary: In recent years, since 1908, soya has become a product of great importance on the world market. There

are few products whose exports have risen so dramatically is just a few years. The reason for the great expansion of trade in soya can be found in the great demand by industry for oilseeds. For more than 30 years, experiments have been conducted on growing soybeans in Europe, but the results have not been very promising. Some people have suggested that soya might be able to be grown in Suriname. It is grown in many tropical countries, including Siam, British India, and Java. Requirements for cultivation and yields are discussed. Japan reports the highest yields, 2,500 kg/ha, compared with 1,000 to 1,400 kg/ha from the USA. Soybeans produce more protein and oil per unit area of land than any other farm crop. The seed is used mainly for human consumption but the plant also yields, fresh or dried, and excellent livestock feed, which is why so much research on it is now being conducted in Australia and America. It is important for Suriname that soya can be used as a green fodder, for example interplanted and fed with corn.

From soya one can make numerous products such as soymilk (soyamelk), soy cheese (soyakaas, whose food value is higher than that of meat), soy flour, soy bread (soyabrood), oil (olie), various sauces (soya sauce, Worcester sauce, etc.), and various substitutes for coffee and chocolate, etc. (surrogaten voor koffie en chocolade enz.).

In Suriname soya is cultivated on a small scale by the Javanese, for example in Lelydorp and in the settlements of Johan and Margaretha. Many experiments with Soya have already been conducted in the experimental garden (Cultuurtuin). Seeds imported from America did not give good results; the plants remained small, yielded few fruits, and died quickly thereafter. It is a common occurrence that plants from temperate or subtropical regions do not grow well in the warm tropics in the rainy season. Of the seeds cultivated in Suriname, two varieties give good results. Those cultivated by the Javanese give hardy plants and a lot of seed though exact yield figures are not available; the planted area is still quite small. But the yield is about 1,000 kg/ha. Apparently the necessary bacteria are present in the soil, for the roots show nodulation.

In the experimental garden two beds of soya were planted on May 24. The first seeds ripened after 3 months and within 4 months all was harvested. Thus the plants developed during the rainy season, and they probably got too much water. The results would probably be better if this season could be avoided. Soya is sold in Suriname for hfl 30 per bag, a considerably higher price than that paid in Europe. On the plantations Peperpot and Jaglust experiments with soya have also been conducted. The European seed that was used gave very limited results. The experiments will be conducted again using Suriname seeds.

With the market price at hfl 10 per bag, it seems very unlikely that the cultivation of soya in Suriname will ever be profitable, unless high yields can be obtained. As mentioned above, this seems unlikely. Small scale cultivation for sale in Suriname, however, seems advantageous at present, while in areas where cattle are raised the use of soya as a green feed to replace more expensive secondary feeds will likely give good results.

Note 1 This is the earliest document seen (May 2009) concerning soybeans in Suriname, or the cultivation of soybeans in Suriname.

Note 2. This is the earliest Dutch-language document seen (March 2001) that uses the term surrogaten voor koffie to refer to soy coffee.

Note 3. This is the earliest Dutch-language document seen (Oct. 2003) that uses the term soyamelk to refer to soymilk. Address: Surinam.

303. Gibbs, H.D.; Agcaoili, F. 1912. Some Filipino foods. Philippine J. of Science 7A(6):383-401. Dec. Section A. Plus 6 unnumbered pages of plates at end. See p. 398-99 + plates III, IV. [2 ref]

• Summary: "Toyo sauce-This condiment is made principally by Chinese from soja beans, Glycine hispida Maxim., imported from China. It is a Chinese sauce of the Worcestershire type." Boiled beans and salt are placed in earthenware jars and spontaneous fermentation is allowed to go on in the sun for 2-4 months (see plate V). "The fermented mass is again boiled for another 12 hours, and the clear liquid is bottled and sold under the name of the toyo sauce. Sometimes it is boiled two or three times producing different grades of strengths of sauce. Molasses or sugar are sometimes added, and this variety is called *si yao* (Chinese).

Photos show: (1) A man in a bihon (thick rice vermicelli) factory using a push-pull apparatus, suspended by ropes from the ceiling, to rotate a traditional stone mill.

Note 1. This same kind of apparatus and mill are used in traditional shops making tofu throughout East Asia.

(2) Soja beans fermenting in earthenware jars, covered with conical woven bamboo lids, in a courtyard, in the manufacture of toyo sauce.

"The Macao Chinese add a quantity of wheat flour to the boiled beans and dry the mixture in thin layers on trays several days before placing in jars for fermentation. This process hastens the fermentation." Note 2. Macao [Macau] is a Portuguese overseas territory, located about 40 miles west of Hong Kong.

Table XVIII gives "Analyses of toyo sauce," including regular toyo, toyo made with sugar, and crude molasses.

Note 3. This is the earliest document seen (Oct. 2010) that uses the word "toyo" or the word "toyo sauce" to refer to Filipino-style soy sauce. Address: 1. Assoc. Prof. of Chemistry, Univ. of the Philippines; 2. Food and Drug Inspector, Bureau of Health. Both: From the Lab. of Organic Chemistry, Bureau of Science, Manila.

304. Holbrooks Limited. 1913. Holbrooks Worcestershire Sauce (Ad). Toronto Daily Star (Canada). June 9. p. 8.

• Summary: "It's made in the largest Worcestershire Sauce factory. Imported-Absolutely!! Business founded 1798." Address: Birmingham and Stourport, Worcestershire, England.

305. W. 1913. Die Sojabohne und ihre Verwendung in der Naehrmittelbranche [The soybean and its use in food-service departments]. Konserven-Zeitung 14(48):377-78. Nov. 28. [4 ref. Ger]

• Summary: A brief account of the history, nutritive value, and utilization of the soy bean. One of the earliest food uses of soybeans in the West was in the use of Japanese soy sauce in Worcestershire sauce, in England. The soybean was also used secretively, unbeknownst to food chemists and experts, as a popular coffee substitute until it was exposed in 1912 in Weller-Darmstadt (see Chemiker-Zeitung). This substitute, made from roasted soybeans, was used to extend coffee at levels of up to 33%. It was shown that this soy-extended coffee was much richer in nutrients than real coffee.

In Paris, France, Bergey roasted soybeans and added molasses or grape sugar to make a coffee substitute, or he added vanilla, sugar, and cocoa-butter (the fat in butter) to make a chocolate substitute.

"As far as we know from the literature, the soybean has been used heretofore, with the exception of Worcestershire sauce and other sauces and soup seasonings, only as coffee or chocolate substitutes. However the real superiority of this plant lies in its high nutritional value and therefore it should be used directly as a food, as it is in the countries of its origin." Address: Germany.

306. Clark, George Harold; Malte, M. Oscar. 1913. Fodder and pasture plants. Ottawa, Canada: Minister of Agriculture. 143 p. + 27 unpaginated color plates. See p. 134-35. Illust. Index. 26 cm.

• Summary: The section titled "Soy or soja bean (Glycine hispida Maxim.)" (p. 134-35) has the following contents: Botanical description. Geographical description. Agricultural value. Cultural conditions. Varieties. Fodder Seed growing. Quality of seed.

The soy bean variety Medium Green, which gives a high yield of both hay and seeds, is best suited to Canada. "The plant got its name from Soy, a product obtained by a long and complicated fermentation of a mixture of cooked Soy Beans, ground wheat and steamed rice or barley, to which later is added water and salt. Soy is the principal constituent of Worcester and other sharp sauces." Concerning fodder: "The hay is of high nutritional value if the crop is cut at the proper stage. This is when the pods begin to develop. If they are advanced, the hay will be woody and unpalatable and the leaves, which constitute the most nutritious part, will be shattered. From one and a half to two bushels of seed to the acre are required when intended for hay."

The Preface notes that the authors are greatly indebted to

Leonard S. Klinck, B.S.A., Professor of Field Husbandry at Macdonald College, Quebec, who gave valuable comments, and to C.A. Zavitz, B.S.A., Professor of Field Husbandry at the Ontario Agricultural College at Guelph, who has given the authors much valuable information on fodder and pasture plants that are of interest in Ontario province.

George Clark was born in 1872. Malte Oscar Malte lived 1880-1933. Address: 1. B.S.A.; 2. Ph.D. Both: Canada.

307. Griffis, William Elliot. 1913. The Mikado's empire. 2 vols. New York, NY: Harper & Brothers, Publishers. 754 p. Illust. Index. Map. 23 cm.

- Summary: The material in this book up to page 578 is identical (page for page) to that in the 1876 edition. Thereafter begins "Book III: Supplementary chapters, including history to the beginning of 1912"-about 129 pages of new information in the following chapters:
- 1. Japan in 1883. 2. Japan in 1886. 3. Japan in 1890. 4. Japan in 1894. 5. War with China (Sino-Japanese War, 1894-1895). 6. Facing the twentieth century. 7. Japan a world power (including a detailed description of the Russo-Japanese War, 1904-1905). 8. Japan on the Asian continent. A separate index covers this supplementary material; soy is not mentioned.

The author reveals his basic viewpoint on the last page of this book (p. 734) by expressing his fervent hope that all of Japan's traditional religions will be "transformed by the spirit of Christ." Address: D.D., L.H.D., Late of the Imperial Univ. of Tokio; presently in New York.

308. Williams, Martha McCulloch. 1913. Dishes & beverages of the Old South. New York, NY: McBride Nast & Company. 318 p. Illust. Index. 19 cm.

• Summary: This cookbook, a nostalgic look (after the Civil War) at the "good old days," contains a recipe titled "Tomato soy" (p. 193), however no soy is used as an ingredient and soy is not even mentioned in the body of the recipe. "Take one gallon solid, ripe tomatoes, peeled and sliced, or four canfuls put up in glass, put in a preserving kettle with a quart of sliced onions, two tablespoonfuls of salt, as much moist sugar, teaspoonful black pepper, saltspoon paprika, four hearts of celery cut fine, a tablespoonful of pounded cloves, alspice [allspice], mace, grated nutmeg, and cinnamon mixed. Stir well together and cook slowly, taking care not to burn, until reduced one half. Dry mustard or mustard seed can be added, but many palates do not relish them. After boiling down add a quart of very sharp vinegar, stir well through, skim if froth rises, bottle hot, and seal. This keeps a long time in a dark cool place."

Also contains 3 recipes in which Worcestershire sauce is used as an ingredient-surprising for a book of recipes from the "Old South": Hams and other hams (p. 59-62, see p. 62). Leg of mutton in blanket (add "a spoonful of tart jelly, along with tabasco or Worcestershire sauce... Tomato or walnut

catsup may be used for flavoring," p. 164-65). Egg fours ("tabasco, Cayenne vinegar, walnut catsup, or Worcester can be added," p. 182-83).

The author, christened Susan Martha Ann Collins, was the fourth daughter of Fannie Williams and William Collins. She was born and grew up near Clarksville, in Montgomery County, northwest Tennessee. She grew up in a privileged world of leisure and abundance, but after the Civil War the family fell into genteel poverty. After her parents' death, she and a distant cousin, Thomas McCulloch Williams, left together for New York city where she created a new name (Martha McCulloch-Williams) and a new career for herself. It is unclear whether she and Thomas ever married (MSU biography). Address: [New York City].

309. Anderson, George E. 1914. Soya bean as food in China. Daily Consular and Trade Reports (U.S. Bureau of Manufactures, Department of Commerce and Labor) 17(23):362-63. Jan. 28.

• Summary: "The soya bean is not generally used for food by the Chinese, though at times it is so used, and its use seems to depend largely upon whether or not supplies of the more usual food products of the people can be had at prices within their reach rather than upon any element of preference. Various other beans, notably a large flat white bean, are used extensively both in the manufacture of flour and as bean 'curd.'" Note 1. Virtually all beans used to make 'bean curd' in China and worldwide are soya beans.

"Soya bean has been raised by the Chinese chiefly for its oil and for the residue, known as 'bean cake,' for fertilizer. Its cultivation on so large a scale as that witnessed in Manchuria in recent years is a matter of development in the past five years or so and represents the response of Chinese farmers to the demand of Europe and the United States for cheap vegetable oil rather than any great Chinese production in the first place."

"The varieties of beans and their uses: There are six varieties of beans commonly grown in North China and shipped more or less extensively to this part of the country and also grown to some extent in South China as well. These varieties are distinguished among the Chinese by their colors and are known as the yellow, the green, the black, the red, the white, and the small green. Of these, the yellow, green, and black are soya beans and are distinguished from the others by their size and ovoid shape. The red bean [xiaodou, azuki] is used by the people as food in much the same shape it is used in other parts of the world, being used largely while green, the pods and all being cooked and served, chopped, with oil or other dressing.

"The white bean is used for the manufacture of a cheap meal or flour like other beans, but is used chiefly in manufacture of what is known as 'bean curd,' one of the most common food products used by the people of central and northern China and used to some extent in South China. The beans are partially cooked and are then ground in a stone mill which often is one of the picturesque features of a Chinese village picture, the mill consisting of a large millstone set in a stone cup, operated by a buffalo or donkey passing around and around the mill, turning the heavy stone directly by a beam it draws. With these beans as they are ground a considerable quantity of water is mixed and the ground product is gathered on a tray and is drained of most of the water. It partially solidifies or rather 'jellies' or 'curds.' When drained it is cut in slices and is eaten with soy sauce, which in itself is the fermented liquor of ground soya beans, ripened for several months. This curd also is dried to a fair degree and is made into cakes, which are fancifully stamped with red or yellow designs or characters, and are sold in shops as cakes. The curd, as it is freshly made, sours in a comparatively short time, while the dried cakes keep longer.

"A substitute for flour-soy sauce: The use of the soya beans, properly so called, as human food among the Chinese is comparatively small, and is, as above indicated, more in the way of substitution. Whenever wheat flour from abroad or from north or central China itself rises in prices beyond the convenient reach of the average Chinese consumer, beans of various sorts, including the soya bean, are brought into use in the manufacture of a substitute. For such purposes the small green variety of soya beans are usually employed in South China, though apparently other varieties are also used in the north, and the small black variety is sometimes used in Canton. Considerable quantities of such flour are imported into Hongkong at times, but the Chinese of South China regard such flour as a substitution, however, and it is not popular.

"Bean oil, of course, which constitutes on an average substantially 20 per cent of the soya bean, is used for all purposes by the Chinese, both as food and as illuminant, and at times in paints. As a food it is used in substantially the same way, and with more or less interchanging with peanut oil, though the bean oil is less readily absorbed by articles cooked in it.

"Soy, the Chinese sauce which is the basis for most modern table sauces, is manufactured extensively in Hongkong from the soya bean, the process simply being that of grinding the beans and mixing the meal with water and a Chinese yeast. The mixture is then allowed to stand for from three to four months, the resulting liquor being the sauce. The United States imports about \$50,000 worth of soy [sauce] annually from Hongkong in addition to quantities imported from Japan." Address: Consul General, Hongkong.

310. Eddington, Jane. 1914. Economical housekeeping: Chop suey. Chicago Daily Tribune. March 16. p. D16. • Summary: Discusses the origin of Chop Suey: It "is not a recipe; it is a mixture... Here is the trick: The Chinese have taken two dishes of which the Americans have been inordinately fond for a century or so, mixed them, dressed

them up a little, and made a mint of money by them, or at least enough to set up scores of restaurants over the country to sell us our fried pork and fried onion, plus some chopped celery,... and some sauce which the uninitiated could never tell from the Worcestershire sauce which is on thousands of restaurant tables of our land the whole year around.

"This sauce is flavored with Indian soy, and Indian soy and Japanese soy and Chinese or soy sauce are as nearly the same sort of thing as such things ever are when made by different manufacturers."

There follows a recipe for "Every day chop suey." "... if you chose, add a tablespoon or two of soy sauce to the meat and let it simmer a few minutes in it. Combine the two mixtures,... and serve with rice and the soy sauce. The Chinese do not add the sauce in cooking always."

Note: This is the most recent English-language document seen (Oct. 2006) that uses the term "Indian soy" to refer to soy sauce.

- 311. Douglas (J.M.) & Co. 1914. Even if you had never tasted it, you could know that Lea & Perrins' is the best Worcestershire sauce in the world (Ad). Toronto Daily Star (Canada). May 2. p. 4.
- Summary: The upper illustration shows a black maid looking in on a group of diners seated around a table. The lower illustration shows a bottle of Lea & Perrins' Worcestershire Sauce. To the right of the bottle, the following is written in a rectangle: The white writing on the red label indicates the Original and Genuine Worcestershire Sauce. In the middle of the rectangle is the "Lea & Perrins" signature. Address: Canadian agents, Montreal [Quebec, Canada].
- 312. Times (London). 1914. Condiments. Pickles and sauces. Various aids to appetite and digestion. June 8. p. 27, cols.
- Summary: The wise old proverb that "Hunger is the best sauce" still retains its ancient force. Yet inventors have flooded the world's markets with a multitude of "ingenious appetizers and stimulants for the jaded palate." The reproach of the insightful Frenchman [Voltaire, in 1729, after a twoyear stay in London] that "England was a nation with a hundred [sic, sixty] religions but only one sauce has long since become wholly unmerited."

"The indispensable companion of all meat meals is the homely cruet-frame, with its store of mustard, pepper, vinegar, and oil." The most common ingredient in table sauces is some form of vinegar. High-class sauces use only the finest malt vinegar, while their low-brow relatives substitute the cheaper forms of acetic acid.

The famous Harvey Sauce [Harvey's Sauce] is "composed of a mixture of malt vinegar, Indian soy, and mushroom or walnut vinegar [ketchup?]. To this must be added finely chopped anchovies, a clove of garlic bruised, and a seasoning of cayenne pepper." Keep these ingredients in an earthenware jar for a month or more, stirring regularly, then strain carefully for use.

To make Worcestershire sauce, mix "Bordeaux vinegar, walnut ketchup, essence of anchovy, Indian soy, cayenne, and garlic." Place in a large bottle, cork, and shake many times daily for several weeks, then strain and bottle for use. These two "may be regarded as typical of the thin or black sauces."

The thick or creamy sauces include O.K. Sauce and A1 Sauce.

- 313. Times (London).1914. Worcester: The making of a famous sauce. June 8. p. 22, col. 6.
- Summary: Located on the River Severn, Worcester is blessed with a magnificent old cathedral. "A great sauce factory: The makers of the well-known sauce, Worcestershire Sauce, are Messrs. Lea and Perrins," one of the oldest and most progressive firms in the city. "Their factory is perhaps the largest establishment in the world wholly devoted to the manufacture of sauce: certainly there is nothing equal to it in the United Kingdom." The company still uses the original recipe, which "remains a closely-guarded secret, and the firm exercises a strict privacy over the whole process of manufacture."

"Before being bottled, the sauce is allowed to mature in barrels in the cellars of the factory."

"Seventy years ago [i.e., 1844] the output of sauce was very limited and was practically all consumed locally. At that time, and for twenty years afterwards, the bottles were filled from a jug carried in the hand." Today, bottling machines fill thousands of bottles a day."

Another Worcester firm, Hill, Evans, and Company, has been making malt vinegar for more than 80 years, and today its works are the largest of their kind in the UK.

Note 1. This is the earliest document seen (Feb. 2012) that contains the phrase "mature in barrels in the cellars" in connection with Worcestershire sauce

Note: Vinegar is an important ingredient in Worcestershire sauce.

- 314. Loomis, Henry M. 1914. Food products from the soy bean. American Food Journal 9(8):472-74. Aug.
- Summary: Loomis collected information on soybean products while stationed on the Pacific Coast. "Probably the most interesting and important of these food products is soy sauce, or shoyu, as the Japanese call it. It is the only one which is used to any extent among Occidental nations, with whom it forms the principal ingredient of Worcestershire and similar table sauces. It is also used to some extent as an ingredient of bouillon cubes. König estimates that the consumption of this product in Japan amounts to two or three fluid ounces per day for each person, which would make a total consumption for that country alone of three to four

hundred million gallons. No figures are available as to the amount of this sauce which is used in China, but all except the poorest class eat it habitually on rice and fish, which form their principal articles of diet."

Japanese soy sauce "is prepared on more scientific principles and it is considered much superior to Chinese soy. Each manufacturer of Japanese soy has special brands or trade marks under which his products are sold. Japanese soy is usually imported into this country in wooden tubs holding about three gallons each and sells at wholesale price of from 75 cents to \$1.50 per tub" [i.e. 25 to 50 cents per gallon]. A brief description of the Japanese process for making soy sauce follows; it mentions Koji.

Brief descriptions are also given of the following foods and their method of preparation: (1) "Soy bean curd, or, in Japanese, Tofu, is as its name implies prepared by coagulating or precipitating the legumin or vegetable proteid, of the soy bean by mineral salts. (2) "The frozen bean curd, or 'Koritofu,'..." (3) [Yuba]. "The liquor or bean milk is the milky fluid produced in the manufacture of bean curd after straining and before coagulating. Chinese bean curd [sic], or Toufu-pi, is prepared by drying the scum produced on boiling the bean milk. It is imported in the form of vitreous, brittle, yellowish sticks in appearance like dried casein. (4) Soy bean oil. (5) "Kinako is prepared by roasting and grinding soy beans. It has a very agreeable flavor and is much used in the preparation of confections, particularly as a sort of coating powder. (6) Miso, which is made from "Koji, the same ferment as is used in the making of soy. There are two principal kinds imported into this country, the white and red Miso. They differ principally in the rapidity of fermentation and in the amount of salt used."

"Winton and others have suggested the use of soy bean products as foods for diabetics and it appears that there are many of the foods mentioned above which would serve a useful purpose in this regard. There are a number of firms now putting out soy bean meal or flour on a commercial scale and notices have appeared recently that soy bean curd and milk are to be manufactured on a large scale in Europe.

A large table contains nutritional analyses of four types of soy [sauce] (incl. Kikkoman, Kikkoraku, typical Japanese shoyu and Chinese soy) plus each of the foods mentioned above, including tofu (8.6% protein) made in Seattle, Washington, and "Bean milk (strained bean liquor before coagulating; 2.09% protein).

Mr. J.T. Willard notes: "I remember twenty years ago [i.e., 1894] that Prof. Georgeson of the Kansas Agricultural College had half a dozen varieties [of soy beans]. He was a teacher of agriculture in Japan and I suppose he learned as much there as he taught, and he became very enthusiastic over the soy bean. I remember there was a great difference in the different varieties of the soy bean." A portrait photo shows Mr. H.M. Loomis.

Note: This is the earliest English-language document

seen (Feb. 2004) that uses the term "soy bean curd" to refer to tofu. Address: Bureau of Chemistry, USDA.

- 315. Lea and Perrins. 1914. Variety of uses. The uses to which Lea & Perrins' Sauce can be put are innumerable (Ad). Times (London). Nov. 13. p. 13, cols. 5-6
- Summary: "At luncheon, dinner or supper, it is the ideal sauce for roast meats, fish, game, cheese, salad, etc. In the kitchen, it is indispensable to the cook for flavouring soups, stews, gravies, minced meat, etc. In India, a favourite 'Pickme-up' is Lea & Perrins' Sauce with soda-water. The original and genuine Worcestershire."

Near the upper right of this display ad is an illustration of a large slice of cheese on a plate. In the lower right is the large "Lea & Perrins" signature. On each of the four sides of the ad, the words "Lea & Perrins' Sauce" are printed inside a white oval within the decorative border. Address: [England].

- 316. Bosse, Sara; Watanna, Onoto. 1914. Chinese-Japanese cook book. Chicago and New York: Rand, McNally & Co. 120 p. Index. 17 cm.
- Summary: A remarkable and pioneering East-Asian cookbook. It may well be the earliest Japanese cookbook seen published in America. It is one of the earliest Chinese cookbooks published in America. The cover illustration shows a well dressed Japanese woman in a Japanese room kneeling and cooking over a brazier. Contents: Preface. Part I: Chinese recipes (12 sections, p. 9-64). Part II: Japanese recipes (7 sections, p. 74-110). List of Chinese and Japanese groceries.

The Preface begins (p. 1): "Chinese cooking in recent years has become very popular in America, and certain Japanese dishes are also in high favor. The restaurants are no longer the resort of curious idlers, intent upon studying types peculiar to Chinatown, for the Chinese restaurants have pushed their way out of Chinatown and are now found in all parts of the large cities of America." "There is no reason why these same dishes should not be cooked and served in any American home."

Concerning shoyu, or Japanese-style soy sauce (p. 2-3): "Syou, sometimes called Soye, is similar to Worcestershire and similar European sauces. In fact, the latter are all said to be adaptations of the original Chinese syou, and most of the European sauces contain syou in their makeup. It lends a flavor to any meat dish, and is greatly esteemed by the Oriental peoples."

Note 1. This is the earliest English-language document seen (Jan. 2006) that uses the word "syou" to refer to shoyu.

Syou (soy sauce) is an ingredient in at least 55 recipes in this book, both Chinese and Japanese-starting with Chinese soups (p. 12-17). When first mentioned here it is called "syou (Chinese sauce)," but thereafter simply "syou."

"Miso paste" appears in 5 Japanese recipes: Satsuma soup ("one quarter pound of aburage {oil-fried Tofu}; one

quarter pound of miso paste {soy bean and rice cheese}," p. 71-72). Uwo shiru (Fish soup) ("one pound of miso paste {bean and rice paste}; one half cupful of syou sauce," p. 73-74). Shika shiro (Pot-roasted venison) ("one cupful of syou sauce;... one quarter pound of miso paste," p. 80). Tamago bolan (Peony eggs) ("finely mashed miso," p. 91-92). Shiro uri (Stewed squash) ("syou sauce... two tablespoons of miso," p. 95).

"Aburage (oil-fried Tofu)" and regular tofu appears in Satsuma soup (p. 71, see above). Yaki zakana (Fried fish) (with "oil-fried Tofu... Note: Tofu is made from a mixture of syou bean [soy bean] and rice. It is mashed and rolled into a thin cake, and fried in oil, very much like pancakes," p. 77-78). Note 2. A poorer definition of tofu would be hard to find. Yaki udzura (Broiled quail or pigeons) ("aburage {bean cheese paste}" and "Tofu cakes," p. 79). Fried squab (with "fried Tofu," p. 81). Tamago tofu (a tofu-like custard made with eggs and syoyu sauce, but no real tofu, p. 89-90).

Bean sprouts are used in many recipes, but we are never told what type of beans are sprouted [probably mung beans]; a recipe for homemade bean sprouts (p. 109) calls for "ordinary white beans, or dried lima beans." Other interesting ingredients include: "Adzuki (purple beans)" (mentioned once in Yohan candy). Goma seeds [sesame] or goma-seed oil (mentioned 15 times). Kudzu starch (6 times, misspelled once as "kudze"). Peanut oil (at least 10 times). Seaweed (1 can of seaweed; small piece of seaweed), seaweed jelly or gelatine, or Kanton [kanten, agar] (15 times). Sweet rice [mochigome].

The authors, "Winnifred and Sara Eaton were sisters, daughters of a Chinese-born mother and an English-born father, and grew up in a large family in Montreal, Canada. Winnifred Eaton was a very successful fiction writer who, by taking on a Japanese identity, both exploited the public's craze for 'Japonica' at the time, and obscured her Chinese heritage during an age of anti-Chinese sentiment and policies. This cook book was her first collaboration with Sarah, who may have done very little of the writing. A painter, Sarah (1868-1940) lived out her life with her German artist husband, Karl Bosse, in New York. Winnifred (whose Japanese pseudonym was Onoto Watanna) lived 1879-1954, knew almost nothing about Japanese cooking. Winifred's biographer and granddaughter, Diane Birchall, says that the authors' claim in the Preface that the Chinese recipes are "... secret recipes handed down from Vo Ling, worthy descendant of a long line of noted Chinese cooks...' is just a hoax. "According to Birchall, Eaton was awful at cooking Chinese dishes" (MSU introduction and biography).

Note 3. This is the earliest document seen (Jan. 2009) concerning soy ingredients used in Japanese-style recipes, food products, or dishes outside Japan.

317. Council of Jewish Women. 1914. The neighborhood cook book: Compiled under the auspices of the Portland

section in 1912. 2nd ed. Portland, Oregon: Council of Jewish Women. 329 p. Index. 20 cm.

• Summary: This book contains 35 recipes in which Worcestershire sauce is used as an ingredient: The first 10 are: Chicken or goose livers (p. 12). Crab cocktail (p. 13). Okra gumbo soup (p. 49). Artichoke poulette (p. 56). Artichokes with veal (p. 56). Chicken a la King (p. 61). Tomato sauce (p. 63). Saddle bags a la Rothchild / Rothschild ("Slit a pocket in a large tenderloin steak, fill it with oysters (small ones) which have been seasoned with salt, pepper and catsup or a little Worcestershire sauce; boil or bake...," p. 67). Sweetbreads a la Newburg (p. 68). Crab a la San Francisco (p. 78). On p. 33 is a recipe for Gluten bread.

The recipe for Tomato Soy (p. 293) is interesting because soy is not used as an ingredient and the word "soy" is not mentioned in the body of the recipe. It states: "One dozen large ripe tomatoes, two large onions, four green or red peppers, one tablespoon salt, ground spices to taste, two cups vinegar, one teacup sugar. Chop vegetables fine, cook slowly until rather thick, bottle air tight."

On page 42 of this book is a half-page ad for "Albers Bros. Milling Co." They make "Albers Rolled Oats" and "Albers Flapjack Flour" for breakfast and desserts. No address is given. Note: Albers was a pioneer U.S. soybean processor.

"The Council of Jewish Women, now called the National Council of Jewish Women, was founded in 1893 by Hannah G. Solomon of Chicago [Illinois]. Solomon had been asked to encourage and organize the participation of Jewish Women in the Chicago World Parliament of Religions, but when she discovered that the women would be serving only as hostesses and pouring coffee she and other women quickly withdrew from the fair. She then organized a Jewish Women's Congress which met at the time of the Parliament. During the Congress meeting, the Council of Jewish Women was established. Solomon served as the president of the council from 1893 until 1905. The Council of Jewish Women has a long history of community service. In the early years of the organization, the group was involved in the settlement house movement and worked with Jane Addams' Hull House" (MSU biography). Address: Portland, Oregon.

318. Garner, W. E. 1914. Reliable recipes for many Chinese dishes. Long Branch, New Jersey: F.M. Taylor. 10 p. 22 x 15 cm.

• Summary: This booklet has ten recipes written in narrative form. The recipe for Plain Chop Suev calls for "a dessert spoonful Queow (thick black sweet sauce similar to New Orleans molasses), a dessert spoonful Seow (thin black salty sauce similar to Worcestershire sauce), a few drops of Miow (an oil something like peanut oil), all of which can be purchased at a Chinese grocery store, and without which you cannot make any Chinese dish." Address: USA.

319. Maddocks, Mildred; Wiley, Harvey Washington. 1914. The pure food cook book: The Good Housekeeping recipes. Just how to buy–Just how to cook. New York, NY: Hearst's International Library Co. vii + [2] + 417 p. Illust. 20 cm. Reprinted in 1915.

• Summary: Edited by Mildred Maddocks, with an introduction and notes on food and food values by Harvey W. Wiley, M.D. Contains over 70 black and white photos. In his introduction, Wiley praises the cooking of French peasants, bemoans the fact the young American women spend years learning how to play the piano instead of the principles of nutrition and how to cook simple, nutritious dishes. He advocates Graham flour or "entire wheat flour."

Worcestershire sauce is called for as an ingredient in the following recipes: Crab rabbit (p. 162). English cottage pie (p. 218). Liver with bechamel sauce (p. 228-29). Jellied chicken and egg salad (p. 267). Mock beef a la mode (p. 331; made mostly with squash, onions, and carrots).

Concerning vegetarianism: A recipe for "Vegetarian rice" is given (p. 101-02).

In the chapter titled "Meat," by Harvey W. Wiley, M.D., we read (p. 185): The number of animals in the U.S. is not keeping pace with population growth. "The natural result of this, aside from manipulation on the markets, is an increasing demand and a decreasing supply. This has worked out at the present time into a condition in which the price of meats is higher to the consumer than ever before. This, however, does not affect in any way the value of meat as a food. With all due deference to our vegetarian friends, whose opinions I respect, I am fully convinced that man is an omnivorous animal. He makes a mistake when he confines his diet to any one particular form of food. Man can thrive quite well, however, on a vegetable diet. Perhaps this should be modified by saying on what is generally called 'a vegetable diet' because the vegetarian as a rule eats eggs, drinks milk, and uses butter, all of which are animal products. The lean or muscular part of meat is essentially a tissue builder, while the fat is a heat and energy former."

Surprisingly the recipes for dried beans are in the chapter titled "How to cook vegetables," which is mostly about fresh vegetables but includes recipes for Baked lentils, Lentil and mushroom cutlets, Baked lentils and cheese, Red kidney beans with cheese in chafing dish, Roast nut and barley loaf (p. 316-23), Black bean soup, Mock beef a la mode (featuring Hubbard squash), and Mock pork (featuring white summer squash) (p. 330-33). Soy is not mentioned. "In general, vegetables need long, slow cooking" (p. 317). Address: 1. Assoc. Editor of *Good Housekeeping Magazine*. Editor of the Family Cook Book, Every Day Dishes, Brosia Meal Cook Book; (2) M.D.

320. Terry, Thomas Philip. 1914. Terry's Japanese empire: Including Korea and Formosa, with chapters on Manchuria... A guidebook for travelers. Boston and New York: Houghton Mifflin Co.; London: Constable & Co., Ltd.; Tokyo: Kyo-Bun-Kwan, Ginza, Shichome. cclxxxiii + 799 p. See p. 515. Maps. Index. 16 cm. [75 ref]

• Summary: This guidebook, after its 283-page introduction, is organized geographically into: 1. Central Japan. 2. Northern Japan. 3. Yezo, the Kuriles, and Saghalien. 4. Western Japan. 5. Kyushu and the Loochoo and Goto islands. 6. Korea, Manchuria, ad the Trans-Siberian Railway. 7. Formosa (Taiwan) and the Pescadores. Abbreviations (p. ix). List of maps (13).

In the Introduction: Japanese inns (p. xxxvi, xxxix-xl): The best food is not always to be had in the most pretentious places. In certain modest inns, where the rooms are as bare as a monk's cell, and the general appearance of austerity might argue a strict economy, there will often come, as an agreeable surprise, dainty food served in dishes that delight the lover of beautiful porcelain or lacquer. Later the traveler may learn that the place enjoys fame for some savory specialty-eels boiled in soy, broiled crayfish, stewed octopus, buckwheat-macaroni, or the like."

"Food is served in the guest's room on a lacquered tray... One of the soups may be made of... lobster, or seaweed, in which case it is amazingly thin and unpalatable; the other of beans [miso], bean curd or something of that nature. Salt is not provided unless asked for. Many of the dishes are cooked in soy; a tiny dish of which is supplied for dipping bits into before eating them."

Japanese food (p. xliii-xlvii): "Rice is a luxury with thousands of the peasants; it takes the place of bread with the well-conditioned; and wherever it is eaten to the exclusion of other foods it produces (because the thin phosphorous skin is polished off it) the prevalent beriberi. The proportion of animal food is small. Beans eaten in a variety of ways occupy a conspicuous place in the food of all classes and they supply the nitrogenous matter essential to those who rarely eat meat and who do not get the casein obtained by cheese-eating peoples. The soy-bean (daizu; omame) ranks first in extent, variety of use, and value among the pulse of Japan, and in point of nutriment is quite near to meat. It contains nearly two fifths of its weight in legumin, nearly one sixth in fat, and is rich in nitrogen. It is to the Nipponese what frijoles are to Mexicans and garbanzos (chick-peas) to Spaniards. Of the numerous varieties some are made into curd [tofu], and into the widely celebrated bean-sauce (the Worcestershire of Asia) called shoyu (sho, soy; yu, oil), and which is almost as indispensable as rice. It forms the daily relish of the rich man and the beggar, and is in as general use as tea and tobacco."

Fish (sakana)... Teriyaki: Fish in a sauce of soy, mirin, and sugar... Sashimi: raw fish cut in thin slices and eaten after being dipped in shoyu.-Kabayaki: fish which is first steamed then dipped into soy and roasted (or eels cut open on the dorsal line, covered with soy mixed with sugar, and

roasted). The latter dish, usually called Unagi-no-kabayaki, is a favorite with the Japanese,..."

"Rice:... Azuki-meshi: rice and red pea-beans mixed (boiled).-Mochi: small dough-cakes made of rice and sold throughout Japan.-Sushi: a general name for food of boiled rice and fish, eggs, vegetables, etc., seasoned with vinegar and soy...-Inari-zushi: fried tofu stuffed with chirashi-zushi.-Maki-zushi: boiled rice and other vegetables rolled and wrapped in a sheet of the sea weed called Asakusa-nori...-Kombu-zushi: fish seasoned with vinegar and wrapped in a piece of the edible seaweed known as Laminaria japonica. A differentiation of this popular food is the Kombumaki: baked or roasted fish wrapped in kombu, then tied, and boiled in sugar and soy.

Various:... Tsukudani: small fish boiled in soy and used as a relish or condiment (named for Tsukudajima, a place in Tokyo famous for its preparation).-Oden: a stew (greatly enjoyed by the proletariat) of fried bean-curd, lotus-roots, potatoes, etc." Ame and midzu ame.

"Soup (shiru): Tôfu-jiru: bean-curd soup.-Miso-shiru: bean-soup with vegetables."

Railways-Dining cars (p. lxxxiv): Discusses "The unique and not unpalatable bento,-a sort of national sandwich,-put up (usually cold) in thin, flat, twin boxes (bento-bako) of dainty white wood (1 in. high, 5-7 in. long), along with a paper napkin (kuchifuki) and a pair of chopsticks (hashi), and sold at many stations, is distinctively Japanese and widely popular... Besides the full box of plain boiled rice, the ordinary (15 sen) bento contains usually... a few boiled black beans (nimame)... seaweed (kobu)..." Rice cakes (mochi) with the kernel of yokan, or sweet [azuki] bean paste, which usually forms their center.

Buddhism (cxc): Again the rice-flour cake [mochi] is offered at the domestic altar. It now takes the form of a lotuspetal with capsule of [azuki] bean-paste." (an).

Yokohama (p. 13): "The return gifts from the emperor and princes included...jars of soy [sauce]; coral and silver ornaments;..."

Tokyo (p. 199): "The hill beyond the intersecting roadway is called Suribachi-yama because of the similarity in shape to a suribachi-an earthenware vessel in which beansoup [miso soup] is prepared."

Nikko-Shops: "... the kuri-yokan (so-called from the chestnuts mixed with the sweetened bean-paste [azuki]) is good and cheap (10 sen)."

Kyoto-The Shinto Shrine of Inari. There are many local festivals, the most important of which is the Inari-matsuri which usually falls on June 5. There are trick riders on horseback and decorated sacred cars [carts] are "placed in the procession, and the day is devoted to general jollity-and pocket-picking. On this occasion the people eat Inari-zushi, or fried tofu stuffed with boiled rice, since tofu [fried, as aburage] is the favorite food of the fox popularly believed to be the messenger of Inari (and by extension, the God of

Rice)."

Kyoto-Miidera (p. 504-05): Travelers visit Benkei's Iron Pot (Benkei-no-shiru nabe), a very old, rusted, and broken contraption (about 5 ft. wide and 3 deep) resembling a soapboiler, and from which Yoshitsune's devoted servitor (and popular hero) is supposed to have eaten his bean-soup [miso soup]—which may well be doubted."

Kyoto to Koya-San (p. 515): For the Western traveler there is "a tiny kitchen a blessed refuge wherein, if he is making a prolonged stay, he may cook his un-Christian food without the vegetarian priests knowing (or caring) that such a sacrilege is being committed! Meals are served in one's apartment; the food is purely vegetable, and after the second day distressfully unpalatable. Fish, flesh, fowl, butter, cheese, eggs, milk, bread, coffee, and other necessaries of life are absent, and are replaced by seaweed, greens, bamboo-shoots, cabbage, daikon in various unappetizing forms, and other garden-truck which one eats as a novelty the first meal and rejects with an involuntary tightening of the throat when it is offered at the second and third. In addition there are flabby mushrooms boiled in very thin water without seasoning; the omnipresent boiled rice without sugar, milk, or salt; a beancurd (tofu) for which one acquires a liking only after much patient effort; a yellow substance (known as yuba) made of the skin of bean-curd, and looking and tasting like thin sheet rubber;..."

Kobe excursion—The Tansan Hotel (p. 630): The strawberries and other ground fruits and vegetables, which grow nearly all the time in this favored spot, are enriched with [soy] bean-cake only [no human excrement is used] (as a precaution against typhoid)."

Korea (p. 725): "Among the dishes dear to the native heart are pounded capsicum, bean curd [tofu], various sauces of abominable odors, a species of sour kraut (kimshi [kimchi]), seaweed, salt fish, and salted seaweed fried in batter."

Manchuria and the Trans-Siberian Railway (p. 756): "Considerable [soy] bean-cake and furs, and vast quantities of lumber, etc., come down the river from upper Manchuria and Siberia."

Also discusses edible seaweed (p. xliv, 330): Japanese food: "Seaweed in almost endless variety enters largely into foodstuffs. Not only are the giants of the marine flora taken up and utilized in various ways, but also the more delicate red and green sorts-the use of which has been adopted by other nations. Most of the edible green and red algae bear the generic term nori, while the words umi-kusa, or kai-so (which also means bêche-de-mer), are used for algae in general. Many of the weeds are eaten fresh, others in soup. Some are dried or pickled and eaten in vinegar. They usually appear in commerce in the form of little packages, to the sale of which special stores are dedicated. Certain varieties are converted into jelly."

Yezo-fisheries: "Certain of the many varieties of edible

seaweed which flourish along the Japanese coast are found in Yezo, particularly the circumpolar tangle (Laminaria) and seawracks (Fucus species), which prefer cold water and a heavy surf. For this reason sea-algae add considerably to the value of the Yezo exports."

Note: The author resided for almost 12 years in Japan and made repeated journeys on foot (and otherwise) from one end of the country to the other. Address: F.R.G.S. [Fellow of the Royal Geographical Society, England].

- 321. Eddington, Jane. 1915. The Tribune Cook Book: Chop suey. Chicago Daily Tribune. Jan. 11. p. 10.
- Summary: "English Worcestershire sauce has probably been made for a century at least. Its basis is the shoyu sauce, a very dark, sweetish sauce made in China and Japan of the soya bean. This bean is not well known and is only imported to serve with chop suey." There follows a recipe for Pork chop suey, which includes "two or three tablespoons of shoyu sauce."
- 322. Times (London). 1915. High Court of Justice. Chancery Division. The recipe for Worcestershire sauce. Lea and Perrins v. Barnitt. (Before Mr. Justice Eve). March 6. p. 3,
- Summary: "The plaintiffs here were Messrs. Lea and Perrins, of Worcester, the manufacturers of Worcestershire sauce, and they claimed an injunction to restrain the defendant from using any recipe from which their sauce was manufactured."

Mr. Clayton, representing the plaintiff, "said that the defendant, Mr. W.D. Barnitt was the son of an executor of a late partner in the plaintiffs' firm. From correspondence with the defendant, the plaintiffs were led to believe that he had in his possession, and proposed to make use of, the recipe for the plaintiff's sauce. This recipe was a valuable trade secret. A writ was issued, and subsequently the defendant denied on affidavit that he had the recipe. The plaintiffs, however, were not satisfied..."

His Lordship, the judge, dismissed the action (case) with costs from the date of the receipt of the affidavit."

Note 1. The defendant was found not guilty. See also the court case of 26 July 1876 in which another defendant was also found not guilty.

Note 2. The late partner was Mr. Francis Barnitt, who died on 27 Feb. 1911. Address: [England].

- 323. Washington Post. 1915. 'Soy' bean as war food: German dieticians experiment with it in many prison camps. Product used in Worcestershire sauce is declared by many to be highly nourishing. Aug. 1. p. M8.
- Summary: "Berlin, July 31.-Protracted experiments with the Japanese 'soy' or 'soja' bean, out of which, among other things, Worcestershire sauce is made, are being conducted with a view to determine whether this vegetable, which can

be and is raised in Germany, cannot be used in the many prison camps."

"In the Far East the soja bean is in great demand, both for human and animal food products, and also for the oil it contains. Next to rice it forms one of the principal articles of the food supply in some Eastern countries, especially when combined with cereals and salt. It also plays an important part in sauces and spices. The milk from this bean approximates ordinary milk in nutritive value, and cheese can be made from it.

"When combined with 30 or 40 per cent white flour, the meal of the soja bean lends itself to a tasty and nourishing bread which has been found to be especially good for diabetics because of the high percentage of albumen and fat contained. The roasted soja beans also make a good substitute for coffee. The soja plant forms a good fodder for cattle."

- 324. Los Angeles Times. 1915. Alliance—Japanese beans for Germans: The soy and soja said to be valuable foods. Experiments are to be made to determine if they can be used in the prison camps—together they yield flour, meal, milk, cheese, coffee and fodder. Aug. 8. p. III25.
- *Summary:* This article, via A.P. [Associated Press] foreign correspondence, is very similar to one published a week earlier (Aug. 1) in the *Washington Post* titled "'Soy' bean as war food: German dieticians experiment with it in many prison camps." (p. M8).

The last sentence in the article, however, is new: "Exhaustive experiments with the soja bean have already been made at the agricultural station of the University of Wisconsin, all tending to bear out, it is said, the contention of German dieticians in favor of the bean."

- 325. Hopkins, Albert Allis. ed. 1915. Scientific American cyclopedia of formulas: partly based upon the twenty-eighth edition of *Scientific American Cyclopedia of Receipts, Notes and Queries.* 15,000 formulas. New York, NY: Munn & Co. vii + 1077 p. See p. 752, 772, 768. Illust. Index.
- *Summary:* In Chapter 21, titled "Preserving, and canning, condiments, etc. (p. 735+) is a section on "Catsups" (p. 752) which includes: Anchovy catsup. Cucumber catsup. Horseradish catsup. Mushroom catsup. Soy, Indian. Soy, Japanese. Tomato catsup. Walnut catsup.

"Soy, Indian.—This sauce is usually bought ready prepared. It is imported from China and Japan, where it is made from a small bean, the produce of Dolichos Soja. Japanese soy is usually preferred to that of China, because it is free from the sweet treacly flavor which distinguishes the latter. When well made it has a good brown color, thick consistency, and is clear.

"Soy, Japanese.—An equal weight of beans, coarse barley meal and salt. Wash the beans well, boil them in water until tender, and pound them in a mortar, adding the barley meal gradually. Put the mass into an earthenware bowl, cover with a cloth, and let it stand in a warm place for several days, until it is sufficiently fermented, but not moldy. To each pound of salt add 4 pt. of water, stir until the salt is dissolved, then stir into the fermented mass. Keep the bowl or pan closely covered for 3 months, during which time it must be daily stirred for at least 1 hour. At the end of this time strain through fine cloths, pressing the insoluble portion well, in order to extract as much of the moisture as possible. Let it stand again until quite clear, then drain off and bottle for use. In making Chinese soy, the liquid extracted is boiled and reboiled with a varying amount of sugar, mace, ginger and pepper until it acquires the desired consistency."

On pages 771-72 is a section on "Vinegars" are two formulas for "Camp vinegar." The first calls for 3 tablespoonfuls of soy [sauce] (plus 1½ pints walnut catsup); the second calls for 4 oz. soy sauce.

On pages 767-68 is a section on "Sauces and salad dressings," which begins with home-scale recipes for various sauces including: Anchovy butter. Anchovy essence. Anchovy paste. Anchovy sauce. Fish [sauce]. Gravies. Harvey sauce. Herb sauce. Soy [sauce]. Tomato sauce. Vegetable butters. and Worcestershire sauce.

The formula for Harvey sauce begins: "Good vinegar, 1 qt.; anchovies, 3; soy, 1 tablespoonful; walnut catsup, 1 tablespoonful; finely chopped shallot,..."

The formula for "Soy" states: "Genuine soy sauce is a species of thick black sauce, imported from China, prepared with white haricots, wheat flour, salt and water; but a spurious kind is made in England as follows: Seeds of dolichos soja (peas or kidney beans may be used for them), 1 gal.; boil till soft; add bruised wheat, 1 gal.; keep in a warm place 24 hours; then add common salt, 1 gal.; water, 2 gal.; put the whole thing into a stone jar, bung it up for 2 or three months, shaking it very frequently; then press out the liquor; the residuum may be treated afresh with water and salt for soy of an inferior quality."

Likewise: "Worcestershire Sauce.—There are many concerns, we believe, who make a sauce which they call Worcestershire. That made in England by Lea & Perrin is considered the best and many have tried to imitate it, but with indifferent success. Of the many formulas appearing in print, the following will serve as an example; Vinegar, 1 qt.; powdered pimento, 2 dr.; powdered cloves, 1 dr.; powdered black pepper, 1 dr.; powdered mustard, 2 oz.; powdered Jamaica ginger, 1 dr.; common salt, 2 oz.; shallots, 2 oz.; tamarinds, 4 oz.; sherry wine, 1 pt.; curry powder, 1 oz.; capsicum, 1 dr. Mix all together, simmer for 1 hour, and strain. Let the whole stand for a week, strain it, and fill in bottles. Worcestershire sauce is never quite clear; straining to remove the coarser particles is all that is necessary."

Note: The publication date printed on the title page is 1915, however the copyright for this edition is 1910. Address: New York, Query Editor of the "Scientific

American".

326. Neil, Marion H. comp. 1915. "Kitchen Hanger" of recipes for the numerous uses of Lea & Perrins' Sauce. New York, NY: John Duncan's Sons.

• Summary: This is a booklet of recipes that hangs on the wall like a calendar. The letter from Marion H. Neil to Lea & Perrins (New York) is dated November 11, 1914. Address: School of Cookery, 3602 Spring Garden St., West Philadelphia, Pennsylvania.

327. Lea and Perrins. 1916. Quality (Ad). Times (London). March 17. p. 10, cols. 4-6.

• Summary: "With Lea & Perrins' Sauce-the original and genuine Worcestershire-a few drops sprinkled over the meat, fish or cheese, &c., are all that is required to impart the most pleasing and appetizing flavour." At the left of this display ad is a royal seal, and below it the words "By Royal Warrant to H.M. The King." In the lower right is the large "Lea & Perrins" signature. Address: [England].

328. Johnson, Nelson Trusler. 1916. Manufacture of bean milk at Changsha. Commerce Reports [USA] (Daily Consular and Trade Reports, Bureau of Foreign and Domestic Commerce, Department of Commerce) 19(183):468-69. Aug. 5.

• Summary: "A firm composed of Chinese from the Province of Chekiang has recently opened a small factory at Changsha for the manufacture of milk from beans. This milk has long been known to the Chinese under the name of to fu chiang [soy milk] or bean-curd sauce. This is not to be confused with the product known as chiang yu, a fermented sauce made from beans which is well known as the sov of the Japanese and as one of the constituents of the famous sauces of Europe [such as Worcestershire sauce].

"Bean milk is made from small yellow beans, the same variety from which the Chinese bean curd [tofu] and chiang yu or soy [sauce] are made. The process appears to be a very simple one. The beans are soaked and then crushed between two stones. The crushed mass is allowed to run off into a tub and is then strained through cheesecloth and diluted with water and boiled. After boiling, it is again strained and the white milk run off into bottles and sold to the factory's customers." Note 1. The milk is first filtered when cold, before it is heated or boiled.

"An analysis of the bean-curd milk [soy milk] shows that it has a specific gravity of 1.020 and a fat content of 3.125 [percent], contrasted with a specific gravity of 1.029 and a fat content of 3.9 [percent] for good average cow's milk in America.

"No complicated machinery: The factory is a very small one. The proprietors informed me that they did all their work at night, in order to have fresh milk for delivery the following morning. They begin their work at about 10

o'clock. The milk is ready and bottled by daylight, when it is sent out by coolie to the various customers." Note 2. See photo in Piper & Morse 1923, p. 231.

"The room where the milk is made shows that no complicated machinery is necessary in the manufacture of the milk. At one end of the room are found two of the small stone mills in which the beans were ground. Large numbers of bottles were arranged on a rack near the wall, clean and ready to receive the morning's supply of milk. At the opposite end of the room there were three wooden [sic, metal] vats built into a concrete foundation, which proved to be a furnace. The prepared product is poured into these vats and boiled, the furnace being supplied with fuel from a hole in the outside wall. On either side were two earthenware jars into which the boiled product is poured and through which it is allowed to run through stop cocks into the bottles.

"The manufacturers of this milk seem to be endeavoring to conduct their factory along hygienic lines. They invited inspection of their factory and expressed a desire to carry out the suggestions made by the inspecting physician. These suggestions related principally to the sterilization of the bottles before allowing the milk to run into them. The whole room was very clean.

"Possible opening for milk bottle manufacturers: The manufacture and sale of this milk appears to be a new enterprise in Changsha, although I am informed by the natives of Shanghai and its neighborhood that it is an old and well-known product in that part of the country. To the eye the product looks exactly like unskimmed cow's milk. It has an odor of raw beans and is said to be not unpleasant to the taste. I am informed that a member of the family of Li Hung Chang is now engaged in manufacturing the various products of beans in Paris, his factory turning out, among other things, this bean milk.

"The product is very cheap compared with cow's milk. The factory undertakes to supply one pint each morning for approximately 50 cents gold a month. If this industry proves a success, manufacturers of milk bottles and patent milk-bottle tops should find a market for their wares here at Changsha, if they could be brought in cheaply... The milk bottle manufacturer will, of course, have to compete with the enormous numbers of empty bottles discarded by families who use aerated waters and wines. These bottles are sold by the servants, and are purchased for use in just such factories."

Note 3. This is the earliest document seen (Dec. 2006) describing the selling of soymilk in bottles in China. Changsha is in southeastern China, far to the southwest of Shanghai. Note 4. Consul Johnson seems to be a careful and well informed observer and reporter. Address: Consulate, Changsha, China.

329. Norton, Jeanette Young. 1916. Chinese delicacies and how to prepare them: Recipes given by Chinese chefs will

enable American housewives to duplicate at home some of the famous restaurant dishes. New-York Tribune. Dec. 31. p.

• Summary: "Soye (dragon's blood) is the Chinese Worcestershire sauce; it is imported by the barrel, and a little is used to flavor nearly all of the made dishes" (col. 3).

"Noodles are always fried in peanut oil."

Pao ping (Thin cakes): "Chop fine vegetables and cold pork; add seasoning and a little soye" (col. 5).

Pork chop suey: Ingredients include a "tablespoon of sove" (col. 6).

Note: "Soye" refers to "soy sauce," which does not mean "dragon's blood" in Chinese.

330. San Francisco Chronicle. 1917. Gotham now has the soja bean. Jan. 12. p. 15.

• Summary: New York. January 11-When it comes to the matter of beans, Boston would do well to look to its laurels, because New York has welcomed into its capacious midst a rival to the famous New England Saturday night and Sunday morning food staple. And if you don't believe it go to 6 East Thirty-ninth street, make your way into the soja bean room of the School of Modern Cookery and gaze reverently on the soy, or soja bean, there on exhibition.

"The soy in its native haunts is said to have red hair, and somewhat of the temperament generally associated with that style of adornment.

"Forty-nine soybean specimens are on display, shorn of their hirsute appendages, the pods, leaves, and stems.

"In its original condition the bean, which is about the size and form of a green pea, is served in soup and is used in the preparation of meat sauces [such as Worcestershire sauce]. It can be found in the mysterious concoctions [soy sauce] which the adventurous eater absorbs in chop suey establishments, it is said.

"The soja bean, according to its sponsors in the bean room, forms the principal article of diet of Chinese and Japanese soldiers, and it is also popular in Germany, where it forms an auxiliary to the cow and goat in furnishing substitutes for milk. Information as to how a soja bean was milked was refused, by the way.

"It was predicted that the soja bean as a great future in this country."

- 331. Waal, A.J.C. de. 1917. Over soja-producten [On soy products]. Chemisch Weekblad 14(15):344-56. April 14. (Chem. Abst. 11:2001). [22 ref. Dut]
- Summary: Describes the work done by men in different countries on various soybean preparations and includes a paper by Li Yu Ying (cited separately) titled "Procédés et Dispositifs pour la Transformation Intégrale du Soya," including food and industrial uses of soybeans. A complex, full-page French-language diagram (p. 350) shows the basic processes by which the many food and industrial products

that can be derived from the soy bean, and summarizes patents related to many of these. By milling and baking: soya meal (soja-meel) and soy bread (soja brood). Soya milk (soja-melk) and Western-style cheeses. Coffee and chocolate substitutes: Soy coffee (soja-koffie) and soy chocolate (sojachocolade). Pork-butcher products, incl. soy sausages (sojaworst) in which one can use soy cheese (soja-kaas). Soy protein (soja-eiwit). Worcestershire sauce (Worcestershiresaus). Li is a resident of Seine France. This paper was presented on 11 Nov. 1911, and published on 20 Jan. 1912.

Note 1. This is the earliest Dutch-language document seen (March 2001) that used the term soja-koffie to refer to soy coffee.

Note 2. This is the earliest Dutch-language document seen (Oct. 2003) that uses the term soja-melk to refer to soymilk. Address: s' Gravenhage (The Hague), Netherlands.

332. Eddington, Jane. 1917. The Tribune Cook Book: Chinese foods. Chicago Daily Tribune. April 15. p. B8.

• Summary: "In some recent stories with a Chinese background a poor student is described as 'the son of a man who dines on no richer dish than rice and soy gravy.' This soy or shoyu or syou sauce is procurable at almost any grocery store. It is one of the ingredients of Worcestershire sauce, which is one of the proofs that is has been used in England for nearly a century. When the soy is not procurable a little Worcestershire may be used."

"At this [Chinese food] store I might have purchased fresh pig stomachs or soy bean cheese [probably tofu, but possibly fermented tofu], both cooked and uncooked, and I did get [mung] bean sprouts (15 cents a pound), and the tiny beans from which these are grown. These beans are green of color and not half as large as the smallest peas I have seen.

A boy in a story "says that he likes iced seaweed jelly, referring probably to jelly of the agar, or what we call vegetable gelatin,..." A recipe for "Seaweed jelly" states: "One ounce of agar-agar will make a gallon of jelly, or even more."

333. Stoddard, William Leavitt. 1917. Soy: The coming bean. Good Housekeeping 65:77, 126-28. Sept. [4 ref] • Summary: "Good Housekeeping asked the Department of Agriculture to tell its readers the truth about the soy bean. This article is the department's answer. In the [Good Housekeeping] Institute Kitchen new recipes and methods of using the soy bean were evolved and tested. These recipes will be found at the end of this article. A list of dealers in various sections of the country who carry a supply of soy beans will be mailed upon request accompanied by a stamped addressed envelope.

"The soy bean, also called the soja bean, is a native of southeastern Asia, and has been extensively cultivated in Japan, China, and India since ancient times... The beans are there grown almost entirely for human food, being

prepared for consumption in many different ways. Their flavor, however, does not commend them to Caucasian appetites and thus far they have found but small favor as human food in either Europe or America.' Thus declared a bulletin of the Department of Agriculture [Piper and Nielsen. 1909. Farmers' Bulletin 372] before the war. Less than three months after our entrance into the war-and the entrance of the United States as a nation for the first time into a food moderation and conservation campaign—this same authority stated that 'the soy bean has already reached a place of high economic importance in America and Europe as a foodstuff... During the past season the demand for seed by food manufacturers has resulted in greatly increased prices.' The soy is a coming bean if not the coming bean."

Sold in some American markets under the name Togo bean, the soy bean "now flourishes in an increasingly large acreage in Tennessee, North Carolina, Virginia, Maryland, Kentucky, and the southern parts of Illinois and Indiana. The earlier varieties even mature in Ontario [Canada] and our Northern states."

The American housewife probably does not care "that there is a factory in New York is making a 'vegetable milk' of soy beans; the "flour or meal [okara] which remains after the milk is manufactured is valuable both as a stock for feed and for human consumption; that soap manufacturers and paint manufacturers are using the oil of soy beans to replace more expensive oils; and that the substitute butter makers are using the fat of the soy bean in products which thousands of consumers are using all unwitting of its true nature.

"The thing that the American housewife wants to know today is where soy beans can be bought and what are the simplest uses of them... Probably the easiest and commonest method of cooking soy beans is to use them either for soup or to bake them."

Eight recipes are given; all but two call for "soy beans." Soy-bean bread (containing 20% of the flour in the form of "soy-bean meal" [a full-fat soy flour]), Soy beans and rice (with "1 tablespoonful Worcestershire sauce"), Soy-bean loaf with tomato sauce, Vegetable roast (baked), Savory baked soy beans, Soy-bean soup, Soy-bean muffins (with "1 cupful cold baked soy-bean pulp"), and Salted soy beans (deep fried).

Photos show: (1) Muffins made with soy-bean meal. (2) Soy-bean meal ground at the Good Housekeeping Institute; the hand-turned mill and two small piles of soy beans are shown. (3) A dish of soy beans and rice. (4) A soy bean plant. (5) A vegetable roast with soy beans as an ingredient.

Note 1. Theodore Hymowitz writes (12 Feb. 1990): "I have no idea if William Leavitt Stoddard was related to Illinois soybean pioneer William Hoyt Stoddard. William Hoyt had one brother named Charles Lumas Stoddard."

Note 2. This is the 2nd earliest document seen concerning soybeans in connection with (but not yet in) Togo.

Note 3. This is the earliest English-language document seen that uses the term "Salted soy beans" to refer to soynuts. It is also the earliest document seen in any language describing the frying or deep-frying of whole soybeans to make soynuts. Previously soynuts had always been dry roasted.

Note 4. This is the earliest article on soy seen (Aug. 2002) in Good Housekeeping magazine.

334. Morse, Edward S. 1917. Japan day by day, 1877, 1878-79, 1882-83. 2 vols. Boston & New York: Houghton Mifflin Co. Vol 1, xiv + 441 p.; Vol. 2, 453 p. Illust. (Color frontispieces + sketches). Index. 22 cm. [20+* ref] • Summary: These charming books, illustrated with 777 illustrations from sketches in the author's journal, is a diary (to avoid the duplication of home letters; subjects are treated chronologically rather than topically), filled with detailed observations about most aspects of Japanese life and the author's pioneering work there as a professor. It gives a vivid picture of daily life in Japan in the late 1870s. Morse quickly grew to admire and love the Japanese people; his greatest problem was learning to enjoy Japanese food.

Volume 1: "Almost everything in the sea furnishes food for the masses... Seaweed, a thin green leaf, is also eaten; it is dried and put up in tin boxes," apparently a species of ulva. "I have mustered courage enough to taste a few of the dishes, and have succeeded in swallowing but one of them, and that was a kind of soup... Water was boiled in a tin vessel with a sauce [shoyu or miso] made from fermented bean [sic, beans], dark in color like Worcestershire sauce; into this were put slices of what looked like a cucumber, and then followed large blocks of a substance which resembled new white cheese [tofu], fresh from the press; this was cut into triangular slices. This last substance was made from [soy] beans, strained to remove the skins, and then made into a paste-like block. This soup was certainly nourishing and with a little practice one might come to like it. Another common article of food is made from seaweed an is known as tokoroten" (p. 87-88).

"It was delightful... to sit down again to a dinner of rare roast beef, real butter, and good bread. It is difficult to understand a country in which there is no milk, butter, cheese, bread, or coffee, and never has been. Butter is so distasteful to the Japanese that they cannot eat cake or other article of food in which composition butter is used" (p. 120).

A famous preparation is "cold raw fish, cut in this slices from the fish while fresh and alive. The idea of eating raw fish is particularly repulsive to our taste, though we eat raw oysters; nevertheless, foreigners soon get accustomed to it. The sauce [soy sauce] made of fermented [soy] bean, barley, and some other grain seems to have been specially created for this kind of food. I ate a great deal of it and must confess that my first experience was fairly good,... (p. 143-44).

"The tail of the fish was cut off and flung overboard...

the [raw] fish was chopped into small pieces, head, eyes, bones, and all, and this hash was put into a wooden bowl... From a box was added a substance [miso] that had a very sour odor, something made of beans and allowed to ferment, a little water was added, and it was all stirred up together, and such an unsavory-looking mess I never saw before. The gusto, however, with which the man ate it to the last grain, showed that it was palatable to him at least" (p. 185).

"I have lived on rice, sweet potatoes, egg plant, and fish for two weeks. I would give all my old shoes, and new ones too, for a good slice of bread-and-butter, a bowl of breadand-milk, or any other thing you are enjoying at home" (p. 227).

"The cakes had a stamp of the chrysanthemum on top; these were red and white and were made of [azuki] bean paste and sugar. The Japanese are very fond of them, but they are rather insipid in taste" (p. 395).

"I have finally resigned myself to the Japanese food of this region [Yezo {Hokkaido} near Hakodate]... And of all places to start such an experiment in this village! It required some courage and a good stomach to eat for dinner the following: fish soup, very poor; bean paste [miso?], which was not so bad;... and holothurian, or sea cucumber,... by no means agreeable. It was eaten with Japanese sauce, shoyu, which renders everything more or less palatable... On the whole, I am keeping body and its animating principle together, but long for a cup of coffee and a slice of breadand-butter. I am the only outside barbarian in town" (p. 440-

Volume 2: The New Year's food included "a bean pickle in sugar syrup and Japanese sauce" [probably black soybeans (kuromame)] (p. 93). A detailed description of mochi and its pounding are given, with two illustrations (p. 95).

As they left Izumi and entered the Province of Kii [today's Wakayama], "I saw the process of manufacture of a curious kind of food one often sees in certain soups. It has a bright-yellowish color, as thin as paper, and has no definite flavor. The substance is made from soya beans by a curious and simple process. The beans are boiled in a large boiler till they are very soft; they are then ground in a mill to a fine paste, and mixed with water and colored by some stuff that is imported from abroad (fig. 675). This material is then put into a shallow trough divided by square partitions, beneath which is a charcoal fire which keeps the stuff gently boiling. The surface coagulates as it does on boiled milk, or on a cup of cocoa, and the film that forms is taken off very skillfully with slender bamboo sticks and hung up to dry (fig. 676). Other films form and are promptly removed by a girl who is kept busily at work" (p. 286-88).

In Kawagoe [a city in today's Saitama prefecture, about 20 miles northwest of Tokyo]: "It is a common custom... to eat grasshoppers as a relish... The Japanese prepare them by boiling them in shoyu, sugar, and a little water, till the water has nearly all boiled away" (p. 324-25).

At New Year's "our old cook brought me a box of yokan (made of sugar and [azuki] beans)... (p. 393).

Edward Sylvester Morse, a marine biologist specializing in Brachiopods, lived 1838-1925. Address: Salem, Massachusetts; Former Prof. of Zoology, Imperial Univ., Tokyo.

- 335. Northern Territory Times and Gazette (Darwin, NT, Australia). 1918. Cookery: A good Worcester sauce. Jan. 5.
- Summary: "Pound and mix together ½ oz. of cayenne pepper and 1-8oz. [1/8 oz.] of garlic in a mortar, and add to them gradually one quart of white vinegar. When thoroughly mixed pass all through a hair sieve. Add a gill of Indian soy, then bottle and cork securely for use."
- 336. Johnson, Nelson Trusler. 1918. Process used by Chinese in making bean curd. Commerce Reports [USA] (Daily Consular and Trade Reports, Bureau of Foreign and Domestic Commerce, Department of Commerce) 21(58):926-28. March 11.
- Summary: This report begins: "Probably the first article of diet that attracts the attention of the foreigner coming to China is the bean curd which is served to him at the Chinese restaurant or hotel, or in the Chinese family in many ways. Bean curd is only one of a number of products derived from soya beans. Among these are bean meal, a kind of spaghetti, bean cheese, bean sauce (known as shoyu to the Japanese, chiang yu to the Chinese, and soy in commerce), bean milk, and bean oil. All of these products are used by the Chinese as foods. The shoyu is used as a foundation for a certain well-known brand of sauce." Note: Probably Lea & Perrin's Worcestershire Sauce.

The next section, titled "Product called an ideal food," is largely a summary of a 1917 article by John E.S. Han titled The Yale-in-China Student (Changsha, China) 1(2):8-14. Nov. Contents: Introduction. Product called an ideal food. Uniform quantities of beans used. Specific gravity near that of milk. Method of coagulating emulsion. Suggested improvements in process.

On the last point, Mr. Johnson notes that the changes Mr. Han recommends "are largely the same as those proposed by Li Yu-ying." Address: Consul, Changsha [China].

337. Gardens' Bulletin, Straits Settlements (The) [Singapore].1918. Soy bean. 2(1):12. July 4.

• Summary: "The Soy bean is of enormous importance in Japan, Manchuria and China; and thence a great feature in world commerce. It is now being extensively planted in the United States. It has been said that it could not be grown in the Tropics, and some first trials of it in the Philippines a few years ago led to statements that it could not be successfully grown there. However this was merely a case of the wrong variety for the season in which the planting was done; for

there are many distinct varieties of Soy of quite different possibilities; and more comprehensive trials in the Philippine islands developed the fact that certain varieties were suited only to the wet season, others only to a drier period, and some were heavier yielders of hay, others of grain, and so on, it now being recognized that soy is a practicable crop for the country.

"Three varieties were brought to Singapore from the Philippines. Two did not germinate. The third gave but few plants, but these grew well and are now setting pods. Great care should be taken to continue and develop this culture* since out of it may arise a real asset to the country. Comprehensive trials of all the plant in furnishing direct food for man and beast is but a part of its value, since its secondary products are used the world over. Vast quantities of the famous soy sauce** are consumed yearly in all parts of the world, while bean curds [probably tofu] and oil from this source are well known.

Footnotes: "* The second crop of Soy bean was for some unknown reason a complete failure. E.H.M. ** Basis also for one of the best known English [British] table sauces" [Worcestershire sauce].

Note 1. This is the earliest document seen (May 2010) concerning cultivation of soybeans in Singapore. This document contains the earliest date seen for the cultivation of soybeans in Singapore (1918). Address: Singapore.

338. Evans, W.A. 1918. How to keep well. Chicago Daily Tribune. Aug. 28. p. 6.

• Summary: "Soy beans offer large possibilities as a food. They contain 17 per cent fat, 36 per cent proteid, and 14 per cent starch. Soy bean milk has been used for feeding children for a long time. Le Wall says that soy bean cheese and soy bean croquettes resembling meat croquettes are in use. According to the same author, soy bean is the basis of Worcestershire and other sauces. Among orientals soy bean foods are: Tashir, a bean natto and miso, also soy bean cheeses. Ordinary soy milk and Yuba or soy cream are in use. Shoyer [sic, shoyu] is an oriental sauce in making which soy beans are used." Address: Dr.

339. J. of Agriculture and Horticulture (Quebec).1918. Soy beans as food. 22:48. Sept. 1.

• Summary: "The housewife of to-day who desires to patriotically conserve needed foods for overseas and at the same time provide adequately for her own household is naturally on the lookout for new articles to add to her dietary list. Such a one which has much to recommend it is soy beans...

"Most varieties require a longer season for maturity than our northern climate provides but there are one or two that appear to thrive in Quebec and a number of people are trying them this year. They are said to produce abundantly so it is probable that many housewives will be giving them a trial

this season for the first time, and a few suggestions as to their treatment may be welcome.

"In Japan and China soy bean milk is prepared and used extensively. This milk is also sold in a condensed form and as curd [tofu]. Other preparations are vegetable butter and cheese, and the extracted oil is sold for table use and for

"The Food Preservation Demonstrations of the Canada Food Board form an interesting feature of the fall fairs this vear."

Describes the preparation of: (1) Green soybeans. "If cooked when about three-fourths grown as green beans the water should be changed once during cooking". (2) Dry soybeans. Long soaking in a large quantity of water improves the flavor by assisting "in the removal of any disagreeable principle." To serve as baked beans, in a crock, add to 2 cups cooked beans, 1/4 teaspoon mustard, salt, a few grains of cayenne pepper, ½ cup tomato catsup, or if desired a few drops of onion juice, or 2-3 tablespoons molasses, or a teaspoonful of Worcestershire sauce. (3) Soy flour. "The raw soy beans may be ground into meal and combined with flour for bread, biscuits, or muffins. In the bread 1/3 soy bean meal may be used, in the biscuits and muffins a larger proportion." The meal tastes best if slightly browned.

Note: This is the 2nd earliest document seen (Jan. 2010) concerning soybeans in Quebec province, Canada, or the cultivation of soybeans in Quebec province (one of two documents). Address: Canada.

340. Jordan, Sam. 1918. Soy beans from soup to nuts: A new crop with many uses both on farms and in factories. Country Gentleman 83(39):7, 34. Sept. 28.

• Summary: Begins by discussing: The possibilities of soy beans "as a substitute for meat." The rising demand for "soy oil" which started a few years ago when the flax crop was little better than a total failure. "Industrial uses" of soy oil in soap, paint, and varnish. "Several packing houses were experimenting with the oil as a possibility in oleomargarine manufacture." "Soys fix soils for cotton." "Varieties of soy beans have been matured as far north as Quebec" [Canada]. The "development of the soy in the cotton sections will no doubt be swifter from an industrial standpoint because of the already existing facilities for oil extraction."

Concerning food uses, the author believes that "the soy bean as human food is destined to play a leading part in the way of a substitute for meat. From studies made of soy beans as food, the use of flour seems to be one form in which their use will suit the American taste and palate best."

"I have heard that the soy-bean milkman comes around before breakfast each morning in the Orient and leaves soybean milk." A Chinese student recently verified this story and said that in his family's household "it was customary to drink a glass of the milk upon arising." The student added that fried bean curd was often served for breakfast, and

with soy sauce for dinner. "This soy sauce is something more or less familiar to Americans, the acquaintance being contingent upon the frequency with which our Chinese restaurants are patronized. It is the dark-brown liquid usually on the tables in the vinegar bottles. It is also the base of our Worcestershire sauces.

"For supper a favorite dish is sprouted beans in salad form, mixed with small pieces of meat or egg. They usually have also some form of bean cheese or fermented boiled beans. Next to baked and boiled beans, the preparation of soy-bean milk is a thing which should be more widely known."

"The author gives a brief description of how this milk is made, noting that it can be used in "cream sauces, puddings, custards, and even ice cream when some high flavoring is added to kill the beany taste. Much of the strong taste can be eliminated by boiling the milk slowly and stirring to prevent scalding.

"The residue [okara] obtained by straining the milk makes an excellent base for muffins and even bread, when it is used in the proportion of one part to three or four parts of wheat flour."

"In regard to fresh bean curd or 'tofu,' as the Chinese call it, it is hardly probable that we shall use it generally at an early date. The process of making it will no doubt come through the activities of our increasing number of women home-demonstration agents and, also, it is being made commercially by several Chinese firms in this country. When it does become more widely known, however, it is destined to be used extensively. It has very little taste of its own, and takes the flavor of everything with which it is used, generally as a base. It is also highly nutritious.

"Soy sauce is likewise destined for greater use, but the process of its manufacture is too complicated for domestic preparation. It can be purchased at Chinese groceries in this country, and probably from the majority of Chinese restaurants.

"Another dish which tastes as good as it looks or sounds is soy-bean sprouts. The smaller beans, of some yellow or green variety, are usually used." They are excellent because of "their use in the winter, acting as a green vegetable, and the fact that the vegetable can be had whenever wanted."

"And here is one for vegetarians—a 'vegetarian roast.' This is made by using equal parts of soy beans and peanuts, with the peanuts roasted and the beans boiled until soft before both are mixed and treated as an ordinary meat loaf. Such a roast as this is now being prepared by several foodmanufacturing firms in the South, where both peanuts and soy beans are plentiful. It is being placed on the market in one and two pound containers."

"The beans served as a green vegetable are treated after hulling in much the same manner as Lima beans or peas. To hull, however, they should be boiled in the pods for about five minutes, then dipped into cold water, after which they

shell easily. They can also be canned in this way, treating them after hulling the same as Lima beans. It is often desirable to serve them with rice or potatoes."

"So here we have a small glimpse of what their [soy beans'] future really is. A crop with a great industrial importance, a crop with known forage and manurial possibilities, and a crop holding forth a beneficent promise as an essential food, soy beans will soon be giving corn and wheat a close race for the more prominent places on our agricultural map."

Photos show: (1) Soy beans after being soaked but before boiling. (2) Piles of hay, used for forage. (3) Side view of a soy-bean harvester (with a man on top, pulled by two horses) used in the South, showing the bags filled. (4) A rear view of the same separating and bagging soy-bean harvester.

Note 1. This is the earliest document seen (March 2012) that uses the term "from soup to nuts" in connection with soybeans. Note 2. This is the earliest English-language document seen (Feb. 2000) that uses the term "soy-bean sprouts" to refer to these sprouts. Address: Columbia, Missouri.

341. Arnold, Julean. 1918. Chinese products of interest to Americans. Commerce Reports [USA] (Daily Consular and Trade Reports, Bureau of Foreign and Domestic Commerce, Department of Commerce) 21(299):1110-19. Dec. 21.

• Summary: About Chinese vegetable products. Two long sections ("Chinese production of beans" and "Extensive use of bean products-Exports during 1917") contain detailed discussions of soybeans and soyfoods in China. However, the author states (p. 1112) that the "greater part of the descriptive information above is taken from:" Shaw, Norman. 1911. "The soya bean of Manchuria." Shanghai, Statistical Department, Inspectorate General of Customs. China Imperial Maritime Customs. II. Special Series. No. 31. 32 p.

The first of these sections states: "It is only within the past 10 years that the outside world has become acquainted with the soya bean of China. It is probably safe to say that the sudden rise of the soya bean from a position of comparative obscurity to a position of prominence in the world of trade, during a period of little more than a decade, constitutes one of the commercial wonders of the world.

"In the Far East soya beans are used for the following purposes: (1) For bean sauce or soy ('soya' is a corruption of the Japanese 'shoyu'), known to the Chinese as 'chiangyu' and made... The sauce is clear, resembles Worcestershire sauce, and is used in a somewhat similar way. (2) For 'chiang' or bean paste, eaten with fish, meat, and vegetables, and made by... (3) For 'tou-fu' or bean curd [tofu], made from green or yellow beans by... (4) For a form of flour, extensively used for bean vermicelli, which is tasty and nutritious. (5) As a table vegetable [green vegetable

soybeans]. (6) For soups. (7) For making confectionery (in Japan). (8) For oil, as a substitute for lard, as a lubricant, as an illuminant, and to make waterproof cloth, paper umbrellas, and lanterns."

Also discusses "Exports of peanuts" (p. 1118-19): Just before the outbreak of World War I, the peanut export industry in China reached a peak. "The annual exports then were about 70,000 tons of shelled peanuts and about 50,000 tons of oil. More than 40% of these exports went from the port of Tsingtau [Tsingtao] as Shantung has developed into the largest peanut producing Province in China." Address: Commercial Attaché, Peking.

342. Morse, W.J. 1918. The soy-bean industry in the United States (Continued–Document part II). Yearbook of the U.S. Department of Agriculture p. 101-11. For the year 1917. See p. 106-10. Contains many photographs by Frank N. Meyer. • Summary: Continued from p. 106. "Soy beans for human food: In Asiatic countries, especially China and Japan, the soy bean and the various food products made from it are so largely consumed that it is second only to rice in importance as a food crop. The soy bean is eaten only to a very small extent like other beans, but in China and Japan it is elaborated into a great variety of products, all having a high percentage of protein and making a well-balanced diet when eaten in connection with the staple food, rice. Some of these products are said to be eaten at every meal and by rich and poor alike. Of these numerous preparations, only one, 'shoyu,' or 'soy sauce,' has been introduced to any extent in other countries. It is quite possible that some of these products would appeal to the American taste and with proper exploitation become established on the American market.

"Although the soy beans as an article of food has attracted attention from time to time in the United States, thus far it has been used but little except as a special food for invalids. The beans contain only a trace of starch and are highly recommended as a food for persons requiring a diet of low starch content. During the past year, however, much interest has been manifested in the possibilities of the soy bean as a staple food.

"Many schools of cookery and domestic science throughout the country have conducted experiments rather successfully, utilizing the dried beans in the manner of the navy bean. As a result, the dried beans can now be purchased in the markets in nearly all of the large cities. The variety and palatability of the forms in which the bean can be served make it a very desirable article of food, and it may be expected to grow in favor as it becomes better known (p. 107)."

"Dried beans:... During the season of 1916 about 100,000 bushels of American-grown [dried] soy beans were packed as baked beans by several canning companies in the Central and Eastern States." Properly roasted, the dried beans "make a good coffee substitute. Those fond of cereal

beverages pronounce it equal to many of the preparations on the market. In China, the beans are soaked in water and roasted, the product being eaten after the manner of roasted peanuts. This method of preparing the beans is improved by soaking the beans for about twelve hours in a 10 per cent salt solution, boiling slowly for about 30 minutes, and then roasting to a light-brown color. The yellow-seeded and green-seeded varieties are preferable, as they make a product of better appearance.

"Green beans: When soy beans are three-fourths or more grown, the seed makes a most palatable and nutritious green vegetable. As such it may be used much as is the green pea or the Lima bean. The pods are somewhat tough and not desirable to eat. The green beans are rather difficult to shell, but after cooking in the pods for about five minutes, they shell out very easily."

"Soy-bean milk:" If dried soy beans are soaked, crushed, and boiled "a milky emulsion is obtained which is very similar in appearance and properties to cow's milk. This liquid, separated out by means of a very fine sieve or through a cloth filter, is the soy-bean or 'vegetable' milk used so extensively in China." "Soy-bean milk has a rather strong characteristic taste and odor which may be masked by the addition of a small quantity of coumarin or vanillin. This 'vegetable milk' can be used in numerous preparations, such as breads and cakes, in creaming vegetables, in milk chocolate, and in custards. If allowed to remain in a warm place the milk becomes sour, like animal milk, and in that form may be employed just like sour milk or buttermilk...

"After separating the milk from the solid material, the residue [okara] is still very rich in nutritive substances. It can be dried and used for cattle feed or possibly made into a meal or flour for human consumption."

"Soy-bean cheese: "The addition of magnesium or calcium salts (about a 1 per cent solution) to soy-bean milk when hot precipitates some of the proteid substances, forming a grayish white curd which settles out, leaving a yellowish watery liquid. This curd, after being drained and pressed, represents the tofu, or bean curd, which is so extensively eaten and forms the basis of numerous fermented, smoked, and dried cheeses in China and Japan (Plates III and IV). Tofu is made fresh daily and is a staple article of diet of oriental peoples. In many cities of the United States having a large Asiatic population, fresh bean curd generally may be found in the Chinese markets. Although the fresh curd, or tofu, is tasteless, it is a highly nutritious food and no doubt could be elaborated by the American housewife into a variety of palatable dishes.

"Soy sauce: Soy or shoyu sauce is a dark brown liquid prepared from a mixture of cooked and ground soy beans, roasted and pulverized wheat (barley is sometimes used), salt and water. This mass is inoculated with a culture known as rice ferment (Aspergillus oryzae) and left in casks to ferment from six months to a year and sometimes longer

(Plate V)... This product may well serve as the basis of sauces of the Worcestershire type... The manufacture of soy sauce is conducted on a large scale in China and Japan, and to some extent in India. The yearly production of Japan is said to amount to nearly 2,000,000 barrels. The brewing of this sauce has also become a well established industry in Hawaii. Although there are no factories in the United States, considerable quantities of the sauce are imported annually, and it can be obtained at Chinese stores in most of our cities."

"Soy-Bean sprouts: Several species of beans are sprouted and used as a green vegetable by the Chinese (Plate VI). Soy beans are used to a very considerable extent for this purpose, as these sprouts are larger and firmer than those of most other legumes. Bean sprouts can be used as a home winter vegetable, for the dried beans are sprouted easily in a short time under proper conditions of heat and moisture. It is quite possible that sprouted soy beans utilized in various vegetable dishes would appeal to the American taste."

A table (p. 111) shows the "Quantity and value of soy beans, soy-bean cake, and soy-bean oil imported into the United States, 1910-1917, inclusive.

Photos on unnumbered pages show: (1) A typical soy bean plant. (2) A field of the Biloxi soy bean grown at Biloxi, Mississippi. (3) Pods and seeds of 7 common varieties of soy

- (4) "Large blocks of freshly made bean curd, 'tofu' [on a round wooden table], ready to be cut up into squares and sold to the housewife."*
- (5) "Large bamboo tray of various kinds of soy-bean cheese of the drier type" [pressed tofu sheets].*
- (6) "A dark room of even temperature where wooden trays, full of bean curd [tofu] are piled. This is another method of preparing soy-bean cheese" [fermented tofu].*
- (7) "Large earthen jars full of squares of bean curd, which are covered with spiced brine and soy sauce. After several months' curing a bean cheese [fermented tofu] is formed, which can be kept for many years."*
- (8) A "courtyard full of covered pots of fermented soy beans and brine from which soy sauce is made."*
- (9) The basket on the left contains "sprouted soy beans, which are sold and used as a green vegetable" [in China]* * = Photographed by Frank N. Meyer, Agricultural Explorer, USDA.
- Note 1. This is the earliest published document seen (Jan. 2001) that contains photos of soyfoods by Frank. N. Meyer. Most of the photos appear to have been taken in China.
- Note 2. This is the earliest document seen (Jan. 2001) in which William Morse describes "soy-bean sprouts" or "soybean cheese" (tofu).

Note 3. This is the earliest English-language document seen (Oct. 2011) that uses the term "soy-bean cheese" to refer to fermented tofu.

Note 4. This is the earliest English-language document seen (Oct. 2003) that uses the term "milky emulsion" to refer to soymilk.

Note 5. This is the earliest English-language document seen (May 2005) that uses the term "masked" (or any other form of that verb) in connection with the undesirable taste or odor of soyfoods (soy-bean milk) or soy beans. Address: Scientific Asst. in Forage-Crop Investigations, Bureau of Plant Industry, USDA, Washington, DC.

- 343. Lea and Perrins. 1919. Simple fare (Ad). Times (London). Jan. 20. p. 4, cols. 6-7.
- Summary: "... does not seem insipid if you use Lea & Perrins' Sauce. A few drops of this famous sauce makes the plainest dish appetizing and enjoyable. Lea & Perrins' Sauce. The original and genuine Worcestershire." At the left of this display ad is a royal seal, and below it the words "By Appointment to H.M. The King." Address: [England].
- 344. Lea and Perrins. 1919. Vegetable dishes (Ad). Times (London). March 17. p. 6, cols. 6-7.
- Summary: "... need never be unpalatable. A little Lea & Perrins' Sauce makes a world of difference in the flavourtry it! Lea & Perrins' Sauce. The original and genuine Worcestershire." At the left of this display ad is a royal seal, and below it the words "By Appointment to H.M. The King." Address: [England].
- 345. Palen, L.S. 1919. The romance of the soya bean. Asia and the Americas 19(1):68-74. July. Illust.
- Summary: The author, who begins by acknowledging his indebtedness to Dr. Yamei Kin, Dr. John Harvey Kellogg, and Mr. W.J. Morse for much of the material in this article, gives an overview of the soya bean worldwide. The article contains excellent photos (many by Adachi): (1) Stacks of soya bean cake in open storage on Dairen wharves, South Manchuria. (2) Horses plowing soybean fields in North Manchuria. (3) Modern machinery [a huge steam-powered tractor] used in bean cultivation in remote parts of Manchuria where foreign interests are involved. A Western man and woman ride horses nearby. Caption: "To the Manchurian farmer, with his laborious methods of hand cutting and hand winnowing, the introduction of modern Western farming methods would spell many-fold prosperity." Note: This is the earliest document seen (Feb. 2003) that shows a photo of a tractor in connection with soybeans. (4) Stacks of soybeans piled high in sacks in Manchuria as far as the eye can see. (5) Soybeans stored in huge cylindrical, 20-foot-high osier bins, each covered with a conical top.

Soy oil is purified and flavored with an admixture of olive oil for use as a salad oil. It also forms the basis of some of our butter and lard substitutes. "What Mr. Li Yu-ying accomplished in Paris in the establishment of a Laboratory of Research and of a factory for the production of all the

products derived from the soya has been the forerunner of activity on the part of certain independent Chinese companies in America and of government and private investigations."

"In general the use of whole soya beans has not been attended with much success because of the ever present flavor of the oil content and because, with the ordinary method of cooking, they remain hard and unpalatable; but it has been found that cooking at a temperature somewhat above the boiling point, say from 220 to 230 degrees, breaks up the cellulose structure and develops a richness of flavor that is not obtainable with the lower temperature."

"By far the most extensive use of the soya is in the products manufactured from it. And it is here that Dr. Yamei Kin, the talented Chinese physician, is making her chief studies under the direction of the Pure Foods Division of the Department of Agriculture, with the purpose of spreading a knowledge of the soya among Americans. For convenience of consideration the products studied may be divided into sauces, curds, cheeses and milk.

"Of the sauces the liquid form is already familiar, although unrecognized, perhaps, by a large percentage of Occidentals through the work of early English traders in bringing back the base of the now famous Lea and Perrins Worcestershire Sauce. This original Chinese shi-yu was highly spiced and became a well recognized adjunct to many an English meal. Following the example of Lea and Perrins, others have put out sauces with the same base without, however, attaining the same success, because the makers did not understand that there are many kinds of soya sauce. While they are all made by the same ferments and in the same general way, they differ very greatly in quality according to the locality and to the manufacturer, just as wine, though made from the identical kind of grape and by the same process of fermentation, may be a very different article from different hands. It takes several months to make this liquid form of sauce, while the best kind requires a year or more to attain the finest flavor and mellowness. The hot condiment added by Lea and Perrins is not favored by the Chinese, since according to their taste it detracts from a wide use of the soya sauce."

Tofu (spelled to-fu) is discussed in detail. "There are records to show that it has been used since at least nine hundred years B.C. To-fu making is a staple industry in every little community. Usually it is done at night so that the fresh curd will be ready for the morning demand in the market, or for peddling around the streets. It provides, for the fraction of a cent, the indispensable equivalent of meat and affords very often the explanation of how the Chinese laborer does so much work on what is purely vegetable diet, popularly supposed not to contain much protein. To-fu is made in many different forms and the bean stalls occupy quite as large and prominent places in the city market as the fish and meat stalls...

"Cheeses are also made from the growth of cheesemaking moulds on tofu. The Chinese resident in America regularly import a certain highly flavored red bean cheese for their own use...

"Perhaps the greatest contribution of the soya to the life of the Occident will be in its form of milk. Back in the golden era of peace there had been established in London a soya bean milk factory which was prepared to place its product regularly on the market, and there were said to be plans consummated for the erection of two others at Manchester and Liverpool; but of what the development has been we have no definite information. In Shanghai, Peking and Dalny Chinese companies are supplying hospitals and individuals with an 8 or 10 ounce bottle of concentrated milk per day at a cost of \$1.00 Mex per month.

"In its competition with the cow the legume has in its favor the following facts: Soya milk can be produced with less contamination; it is tuberculosis-free; its caseins break down much more readily than the caseins of cows' milk and do not form curds in the stomach in the same degree...

"By those who advocate and urge a vegetarian diet, a very strong bill can be drawn in favor of this oriental substitute. In these days when war has thrown new light on many of our life problems, it will be easier to secure acceptance for their contention that the world must for both economic and physiological reasons adopt the biological diet. It has been calculated that, roughly speaking, it takes 100 pounds of foodstuffs to produce 3 pounds of beef and that a given acreage of land can support five times the population if the necessary protein can be derived directly from vegetable sources rather than going through the roundabout way of an animal form, imposing upon the body the burdens incident to taking in the toxines [toxins] resultant from the catabolism of the cells of the animal, and from possible putrefaction. In China the Buddhist priests and people who enter the various temperance societies all depend on varieties of to-fu."

346. *Christian Science Monitor*. 1919. Japanese children. Aug. 28. p. 14.

• Summary: "The Japanese also have... wafers [rice crackers] which are made of rice paste, dipped into 'shoyu' and dried in the sun. 'Shoyu' is a sauce with a salty taste, which is the Japanese equivalent of Worcester sauce."

Also discusses a sweet called "ame," which is made from malt, and "'yokan' consisting of mashed [azuki] beans and sugar, which is made in the mountain districts of Japan. It is much nicer than it sounds and looks so attractive packed in its long, narrow, white, wooden boxes and wrapped in a single big bamboo leaf."

347. Arnold, Julean. 1919. Commercial handbook of China. 2 vols. Washington, DC: Government Printing Office. 629 p. + 472 p. Dep. of Commerce, Bureau of Foreign and

Domestic Commerce, Miscellaneous Series No. 84.

• Summary: In Vol. 1: The "Letter of submittal" from the Department of Commerce, Bureau of Foreign and Domestic Commerce, states that the Bureau "realizes keenly the desirability of an immediate, vigorous, and systematic effort to promote American trade with this great friendly nation in the east of Asia. Such an effort... must be based on the most recent and dependable economic information. To supply that information is the purpose of this handbook.

"This handbook, the most detailed publication of its kind ever issued by the Department of Commerce, will appear in two volumes." The basic organization will be by each of the 17 American consular districts.

Digital searches for "soy" or "soya" or "beans" or "bean curd" or "bean sprouts" or "bean cake" or "bean oil" will result in many hits and a vast amount of information. For example:

Pages 42, 45: A table titled "Commercial statistics for China as a whole," under "Exports, sundries" includes:

"Bean cake" (pounds). For 1913. Quantity: 1,575,792,400 pounds. Value: \$18,197,871.

"Bean cake" (pounds). For 1918. Quantity: 2,182,241,744 pounds. Value: \$35,650,215.

"Bean curd" (pounds). For 1913. Quantity: 4,846,543 pounds. Value: \$144,849.

"Bean curd" (pounds). For 1918. Quantity: 3,765,591 pounds. Value: \$265,141.

"Beans" (black, green white, yellow, other kinds) (pounds). For 1913. Quantity: 1,376,795,200 pounds. Value: \$16,983,422.

"Beans" (black, green white, yellow, other kinds) (pounds). For 1918. Quantity: Yellow (#1): 849,479,313 pounds. Value: \$17,106,454. Values are also given for Other kinds (#2), White (#3), Green (#4), and Black (#5): 13,481,033 pounds. Value: \$295,796.

"Oil, Bean" (pounds). For 1913. Quantity: 65,575,600 pounds. Value: \$2,720,637.

"Oil, Bean" (pounds). For 1918. Quantity: 393,621,508 pounds. Value: \$29,802,630.

"Soy" (pounds). For 1918. Quantity: 820,531 pounds. Value: \$45,871.

Page 115: "Canton Consular District." "Other native industries of Canton that give employment to large numbers of people in the aggregate are:... The making of a Chinese sauce called 'soy,' which is made from a certain bean which as been boiled slowly and to which wheat or barley flour is added (soy is exported for the use of Chinese living abroad and also for the making of certain foreign sauces and condiments);" [such as Worcestershire sauce?].

Page 200: "Export trade:... The leading products shippd from Hongkong to all parts of the world are:... beans,...soy, tapioca flour, tea..." Pages 202-03: Trade between Hongkong and the United States during 1918. Hongkong Consular District. Value in 1913: Soy. Shipped to the United States:

\$51,595. Shipped to the Philippine Islands: \$1,430. Shipped to Hawaiian Islands: \$1,140.

Page 365-66: "Amoy Consular District." Manufacturing and other industries. The Amoy Tinning Co. (Ltd.) and The China Canning Co. (Ltd.): The output of these two factories includes "soy and soy sauce."

Page 397. Antung Consular District. Exports include soy.

Page 478: "Shantung Province is the original home of the soya bean and the bean-crushing industry in this part of the world, and until the possibilities of Manchuria were discovered and developed this Province led the industry." "Manufacture of vermicelli: The principal crude native industry is the manufacture of Chinese vermicelli from a small green bean known as the 'lu tou' [mung bean]. This vermicelli is manufactured not only in large factories but also by individual farmers and in the homes of the natives in all parts of the Province."

Page 517-18: Dairen Consular District, Agriculture. The principal crops and their yeild per acre: soya bean, 4.5 bushels. "The principal fertilizers are manures and bean cake (the residue after the oil has been pressed from soya beans)." "Soya beans, and the bean oil and bean cakes manufactured thereform are the principal agricultural products exported from this district." Address: Commercial Attaché, Peking, and various American Consular Officers, China.

348. American Food Journal. 1919. Eastern soy sauce mystery penetrated. 14(12):41. Dec.

• Summary: "There are mysteries of the far and ancient East that, now and then, may be penetrated by the occidental mind. Some of them have been-and one of them is soy sauce. That substance, they say, has gone into all the meat sauces-all the good ones at least [such as Worcestershire sauce]-that the Western world has consumed through all the years. But is has been made only in the Far East-in Japan and China.

"Now, it has now been made in the United States-by the government of the United States, through its fermentation experts at the Bureau of Chemistry of the Department of Agriculture.

"The work has been going on only for about a year, and it is said to take five years to make some qualities of sauce... The work was begun with the aid of a professor from the University of Tokio, and has been carried forward by workers in the Bureau of Chemistry who worked with him."

The process is described. Boiled soy beans and roasted wheat are inoculated with a small quantity of yellow-green aspergillus mold. The brine fermentation takes from 6 weeks to 5 years, depending on the quality of sauce desired.

"The Japanese use this sauce in cooking meats, soups, rice and other dishes. Its principal use in occidental countries has been for mixing with the other ingredients of meat sauces. Its manufacture in the United States will afford an

additional means of utilizing the soy bean, which recently has taken its place as one of the important leguminous crops of this country."

Note: This is the earliest English-language document seen (Jan. 2006) with the term "soy sauce" (regardless of hyphenation) in the title.

349. Greenbaum, Florence Kreisler. 1919. The international Jewish cookbook: 1600 recipes according to the Jewish dietary laws with the rules for kashering... 2nd ed. New York, NY: Bloch Publishing Co. [xiv] + 438 p. Index. 21 cm.

• Summary: Three recipes call for the use of Worcestershire sauce as an ingredient: Sardine canapés (p. 1). Mustard sardine paste for sandwiches (p. 9). Enchiladas (p. 85).

One cup of peanut butter is used as an ingredient in Peanut and rice croquettes (p. 66). There is also a recipe for Salted peanuts. Address: New York.

350. Hirtzler, Victor. 1919. The Hotel St. Francis cook book. Chicago, Illinois: The Hotel Monthly Press. 430 p. Frontispiece (portrait). Index. 27 cm.

• Summary: This book, which is completely different from Hirtzler's 1910 Hotel St. Francis cookbook, is "organized as a year's worth of Breakfast, Luncheon, and Dinner menus with recipes displayed next to each menu." Thus, page 1 contains the menu, and accompanying recipes, for January 1 (MSU biography and introduction).

Worcestershire sauce is used as an ingredient in a remarkable 37 recipes in this cookbook-thus clearly showing its standing as a highly respected ingredient. Most of these recipes were served at dinner and are based on animal products (fish or shellfish, meat, poultry, eggs, cheese, or milk); some are salad dressings or sauces. The recipes using Worcestershire sauce are:

Squab pie, à l'Anglaise (p. 1, Jan. 1). Roquefort dressing, for salads (p. 19). Cocktail sauce, for oysters (1 and 2) (p. 23). Deviled crabs, p. 30. Oysters Kirkpatrick, p. 31. Ox tail, English style (p. 32). Haricot of mutton (stew) (p. 44). Aiguillettes of bass, Massena (p. 74). Crab cocktail, Victor (p. 84). Venetian eggs in chafing dish (p. 92, April 1). Curried oysters (p. 99). Deviled crab in shells (p. 108). Roast shad and roe, à la Americaine (p. 115). Angels on horseback (oysters) (p. 117). Deviled chickens' legs (p. 121). Devil sauce (p. 121). Suprême of oysters, St. Francis (p. 124).

Lamb broth, à la Grecque (p. 127). Crab salad, Louis (p. 128). Alligator pear cocktail [avocado] (p. 136). Fillet of sole, Doria (p. 137). Lamb hash with [green] peppers (p. 139). Crab leg stock (p. 156). Broiled sirloin steak, Cliff House (p. 164). Broiled veal kidneys, English style (p. 168). Russian dressing, for salads (p. 179). Baked lobster, Lincoln (p. 185). Crab gumbo (p. 213). Baked porterhouse [steak] (p. 301). French dressing, for salad (p. 320). Giblet soup, à l'Anglaise (English style) (p. 323). Mayonnaise sauce (p. 325). Spring lamb Irish stew (p. 328). Cold horseradish

sauce, English style (p. 329). Sauce special (p. 352). Welsh rabbit (melted cheese with sauce over toast, p. 356). Chicken okra soup (p. 367).

Neither Harvey's Sauce nor Leicester Sauce are mentioned. Almonds are used in a surprising 162 recipes, while neither peanuts, nor peanut butter, nor almond butter, nor cashews are mentioned. Address: Chef of Hotel St. Francis, San Francisco [California].

351. Boston Daily Globe. 1920. Flesh of snapping turtle makes very delicious soup. Sept. 26. p. 61.

• Summary: Snapping turtles are found in almost every lake and pond in New England. Yet most New England housewives have yet to learn of their food value and delicate flavor. To steamed turtle, "add black sauce (the soy-bean sauce to be found in Chinese restaurants) or Worcestershire sauce."

352. Lea and Perrins. 1920. Seasoning suggestions: Revealing the chef's seasoning secrets for improving over one hundred and fifty dishes with Lea & Perrins' sauce. New York, NY: Lea & Perrins. 32 p. Index to recipes. 21 cm.

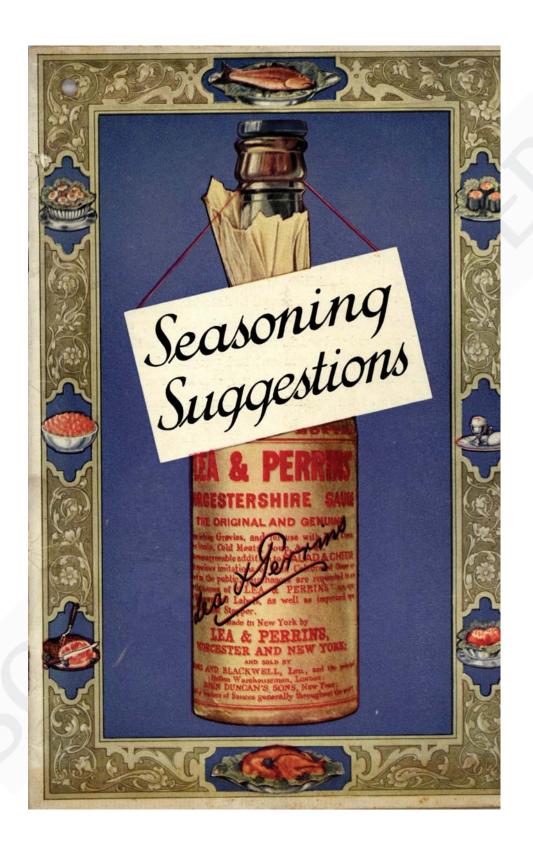
• Summary: A booklet of recipes advertising Lea & Perrins' Worcestershire Sauce. Copyright 1920 by John Duncan & Sons, Ltd., New York, NY. Contents: 1. The new dinner appetizer. Dishes improved with Lea & Perrins' Sauce on the table. Dressings and gravies. 2. How to improve dressings and gravies with Lea & Perrins' Sauce. Different kinds of dressings. How and when to season dressings with Lea & Perrins' Sauce. Brown dressings. White dressings. Drawn butter dressings. Miscellaneous dressings. 3. Chowders and soups. Garnishings for soup. 4. Croquettes, timbales, casseroles, stews and other meat dishes. Timbales. Stews and casserole dishes. 5. Eggs, omelets, souffles, Creole and rice dishes. Omelets and souffles. Creole and rice dishes. 6. Chafing dish suppers. 7. Sandwich fillings. Cheese sandwich fillings. Egg sandwich fillings. Meat sandwich fillings. Fish sandwich fillings. 8. Salad dressings. 9. Catsups, chutneys, pickles and home-made relishes.

On the cover a large color photo (see next page) shows a bottle of Lea & Perrins' Worcestershire Sauce. Address: 241 West St., New York, NY.

353. Carver, G.W. 1921. Prof. G.W. Carver's lecture-Farmer's Conference. 19+ p. See p. 18. Feb. 16.

• Summary: "Here is a bottle of worcestershire sauce and it is made of Peanuts. The original worcestershire is made from the soy bean but I find this is just as nice as the soy bean and therefore will be attractive in that particular. Here is a bottle of Peanut coffee...

"Here is a bottle of tofue [tofu]. It is a Chinese preparation made from the soy bean and I find that the peanut makes it just as nice as the soy bean. The Peanut milks have just about the same quality of curds as cow's milk. Here is a



bottle of Curds and all that is necessary is to freshen them up and you can make any of the various cheeses, or koumiss."

Note 1. The above lends support to the theory that Carver may have been influenced in his peanut research by his knowledge of existing processes for making products from soybeans. Note 2. This lecture was presented at the Voorhees Normal and Industrial School, Denmark, South Carolina. Address: [Tuskegee, Alabama].

354. Lea and Perrins. 1921. At the horse show (Ad). Times (London). June 10. p. 9, cols. 1-2.

• Summary: "... you will find the best people and the best horses. See that you get the best sauce when you go to lunch." Below that is a large, bold signature: "Lea & Perrins' Sauce." Below that: "The original Worcestershire sauce." At the left of this display ad is an illustration of the head of a horse with a bridle. Address: [England].

355. North, J.L. 1921. To solve the cost-of-living problem? A magic bean. Illustrated London News (The). Oct. 8. p. 476-77. [1 ref]

• Summary: "The leading article and letter in the Times of Sept. 28 from its Vienna correspondent about Manna flour, manna bread, and milk substances made from the Soya bean, are likely to do good if they help us to realise how much we are losing by our neglect of this, the most valuable-for the uses to which it can be put-of all legumes.

"In the letter giving the details of the researches of Dr. László Berczeller of Vienna, there is no reference to the fact that these 'Manna' or Soya bean products were first made in England before the war. Samples of the flour and biscuits are to be seen in the cases of the London Institute of Hygiene, and Manna milk has been for years-and, no doubt, still is-sold here under the name of 'Solac' at a price considerably lower than that charged for milk by dairymen. The appearance and rapid rise into importance of the Soya bean is one of the most remarkable commercial events of modern times."

"In 1790 the [soy] bean was brought to Europe when its cultivation was first attempted by Young [Arthur Young, lived 1741-1820 in England], the father of British Agriculture, though without success. In 1878 an Austrian professor, Haberlandt, tried it, but failed [Note 1. Haberlandt did not fail; he successfully cultivated soybeans in Austria as early as 1875, and many times thereafter.] When the bean came here in 1908 there was an immediate rush to grow it both in Europe and America. Experiments were started by our Board of Agriculture, the Royal Agricultural Society, and many semi-public bodies. The early experiments failed completely, for the reason that they were made with seed whose climatic origin was unknown, as well as the orthodox Chinese methods of growing it. Later, this was remedied..."

By 1918 Europeans were aware of 500 different soybean varieties that were growing experimentally at Arlington,

Virginia.

"My interest in the Soya bean began in 1913 with a visit from an agent of a German cultivator at the office of the Royal Botanical Society at Regent's Park. He was, he said, trying to form a syndicate to grow what he called an acclimatised Soya bean, brought from China in 1910, and already in cultivation in Germany. He refused seeds for testing, but sent from Hamburg a plant which had been carefully cleared of the seed, though the *empty* pods, nearly sixty in number, were left. The syndicate never materialised, and I thought no more of the matter, until later on, whilst examining the dried plant, I noticed a tiny pod, scarcely half an inch long, which contained a seed no bigger than a pin's head. Going over the plant I found other pods which evidently had been thought too insignificant to be of use, and from these I obtained thirteen seeds. These were sown in 1914 and resulted in thirteen plants, which produced four hundred and forty seeds. From thirty-three plants in 1915 one thousand seeds resulted, and in 1916 no less than twelve thousand. Many experiments as to the value of different methods of growing them were made in several countries, and with no less than twenty-one different foreign varieties. One thing came clear throughout the tests, and that was that the original variety started with was by far the best. It says a good deal for German astuteness that they should have gone to Manchuria and, from hundreds of varieties, chosen the one best for them and for us."

The future of the Soya bean in England is uncertain. "Natural selection helps the plants that mature earliest produce most seed; those that mature late die out. It is noticeable that the plants experimented with in England fruit earlier now than they did at first, and this is a very hopeful sign. Another satisfactory fact is that there is no lessening in the number of pods produced, but rather a gain. This year there are plants with three times the number of pods shown in a photograph of the best German-grown specimen of 1912."

In China and Japan the Soya bean "enters into the composition of most dishes, and in one form or another, as Soy sauce, bean paste, bean cheese, bean curd, bean milk, bean wafers, bean cakes and confectionery, is used everywhere. For a hundred years Soy sauce has been imported-the principal ingredient in the well-known Worcester [Worcestershire] sauce."

Apart from its value as a food, it is used in the manufacture of glycerine, explosives, enamels, varnish, varnish, waterproofs, linoleum, paints, soaps, celluloid, printing inks, and as a lubricant."

Photos (all but #1 by Frank N. Meyer of the USDA) show: (1) A typical pod from a soya bean plant grown by Mr. J.L. North at Chiswick, England, in 1921. (2) Two large, thin "blocks of tofu (bean curd)" on a round, wooden table. "Soya bean cheese for human food... Ready to be cut up into squares for sale to the public. Tofu, or Soya bean curd, is

made by adding magnesium or calcium salts (about a 1 per cent. solution) to hot Soya bean milk; the product is drained and pressed. (3) "Varieties of soya bean cheese on a bamboo tray. Tofu, or Soya bean curd, forms the basis of many fermented, smoked, and dried cheeses in China and Japan." (4) "Soya bean cheese [fermented tofu] in preparation: A pile of wooden trays full of bean curd in a dark room of even temperature." (5) "Used by the Chinese as a green vegetable: A basketful of sprouted soya beans." (6) Soy bean plant with leaves, many pods and roots, grown at Chiswick.

Note 2. This is the earliest document seen (March 2002) written by Mr. J.L. North, the pioneer in cultivating soybeans in England.

Note 3. This is the earliest English-language document seen (March 2010) that uses the term "soya bean cheese" (or "soya-bean cheese") or the term "soya bean curd" to refer to

Note 4. This is the earliest English-language document seen (July 2007) that uses the term "magic bean" or that uses the word "magic" as an adjective to refer to the soybean.

Note 5. Concerning Arthur Young. He was the author of many books on agriculture, which were very influential in their day. He was an important advocate for the progressive agricultural practices of his time, advocating such innovations as the seed drill, improved crop rotations, the use of marl as fertilizer, and the enclosure of open fields. In 1767 he undertook the management of a farm in Essex. He conducted various experiments and published the results in A Course of Experimental Agriculture (1770). In 1784 he began the publication of the Annals of Agriculture, a periodical which was continued for 45 volumes and had many contributors. Young traveled to France during 1787-89 and in 1792 published an important book about his travels and observations there. The soybean was first grown in Paris, France, perhaps as early as 1740, definitely by 1779. So he may have learned about soybean from fellow agriculturalists in Paris while on this trip. Address: Curator of the Royal Botanic Society of London.

- 356. Kirkman, Laura A. 1922. Efficient housekeeping: Chinese chop suey in the guest luncheon menu. Los Angeles Times. April 15. p. II8.
- Summary: One of the ingredients is "'Soye' (the Chinese Worcester sauce)." Recipes are given for both Chicken chop suey and Pork chop suey. The ingredients for each include "1 tablespoon of soye."

"To adapt these recipes for our table without any of the real Chinese ingredients, simply drop the Chinese ingredients, use a few drops of Worcester sauce instead of soye:..."

357. Arnolds. 1922. The markets that set the pace (Ad). Toronto Daily Star (Canada). Aug. 24. p. 16.

• Summary: "Holbrook's Worcestershire Sauce. Imported

bottle 25¢."

358. Vesta. 1922. Women to women: Welfare of the young. Argus (The) (Melbourne, Victoria, Australia). Aug. 30. p.

• Summary: The recipe for Worcestershire sauce (p. 5) calls for "1 pint of Indian soy sauce."

359. Quebec Daily Telegraph (Canada). 1923. Chop suey. Jan. 29. p. 4.

• Summary: This recipe, by Bertha E. Shapleigh, of Columbia University, calls for "2 tablespoons Soyu Sauce."

In the instructions is a section which reads: "Soy bean sauce: The Shoyu or Soyu Sauce is the Worcestershire of China. It is made from the soy bean and gives the characteristic flavor found in Chinese food. If it cannot be purchased, use Worcestershire, one tablespoon, and a little salt. The Soyu sauce is salty and where used, no other salt is required."

Note: This is the earliest document seen (March 2012) that refers to soy sauce as "the Worcestershire of China."

360. Miami Daily Metropolis (Miami News). 1923. Chop suey. Feb. 9. p. 5.

- Summary: Note: This recipe first appeared in the Quebec Daily Telegraph (Canada) on 23 Jan. 1929, p. 4. It calls for "2 tablespoons Soyu Sauce" and has a section in the instructions titled "Soy bean sauce," which begins: "The Shoyu or Soyu Sauce is the Worcestershire of China."
- 361. Lea and Perrins. 1923. Lea and Perrins' Sauce (Ad). Times (London). March 20. p. 16, cols. 6-7.
- Summary: At the top of this display ad is an illustration of Worcestershire sauce being poured from a Lea and Perrins' bottle onto slices of bacon on a plate of bacon and eggs. Below that: "The eggs addressed the bacon thus:-'People hail the man who discovered that jelly went with a saddle of mutton, but some have not yet learned the joy of eating us with just a drop of Lea & Perrins' Sauce."

At the left in a sidebar: "Free. A cookery book that contains 150 delightful dishes. New ideas for soups, salads, curries and ragouts-new fish, egg and casserole dishes... Sent free on receipt of a penny stamp to cover postage. Lea & Perrins, 2 Midland Rd., Worcester." An illustration shows the cover of the booklet titled "Kitchen Recipes for Lea & Perrins' Sauce." Across the bottom of the ad: "The original Worcestershire. 'The first thing to reach for.' Address: [England].

- 362. Bidwell, Emelia. 1923. Kitchen recipes: The chef's suggestions for seasoning over one hundred and fifty dishes with Lea & Perrins' sauce. Worcester, England: Lea and Perrins. 46 p. 18 cm. *
- Summary: A booklet of recipes advertising Lea & Perrins'

Worcestershire Sauce. Address: [England].

363. Church, Margaret B. 1923. Soy and related fermentations. USDA Department Bulletin No. 1152, 26 p. May 12. [27 ref]

• Summary: This long and very informative paper, with its excellent bibliography and review of the literature, is the third earliest study seen of a fermented food published by a USDA researcher. The focus is on Japanese fermentations because of the laboratory's contact with Japanese researchers, such as Dr. T. Takahashi and Dr. G. Kita. "The experimental work reported here was conducted under the direction of Charles Thom, mycologist in charge, Microbiological Laboratory, Bureau of Chemistry."

Contents: Introduction. Work of previous investigators. Experimental work: Apparatus, material, preparation of ingredients, shoyu-koji, peanut press cake koji, shoyumoromi. Proportions of ingredients. Yields. Chinese soy sauce. Peanut sauce. Relation of enzymic activity to soy processes. Manufacture in the United States. Related fermentations (Miso, soy cheese [fermented tofu], natto). Summary. Bibliography. "Soy sauce is a dark-brown salty liquid made by the fermentation of soy beans with, as a rule, some additional starchy component. It is widely used as a seasoning throughout Japan, China, and Java [Indonesia], and has been introduced into the Philippines and Hawaii* (* = See letter from C.W. Carpenter, Sept. 23, 1918). Where the occidental would use a vegetable or meat extract and salt, the oriental daily uses soy sauce. Americans are familiar with soy sauce as it is used in the Chinese-American restaurants and as an ingredient which produces the characteristic flavor of the Worcestershire type of sauce." In Japan, the process of preparing "shoyu-koji," a mold-fermented product made from "tane-koji," takes 3 to 4 days. "The mold-fermented material is emptied into a strong brine, thus producing a mash. Constant daily attention is given to aeration, even distribution, and stirring of the solid ingredients. Progressive changes take place over a period of from six months to several years, until at last the mature 'moromi,' as the mash is designated by the Japanese, is produced. These changes are due partially to the activity of bacteria and yeasts, but chiefly to the enzymes of the mold introduced into the mash with the koji."

"Experimental work: The Department of Agriculture had certain strains of the Aspergillus flavus-oryzae group of molds known to be used in making soy sauce. Through the courtesy of W.T. Swingle, of the Bureau of Plant Industry, a can of commercial Japanese rice tane-koji designed for shovu manufacture was also received. Dr. Gen-itsu Kita brought additional samples of shoyu tane-koji under sterile conditions directly from Japan. Provided thus with soy beans, wheat, and the mold ferment, experiments with soy sauce were undertaken by the Bureau of Chemistry in 1918.

(1) "Apparatus: The apparatus was made according

to specifications drawn by Doctor [T.] Takahashi, of the Imperial University of Tokyo, who worked in the bureau for a month." "The usual Japanese koji room (fig. 2) is 321/2 feet long, 11 feet wide, and 7 feet high. The walls are thick, and in the more modern factories are built of brick, which does away with fluctuations in the temperature from without. At one end of the room is an entrance and at the opposite end a window. In the ceiling several openings provide means of escape for the carbon dioxid [dioxide] and the damp air. Steam pipes along the floor make it possible to warm the room in cold weather. The ceiling is built with many layers of straw in order that the condensing moisture may be absorbed. One disadvantage of such a ceiling is that infection always occurs in the wet straw. A large area of infection directly over the piles of koji trays is detrimental to the production of sweet koji. In modern buildings, therefore, the surface of the ceiling is coated with cement. When a cement ceiling is used the condensed water drops on the trays of koji, which also is harmful... The burning of sulphur is useful in combatting any infection of a koji room."

Material: "The mold ferment employed in shoyu-koji manufacture is Aspergillus flavus Link, occasionally A. oryzae (Ahlb.) Cohn, or strains intermediate between the two species." "Certain Japanese manufacturers add cultures of pure yeast belonging to the genus Zygosaccharomyces at the time of placing the first mold-fermented material in the brine."

Preparation of ingredients: While soaking the soy beans, the water should be changed at intervals of several hours to prevent the formation of spore-forming rods, which cause heating and souring. The spores of these bacilli are on the beans as they come from the field. "After being soaked for 20 to 24 hours the swollen beans are cooked in an open kettle or under pressure until they are soft enough to be easily pressed flat between the thumb and finger. This desired softness can be obtained by autoclaving at 15 pounds pressure for 50 minutes and also by much longer cooking in an open kettle. Autoclaving under pressure has the advantage of sterilizing the material." After roasting, the wheat is crushed or cracked. It is important to "reduce some portions of the kernel to a fine powder or dust." The cooked beans and cracked wheat are "mixed in large trays or on mixing tables." Hot beans "may be cooled with a draft of air directed over a thinly spread layer." These "two ingredients need to be thoroughly mixed, so that the wheat dust may form a coat over each bean. The lower water content thus induced on the exterior of the beans makes them better adapted to mold growth than to bacterial growth."

"Shoyu-koji-Ripening: After the beans and wheat are thoroughly mixed, a very small quantity of previously molded material, such as mature rice koji (tane-koji), some shoyu-koji, or a pure mold culture, is thoroughly mixed into the ingredients. The whole mass is then distributed into the small flat koji trays (Plate II, inserted between pages 4 and

5) which are immediately placed into the koji fermentation room before they cool further. Each tray holds about 1.8 liters, or about 2 quarts of raw material. The koji trays are placed in tiers along the wall of the room (Fig. 3)." They are usually stacked in a zigzag fashion to ensure adequate aeration. This is extremely important "because moisture and the lack of oxygen induce the development of mucors and bacteria, and are said to cause the diastatic enzyme to develop at the expense of the proteolytic enzyme. In some localities in Japan no such trays are used, but a broad straw mat with which very good koji can be secured." "The koji room or compartment is kept at a temperature of 24° to 25° C., with a definite humidity." Continued. Address: Microanalyst, Microbiological Lab., Bureau of Chemistry [USDA].

364. Manchester Guardian (England). 1923. The winter hoard: Sauces and pickles. Aug. 27. p. 4.

• Summary: "At this time of year the wise housewife will see to the replenishing of the shelves in her store cupboard. Not only should jams and jellies be made, but various kinds of sauces, pickles, and chutneys..."

After the recipe for "Tomato ketchup" is a recipe for "Worcester sauce" as follows: "1 pint Indian soy [sauce]. 1 oz. ground black pepper. ½ oz. powdered mace. ½ oz. bruised cloves. ½ oz. cayenne. ½ oz. peeled garlics. 8 oz. shallots. 2 quarts vinegar.

"Put the mixture into a large brown jar and let it stand for a fortnight, closely covered. At the end of the time turn the mixture into a large pan and simmer for three-quarters of an hour. Then strain and bottle for use."

Note: Soy sauce is the main ingredient in homemade Worcestershire sauce in a British newspaper.

365. Loblaw Groceterias Co., Limited. 1923. Proof: That our modern system pleases the careful buyer is the large crowds that throng our 17 busy groceterias each week (Ad). Toronto Daily Star (Canada). Oct. 11. p. 6.

• Summary: "Harvey's Worcestershire Sauce bottle 11¢." "We sell for less." The address of each of the 17 groceterias is given.

366. Beeton, Isabella Mary (Mayson). 1923. Mrs. Beeton's cookery: Practical and economical recipes for every-day dishes, and general cooking instructions in marketing, trussing, cookery, etc., invalid cookery, labour-saving, carving, etc. New edition. London and Melbourne: Ward, Lock & Co., Ltd. 256 p. See p. 136. With 100 illust.

• Summary: Contains a recipe for Worcestershire Sauce (p. 136), which reads: "Worcester Sauce. Ingredients-1 quart of best brown vinegar, 6 tablespoonfuls of walnut ketchup, 5 tablespoonfuls of essence of anchovy, 4 tablespoonfuls of soy, ½ a teaspoonful of cayenne, 4 finely-chopped shallots, salt. Method-Put all these ingredients into a large bottle,

and cork it closely. Shake it well 3 or 4 times daily for about 14 days, then strain the sauce into small bottles, cork them tightly, and store in a cool, dry place. Time-2 weeks."

The author lived 1836-1865. Address: England.

367. Moore, Alice. 1923. Chinese recipes: Letters from Alice Moore to Ethel Moore Rook. Garden City, New York: Doubleday, Page & Co. 113 p. 10 x 13 cm.

• Summary: The Preface (p. viii to ix) states: "The Chinese use no butter, no milk, no cheese, and no bread." "One of the most startling differences between this cuisine and ours is the complete absence of salt. Its place is taken by a sauce made from the soy, or soya, bean. The beans are allowed to ferment in big pots for two months under the blazing sub, an enormous amount of salt and other seasoning is added during the process and the result is an inexpensive brown sauce which is very salt [sic, salty?] and very appetizing. It is much like Worcester sauce of which it is the base. Soy may be had in bottles or in imported brown jugs.

"The fat used in these recipes is always sesame oil, made from the sesame seeds. It has a more delicate flavour than peanut oil which is sometimes substituted. Like soy sauce, it is inexpensive, like it also it gives a piquant flavour to ordinary dishes."

Page 3: "North (the Chinese use the points of the compass always, and always correctly, I mean in front, right being east) is a dish of Chinese (Soy) sauce."

This book contains 66 recipes. On page 104-05 is a recipe for Buddha Dish, which calls for "1/2 cup of fried bean curd and 1/4 cup of soy sauce."

Note: A review of this book in the *New York Times* by Nicolas Poussin (16 Dec. 1923, p. BR20) begins by asking if anything will ever dethrone the French culinary art, then adds: "But Alice Moore,... who has lived a dozen years in China, eaten all manner of things in the East and Near East and is familiar with American and European cooking, awards the palm for delicious cookery to the Chinese. Again and again she emphasizes her conviction that the Chinese are 'past masters of the culinary art' and the best cooks in the world." Among the dishes "declared to be delicious by the author [Poussin] are... tea eggs-made by soaking hard boiled eggs in a concoction of hot water, soy sauce, tea leaves and cinnamon..."

368. Loew, Oscar. 1924. The soy bean, a superior crop. Porto Rico Agricultural Experiment Station, Agricultural Extension Notes No. 64. p. 1-2. Jan. 15.

• Summary: "The soy bean originated in Eastern Asia and has been introduced during the past 30 years into different countries of the world. It can be grown successfully even in a rather poor soil, in the absence of nitrogenous manure, provided the specific root-nodule bacteria are present. This plant is far superior to other leguminous crops, even those very rich in protein, as the lupin, which it equals in protein

and highly surpasses in fat content. In fact, the soy bean is richer in fat than all other leguminous crops and is, therefore, sometimes called the oil bean. The soy bean does not contain alkaloids and bitter tasting matters like the lupin..."

A table compares the nutritional composition of the pea, common bean, lupin, and soy bean. "From the analyses it would appear to be of great advantage for the people of Porto Rico to replace the common bean now serving as an essential part of the daily food, by the soy bean, it providing a higher percentage of protein and fat... Since the Soy bean needs prolonged boiling until it reaches a sufficient degree of softness, it is best soaked for a day in water to which some soda and common salt are added (about a teaspoonful of each to half a liter) followed by washing two to three times with fresh water and then boiling for an hour or so. The taste of this dish is very agreeable.

"In Japan the soy bean serves for several preparations, called 'tofu,' 'yuba' and 'miso,' which might be prepared in Porto Rico. Also, a dressing or condiment similar to the English Worcestershire sauce, is prepared from the seeds." The preparation of tofu is described. It is "generally fried like cakes and represents an excellent food."

"The milky liquid can also doubtless be used as a suitable nutrient, but it can never replace the mother's or cow's milk for children, since the lime content is exceedingly small and the protein differs widely from the casein of the milk.

"In our trials with soy beans at the Experiment Station, Mayaguez, the results at first were disappointing. This was found to be due to the fact that the soil was not inoculated with the proper bacteria for assimilating nitrogen for the roots. We now have inoculated soil, and before planting on ground new to this crop inoculating material should be secured from the Station for mixing with the seed at the time of planting. When the soil is once inoculated it will remain so for all succeeding crops."

Note: Who was Dr. Oscar Loew and how did he learn about soyfoods? From 1897 to 1906 he was a Professor of Agricultural Chemistry at the Imperial University of Tokyo, Japan, where he wrote articles about soy sauce, tofu, soymilk, and yuba. In 1911 he was in Munich, Germany, where he wrote an article about soymilk. When he speaks of "our trials with soy beans at the Experiment Station, Mayaguez," he seems to indicate that he was living at the Station in Porto Rico in about 1924. Address: Mayaguez, Porto Rico.

369. Hamburger's 1924. The Lenten menu... (Ad). Los Angeles Times. March 6. p. 8.

• Summary: This ad features the "Delicatessen Department." Under fish sauces: "Harvey's Sauce, Japanese Shoyu Sauce, Oyster Cocktail Sauce, Tartar Sauce, Escoffier Sauce Diable,... Lee [sic, Lea] and Perrin's Genuine Worcestershire Sauce."

An illustration shows two people dining at a table with candles.

Note: Hamburger's was renamed "The May Co." (at the same location) by Sept. 1924. Address: Broadway at Eighth-Groceries-Fourth Floor. Phone: Broadway 3940.

370. Lea and Perrins. 1924. Lea & Perrins' Sauce (Ad). Times (London). April 24. p. 5, cols. 6-7.

• Summary: "... is half the battle in preparing delightful dishes-Never be without it in the kitchen." At the left of this display ad is an illustration showing the cover of a booklet titled "Kitchen recipes for Lea & Perrins' Sauce." Across the bottom: "Free to housewives-The Lea & Perrins' Recipe Book, containing over 150 suggestions for new dishes. Send ½d. stamp for return postage with your name and address to Lea & Perrins, 2, Midland Road, Worcester." Address: [England].

371. Eddington, Jane. 1924. The Tribune Cook Book: Condiments. Chicago Daily Tribune. Aug. 28. p. 21.

• Summary: "... horseradish, chili sauce, Worcestershire and soy sauces and ketchup are reckoned as condiments. In fact a condiment often means a mixture of spices with some fruit or vegetable base."

"... the chili sauce is not strained or sieved and the ketchup is,..."

372. Bean-Bag (The) (Lansing, Michigan). 1924. Manchuria: Home of the soy bean. 7(6):11-12. Nov.

• Summary: This article is based on (and quotes widely from) a bulletin released by the National Geographic Society (Washington, DC).

"Manchuria's major crop is the soy bean—and it is soy bean sauce which lends flavor to chow mein, chop suey, yakamin [sic], and other American versions of Chinese cooking.

"The soy bean's rise from obscurity, only 15 years ago, to its present importance is a wonder of modern commerce."

"Not only does the soy bean provide a sauce which is the Worcestershire of China, but it also masquerades as cheese [tofu], candy, fertilizer, flour, oil for lighting and lubricating and it does further duty in waterproofing umbrellas and cloth.

"The Japanese use it widely [in the form of kinako, or roasted soy flour] as the basis of confectionery. In this form it is highly palatable and the Japanese consider their candies and pastries more wholesome than ours-indeed they are appalled by the quantity of sugar which Americans consume."

"Only a fraction of the bean oil that comes to this country is used in edibles. Much of it is utilized in making soaps, paints, lubricants and toilet powders. After oil is extracted from beans and the residue is made into bean cakes. These are manufactured extensively in Mukden. They are retained in the east, and serve as fertilizer and cattle feed both in China and Japan.

"Aware of its enormous soy bean crop, and its heavy yield of sorghum and millet, the visitor expects to see great farms of these products. The Manchurians, like most Chinese, are gardeners rather than farmers. The vast aggregate of these grains and vegetables come from patches of an acre or so. Tens of thousands of farmers with tens of thousands of the primitive plows, shaped like crude shovels, turn up millions of ridges, and drop seeds into the loose earth. Then they run a roller over their patches and wait until it is time to spread their beans or their grain on clay floors. They thresh the grain with flails or with oxen to trample it.

"Southern Manchuria has the best railroads in China; some of the busiest cities, such as Mukden, Harbin, Kirin, and Port Arthur; and its general prosperity is high."

- 373. NZ Truth (National, New Zealand). 1924. Answers to correspondents. Dec. 6. p. 14.
- Summary: "A highly recommended recipe for home-made Worcester Sauce is the following: 1 pint Indian soy [sauce]; 1 oz black pepper; 1 oz powdered mace,..."
- 374. Lea and Perrins. 1925. A steak and-Lea & Perrins' Sauce (Ad). Times (London). March 18. p. 5, col. 7.
- Summary: "'What may I get you, Sir?' The waiter turned to my friend.

"'Tigers!' replied the little man fiercely, 'Tigers! Why, I've killed scores of them. Shooting big game my dear fellow is a passion with me-I revel in it. I was born for it." The long dialogue ends with this: "The waiter interposed. 'Pardon me, Sir, but you said steak and -?'"

Below this: "Lea & Perrins Sauce." At the top of this display ad is a stylized illustration of a waiter, dressed in a black tuxedo, with a white napkin draped over his left forearm. Address: [England].

- 375. Cottington-Taylor, D.D. comp. 1926. Subtle seasoning: A little book of recipes [1st ed.]. Worcester, England: Lea and Perrins Ltd. viii + 54 p. Introduction by X. Marcel Boulestin. Illust. (by John Austen). Recipe index. 20 cm.
- Summary: A booklet of recipes that call for Lea & Perrins' Worcestershire Sauce. Contents: Introduction by X. Marcel Boulestin. Some domestic details of interest to the young hostess, Mrs. D. D. Cottington-Taylor. The recipes: Stocks and soups. Fish dishes. Egg dishes. Curries. Meat and entrées. Sauces. Salads.

The Lea and Perrins' sauce bottle, with its distinctive orange label, is shown on the front cover (see next page). Address: Director of Good Housekeeping Inst. [England].

376. Freshel, Maud Russell Lorraine (Mrs.). 1926. The golden rule cook book: Six hundred recipes for meatless dishes. Originated, collected and arranged by M.R.L.

Freshel. New ed. New York, NY: Dodd, Mead and Co. 323 p. Illust. Recipe index. 21 cm.

• Summary: This important, well written, early vegetarian cookbook was first published in 1908 under the title Six hundred recipes for meatless dishes. The author's full name was Mrs. Maud Russell (Lorraine) Sharpe; thus her maiden name was Maud R. Lorraine. Born in 1867, she sometimes writes her first name "Emmarel."

This 1926 edition is very similar to the 1908 edition except for four things: (1) There is a new publisher, Dodd, Mead in New York. (2) The copyright page uses the 1910 copyright date, but lists a 4th printing in Feb. 1926. (3) The Preface is titled "Preface to the Fifth Edition." (4) At the end of the Preface we read: "M.R.L.F., New York, Feb., 1926." Address: Providence House, Chestnut Hill, Massachusetts.

- 377. Horvath, A.A.; Liu, Shin-Hao. 1927. The effect of soy sauce on blood sugar and phosphorus. Japan Medical World 7(4):105-08. April 15. [18 ref]
- Summary: "Introduction: Shoyu, or soy sauce, is a darkbrown, moderately thick liquid, very popular in China and Japan as relish or condiment to increase the flavor and palatability of the diet (Footnote: The now famous Lea and Perrins Worcestershire Sauce is a highly spiced soy sauce). In order [sic, odor] and taste it is not unlike a beef extract of good quality."

"Summary: 1. In rabbits, subcutaneous injections of Taka-Diastase gives no definite results for conclusions, but seems to be capable of affecting the blood sugar in both directions. 2. In men the results of oral administration of soy sauce are varying and at present no definite conclusion concerning the effect of soy sauce on blood sugar and phosphorus can be drawn. But in some cases soy sauce seems to be capable of affecting the blood sugar and blood phosphatides." Address: Dep. of Medicine, Peking Union Medical College, Peking, China.

378. Toronto Daily Star (Canada). 1927. Odd queries answered. Oct. 6. p. 33.

- Summary: "Q. How is plain chop suey made?
- "A. Use 8 pork chops, 3 stalks celery, 2 cups of mushrooms and 2 large onions." Plus other ingredients. Chop, blend and fry "until brown, then add the mushrooms, onions and celery, 1 tablespoon of Worcestershire sauce, 3 of bean sauce [soy sauce] and 1 cup of wheat sprouts, if desired." Stirring constantly, cook until brown and thick.
- 379. Lea and Perrins. 1928. Fish, flesh, fowl-With every course ask for Lea & Perrins Sauce (Ad). Times (London). July 19. p. 12, cols. 6-7.
- Summary: Printed in bold letters across the bottom of this display ad: "Make sure of the original Worcester [sic, Worcestershire] sauce! Say 'Lea & Perrins, please.'" An illustration at the upper left shows a waiter (standing)



looking down at a gentleman seated, with a table napkin in both hands. Address: [England].

380. Good Housekeeping. 1928. Confidence creates sales: Everywoman's magazine. Every manufacturer's market (Ad). New York Times. Sept. 24. p. 10-11.

• Summary: "Ask any of the more than 1,600,000 progressive Good Housekeeping families what monthly page in the magazine serves them as a Buying Directory. They will reply out of their satisfactory experiences: 'Good Housekeeping's Index of Guaranteed Advertisements!"

"Herewith we present a list of advertisers in October Good Housekeeping..."

The category "Food products" includes Grape Nuts, Kellogg's All Bran, La Choy Chinese Food Products, Lea & Perrins' Sauce, etc. Address: New York, Chicago, Boston, Detroit, San Francisco.

- 381. Babinski, Henri (Ali-Bab). 1928. Gastronomie pratique: études culinaires suivies du Traitement de l'obésité des gourmands [Practical gastronomy: Culinary studies aimed at treating the obesity of gourmands. 5th ed.]. Paris: Ernest Flammarion. 1281 p. 29 cm. [Fre]*
- *Summary:* The author (whose pseudonym is Ali-Bab) refers to soy, Worcestershire, catsups, tabascos and other such frequently bought condiments as "sauces violentes" which mask out all other flavors.
- 382. Babinski, Henri (Ali-Bab). 1928. Gastronomie pratique: études culinaires suivies du Traitment de l'obésité des gourmands. Huitième ed. [Practical gastronomy: Culinary studies aimed at treating the obesity of gourmands. 8th ed.]. Paris: Ernest Flammarion. 1281 p. 28 cm. [Fre]
- Summary: In the chapter titled Pâtes. Légumes secs. Légumes verts is a recipe (p. 874) for Soja au jus which calls for 1,000 gm soy sprouts (germes de soja), 100 gm veal or poultry, 40 gm butter, 40 gm white wine and salt and pepper

In the chapter on Salades (Salads), after the recipe for Salad of salsify are two notes (p. 957): In the same spirit, one can prepare salads of artichoke hearts, of crosnes (an edible tuber), of soy sprouts (germes de soja), etc.

One can also add relish to a salad with a little Worcestershire sauce, to taste.

Various editions of this book were published but all those from 1928 on have the same number of pages (1283 p.): 2nd ed. 1912. 3rd ed. 1923. 5th ed 1928. 8th ed. 1950. 9th ed. 1967.

The Joy of Cooking (1963, p. 542) states that the author "refers to soy, Worcestershire, catsups, tabascos, and other such commercial condiments as 'sauces violentes,' which mask out all other flavors." Note 1. We have been unable to find the page on which this statement appears.

Note 2. The author, whose real name was Henri

Babinsky, was of Polish ancestry, born in 1855 in Paris and died in 1931. The 1st edition (314 p., 20 cm) was published in 1907 by the same publisher in Paris. The 2nd edition (636 p., 26 cm) was published in 1912.

383. Fortune. 1930. Soy beans: Which may be glue, milk, cheese, sauce, varnish, axle grease, fertilizer, soap, soup, buttons, artificial leather, enamel. 1(5):102, 104. June.

• Summary: Discusses the history of the soybean in various countries. Its uses in the United States are outlined. A plastic named Satolite is used to make combs and buttons. In "Paris there is a cheese factory that makes Rocquefort [Roquefort] from soy bean curd." Soy bean "milk has more proteins than cow milk and little danger of contamination. Its flour contains four and one-half times more fat, four times more proteins, half as much water, and nearly half as many carbohydrates as the flour of wheat. These chemical ingredients make it a food, more interesting, perhaps, than palatable. Though the milk is supposed to be good for one (it arrests cases of retrogression, causes normal growth), it has generally to be drunk sweetened with sugar. Soy bean sauces are better spiced. (For the Chinese taste Lean & Perrins Worcestershire is too hot. The Chinese themselves make their sauces by exposing the crushed bean to sunlight and actually melting it. Certain Korean sauces are thus matured thirty years before they are considered palatable.) But if the bean's chemical make-up only indirectly contributes to its success as human food, it is nevertheless the basis of the bean's industrial importance. Because of its nitrogen, the bean is valuable as fertilizer and also as poultry and stock feed. And the bean's hereinbefore mentioned oil has proved of value to many a manufacturer of paints, enamels, lacquers, and even explosives."

The Anglo-Chinese Company at Harbin and the Suzuki Mill at Dairen, both of which use chemical solvent extraction, have succeeded in extracting virtually all of the oil from the soybean; Manchuria's traditional crude stone presses were able to extract only about half the soybean's oil content.

"Perhaps the greatest economic and industrial triumph of the soy bean occurred, oddly enough, in Denmark. Until some thirty years ago this pleasant country was more than self-supporting in the production of cereals, especially wheat. But U.S. mass production and low prices made for perilous and in some cases disastrous competition, even in Denmark's home markets. The Danes bethought themselves of raising live stock, imported the soy bean (using the oil for its usual purposes), and used it as feed for their live stock and poultry. Today 70 per cent of Denmark's export trade consists of live stock and animal products: milk, butter, cheese, bacon, ham, eggs, and the like. And for their country's regained economic health Danes give thanks to the soy bean...

"In the United States the paramount importance of soy bean is still its agricultural use. But it is significant

that 75 per cent of the soy bean oil consumed in United States is being used by paint and varnish industries and in manufacture of linoleum, oil cloth, artificial leather. Lesser quantities are utilized in printer's ink, liquid soaps. Few soy beans are imported into this country."

Note: This is the earliest English-language document (Feb. 2007) seen that contains the term "mass production."

384. May Company. 1930. The May Company's market: The world's finest foods moderately priced (Ad). Los Angeles Times. Oct. 19. p. B26.

• Summary: "Genuine soy sauce: the Worcester of China: from black soy beans-75¢."

"'Maggi' seasoning. Vegetable essence from Switzerland. For salad, soup, stew!–90¢. Also in \$5 bottles.

Note: Several earlier documents suggest that miso was used as an ingredient in Maggi.

385. Horvath, A.A. 1931. The soy bean as human food. Industrial and Engineering Chemistry, News Edition 9(9):136. May 10.

• Summary: Contents: Historical background. Properties and uses. Growing interest in soy bean preparations in different countries. Soya foundation proposed.

This article begins: "The soy bean is a plant of early cultivation in China. Its use dates back to the beginning of China's agricultural age under the Emperor Shen Nung. It is mentioned in the Ben Tsao Gang Mu, the ancient 'Materia Medica' written in the year 2838 B.C. This bean is remarkable for its richness in oil (average 20 per cent), protein (average 40 per cent), and ash (average 5.5 per cent), and the almost complete absence of starch.

"Since time immemorial the soy bean has been the most universal article in the Chinese dietary. It is also extensively used for food in Korea, Japan, Indo-China, the Philippine Islands, the Dutch Indies, Siam, and India. The Chinese make practically no use of dairy products, and the bulk of the people consume a very meagre amount of meat. Yet, in spite of this, they have lived for centuries on what appears to be a remarkably well-balanced diet by the use of the soy bean."

Also discusses: Soy bean milk, tofu, fried tofu ("called in China 'the meat without the bones'"), miso, chiang, Worcestershire sauce ("liquid soy sauce... when spiced, is sold under the label 'Worcestershire sauce.'"), W.J. Morse of the USDA, soy bean foods in Europe, Prof. Berczeller, and work at the Physiological Institute of the University of Vienna under Prof. Durig and Dr. Wastl.

"In Russia, the soy bean is fondly called 'our young revolutionary Chinese ally.' 'Plant soy beans and you plant meat, milk, egg omelets,' is the newspaper cry. Efforts have been made all year to introduce soy bean dishes to restaurants and homes. A Soy Institute was recently organized in Moscow, as well as a special exhibition of soy foods at which 130 varieties of soy dishes, including

cutlets, pastry, salads, candy, and beef, were shown. A dinner, prepared entirely of soy beans, was served to representatives of trade unions, factories, Red Army, and the Soviet press. The food was unanimously declared excellent...

"Soya foundation proposed: There are reasons to expect that the United States will become the leader in introducing the soy bean in the daily diet of the white race. An important step should be the establishment of a soya foundation in order to promote the creation of a national soya food research institute." Address: Health Section, Bureau of Mines, Pittsburg, Pennsylvania.

386. Blumenthal, Saul; Thuor, L. 1932. Worcestershire sauce manufacture. Fruit Products J. and American Vinegar Industry. March. p. 207, 223.

• Summary: "Most people who are uninformed about the preparation of Worcestershire Sauce are generally under the impression that it is a very simple matter to make this product. This is not so, however. A Worcestershire Sauce of good quality represents a combination of nourishing foods, the essential ingredients being soy sauce, vinegar, extractions of spices and seeds, sugar, salt, water, beef extract, gums and other less important ingredients. The soy sauce is made from soybeans, abundant in proteins and amino acids. Its flavor is characteristic of the taste of the Orientals.

"The soy sauce is the fundamental ingredient of Worcestershire Sauce. A discussion of the method of making the sauce in the Orient may be of interest to the reader." A description is given, but it is not clear in which country this soy sauce is made; it is probably made in China since so much molasses / sugar is added. "As a rule, the above natural soy-sauce is diluted with blackstrap molasses and exported to America. The extent of the dilution depends upon the price paid for the sauce. The United States Department of Agriculture has no definitions or standards for Soy-sauce. Therefore, one must depend entirely upon the chemical examination to find out how much soy-sauce is present and also upon the organoleptic examination. The findings, given below, show the average chemical examination of soy-sauce shipped into this country over a three-year period: Total solids 77.5%, protein (N x 6.25) 1.93%, ash 9.4%, salt 3.13%, reducing sugars 19.62%, cane sugar 29.70%, corn syrup 0.00%.

"The following is a typical formula for a good quality Worcestershire Sauce. This makes 100 gallons. Cider vinegar 50 gallons, spiced vinegar 10 gallons, soy-sauce 15 gallons, walnut catsup 15 gallons, pure lime juice 1 pint, terpenless [sic, terpeneless] oil of lime 30 drops, sugar 10 pounds, table salt 15 pounds, water to the 100 gallon mark, Galagum C 6 pounds." Details are given on how to make the spiced cider and the walnut catsup used in the Worcestershire Sauce recipe. The latter contains 3 gallons of soy sauce, the main ingredient other than water.

"The spices are thoroughly mixed with the vinegar and

allowed to stand for several weeks before use. In transferring the required amount of this spiced vinegar to the main formula run same through several layers of cheese cloth to remove large pieces. Mix in the other ingredients in the order described in a wooden tank with a stirring paddle. Run through a 20 or 30 mesh screen to filter out solid particles, then fill the finished sauce into bottles or kegs." Address: Shirley Laboratories, New York.

387. Williams, Edward Thomas. 1932. China yesterday and to-day. 5th ed., revised. New York, NY: Thomas Y. Crowell Co. xxiv + 743 p. Illust. (plates). Portraits. Map. Index. 22 cm. Previous editions were 1923, 1927, 1929. [369* ref] • Summary: This remarkable, sympathetic and very comprehensive book has been revised to May 1932. The author has lived for many years in China, starting before the downfall of the Manchu Dynasty, and for 35 years has had close association with Chinese affairs. The 1st edition was published in 1923. While focusing on the Era of Reform (1902-1911) and the period of the Chinese Republic, established on 1 Jan. 1912 by Sun Yat-sen, the book contains many interesting features and appendixes, including a chronology of "Important dates in Chinese history" (p. 673-

680a), and a lengthy bibliography.

In Chapter 8, "The Craftsman," the section titled "Bean curd" states (p. 174-75): "I stopped at a neighboring door to watch a great, lazy-looking water buffalo turning a heavy mill-stone grinding beans. In a shop down the street the bean flour was being cooked, mixed with a little gypsum and turmeric to curdle it. The cooked paste, wrapped in cloths, was placed in a cheese press from which, after it should be properly solidified, it would be taken, cut into small cakes, and exposed for sale. It is the cheese of the Chinese and a very popular article of diet, rightly so, indeed, in a land where meat is too dear a luxury to be the daily food of the poor. There are several varieties of this bean-curd; one known as the 'stinking bean-curd' rivals the choicest cheeses of Europe in odor.

"At an oil-mill another variety of [soy] beans was being ground and pressed for its oil. The refuse finds a ready sale for fertilizing purpose. Vegetable oils are in great demand in China for culinary and other domestic purposes, animal fats not being abundant enough to supply the need. Besides [soy] beans, cotton-seed, rape-seed, peanuts, a variety of tea, or camellia seed, hemp-seed, sesamum, seed of the castor oil plant and nuts of the wood-oil tree are all used for this purpose. The oils of the cotton, rape, beans, hemp and peanut are all used in cooking, and the bean and rape-seed oils are also used for lamps [illumination]. The lamp of the poor man is merely a shallow cup with a spout at one side, like the classic lamp of ancient Rome. A piece of rush pith is placed in it for a wick. The soja bean is used for making soy, the common sauce of the rich and poor alike. It is said to have been suggested to the English [for] the manufacture of their

Worcestershire and other sauces."

Note: This is also the earliest English-language document seen (Oct. 2011) that contains the term "stinking bean-curd." Address: Agassiz Prof. of Oriental Languages and Literature, Univ. of California, Berkeley, California; Formerly American Chargé d'Affaires, Peking, China; Recently Chief of the Division of Far Eastern Affairs, Department of State (U.S.).

388. Bulletin des Matieres Grasses (Paris). 1932. Notes et brevets: La préparation de la Worcester sauce à base de soja [Notes and patents: The preparation of soy-based Worcestershire sauce (Abstract)]. 16(11):339-40. Nov. [Fre] • Summary: This is a French-language summary of a German-language article from Allgemeine Oel- und Fett-Zeitung (Oct. 1932). Address: Chimiste de l'Institut Colonial de Marseille [Marseilles], France.

389. Woodruff, Douglas. 1932. A gourmet's tour around old England: Every part of the tight little isle has its own tasty dishes, some of which the holiday season recalls. New York Times. Dec. 25. p. SM8. Sunday magazine.

• Summary: Worcestershire: No other county in England has a china so delicate and popular. No other county has the tomb of the famous King John. "And no other county has invented and popularized such a sauce, an imperious blending of cayenne, anchovy, soy and vinegar and walnut ketchup that overpowers and obliterates the quiet flavors of whatever may be eaten with it."

"It is even said, but not altogether truly, that Worcestershire sauce is the defensive mechanism of envious Worcester men driven mad by the odors of that [Shropshire]

A map shows England and its favorite regional or local foods-including Worcestershire Sauce. Address: London.

390. Leplae, Edmond. 1932-1933. Traité d'agriculture générale et de cultures spéciales des pays tempérés, subtropicaux et tropicaux [Treatise on general agriculture and special crops for temperate, subtropical, and tropical countries. 3rd ed. 2 vols]. Louvain, Belgium: Librairie Universitaire. Vol. 2, 796 p. See p. 306-07. 25 cm. [Fre] • Summary: The author classifies the soybean among the leguminous forage plants, among starchy (féculentes) plants, and among oilseeds. "Soybean seeds have a nutritive value for humans greater than that of all other seeds, except peanuts." The peoples of East Asia prepare soybeans and their flour in 100 different ways, many of which are now also known in Europe. The Chinese make from soybeans an artificial milk and a cheese [tofu]. Soy flour is easy to digest and can be mixed with wheat in making bread and pastries. The soybean is used in the production of so-called "English sauces" [such as Worcestershire], which are widely consumed in Europe and America. Finally, soybeans are

imported into Europe at the rate of 600,000 tonnes/year and the oil is used to make soap and margarine. Address: Prof. à l'Univ. de Louvain, Directeur général de l'Agriculture au Ministère des Colonies.

- 391. Cottington-Taylor, D.D. comp. 1932. Subtle seasoning 1932: A little book of recipes. 5th ed. Worcester, England: Lea and Perrins Ltd. 70 p. Illust. Recipe index. 20 cm. 1st ed.
- Summary: A booklet of recipes advertising Lea & Perrins' Worcestershire Sauce, The sauce bottle, with its distinctive orange label, is shown on the front cover (see next page).

Contents: Subtle seasoning: Introduction. Domestic details: Cooking terms explained, menu making, marketing guide, table appointments, hints on entertaining, a lesson in frying, cooking temperatures, some facts on Lea & Perrins' Sauce. Recipes: Soups, fish dishes, vegetarian dishes, meat dishes and entrées, rechauffé [reheated] dishes, sauces, salads, snacks meals and sandwiches, sandwiches and rolls. Lea & Perrins' Mayonnaise. Lea & Perrins' Salad Cream. Handy household hints. Address: Director of Good Housekeeping Inst. [England].

- 392. Lea & Perrins, Inc. 1932. Success in seasoning. New York, NY: Lea & Perrins. 49 p. Illust. (color). Index. 17 cm. Reprinted in 1934 and 1936.
- Summary: Recipes for using Lea & Perrins' Worcestershire Sauce. Contents: The art of serving appetizing meals. Appetizers. Soups. Fish. Meats. Eggs and cheese. Entrées. Sauces. Spaghetti and rice. Vegetarian dishes. Garnishes. Stuffings. Salads and salad dressings. Sandwiches. Bridge party and Sunday night supper dishes. Vegetables. Hot dishes for cold days. Relishes. Dishes men like. Items-Small but important [kitchen tips].

The inside front cover states: "Nearly a century ago, Lea & Perrins of Worcester, England, compounded a sauce from the recipe of an English nobleman, who had spent many years in India. They began production on a large scale, and its local importance was followed by ever increasing demand.

"Where the flag of civilization went, Lea & Perrins Sauce, the Original Worcestershire, followed. Scarcely a ship left Britain without a supply among its stores. Soon the great hostelries at the ports of call featured in their menu attractions. Branch distributing houses were established in all parts of the world, thus making it available at even the remotest points."

Note: Lea & Perrins, Inc., New York, NY, also issued the following leaflets and booklets, all of which are owned by the Texas Woman's University Library (Denton, Texas) and cataloged as Title: "Recipe leaflets collection. Corporate author: Lea & Perrins, Inc. Publication: New York, NY: Lea & Perrins, Inc. Year: 1934.

Success in seasoning (1934).

Success in seasoning (1936).

The secret of seasoning (1946).

Dishes men like (1952).

A guide to tempting dishes (n.d. [no date = undated]) [about 1950s].

Exciting ideas cookbook (n.d.) [about 1960s]. Light & elegant (n.d.) [about 1980s]. Address: 241 West St., New York, NY.

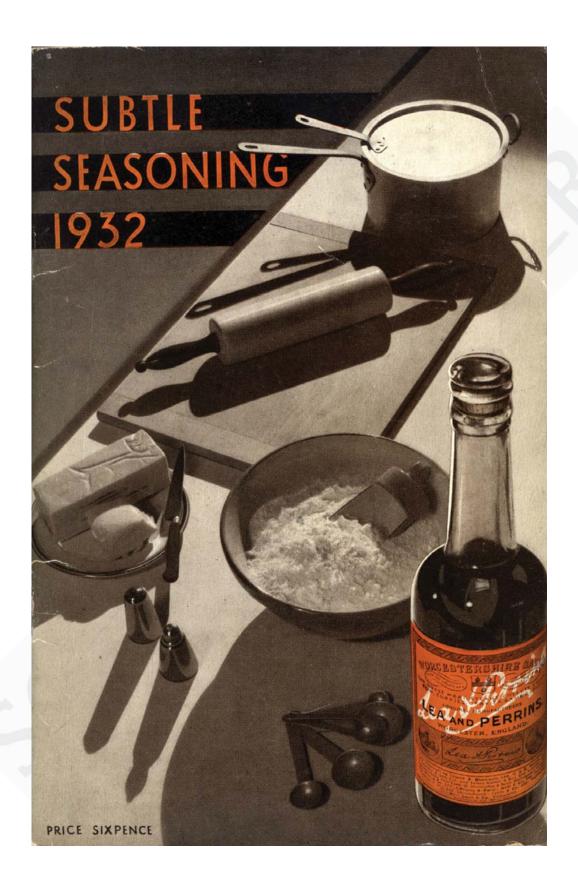
- 393. Baker, Wilson; Robinson, Robert; Simpson, N.M. 1933. 75. Synthetical experiments in the isoflavone group. VII. Synthesis of daidzein. J. of the Chemical Society (London) 1933. p. 274-75. March. [5 ref]
- Summary: "The monoglucoside daidzin was isolated in 1931 by Waltz (Annalen, 489, 118) from the bean Soja hispida and was found to yield the aglucone, daidzein..." Address: The Dyson Perrins Lab., Oxford Univ., England.
- 394. L'Heureux, L. 1933. Le soja [Soya]. Congo: Revue Generale de la Colonie Belge 1(2):214-36. Feb.; 1(3):365-83. March. (Bulletin de l'Office Colonial, Bruxelles). [14 ref. Fre: eng+1
- Summary: This early publication on soyfoods in Africa describes food uses and methods of preparing soymilk, in both condensed and powdered forms. Tunisia was a French protectorate from 1881 to 1956, when it became independent. France grew soybeans there, apparently at about the same time it started growing them in Algeria (p.

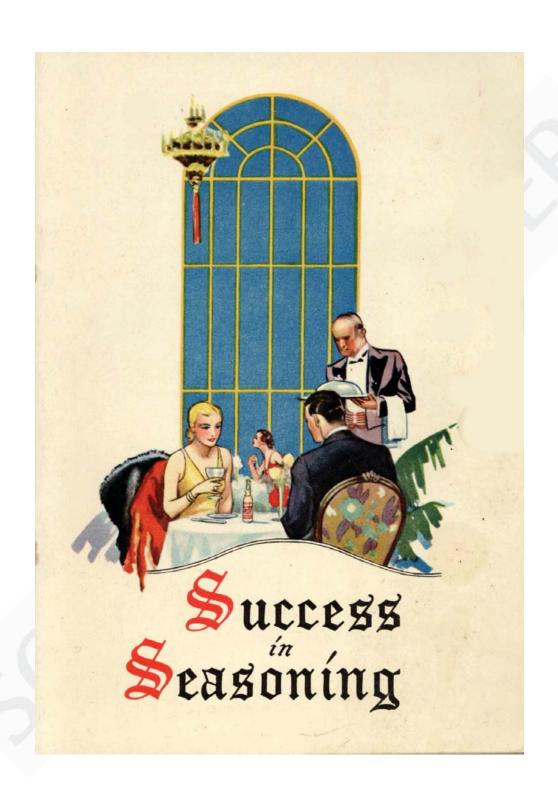
At the exposition of Nanking in 1910 some 400 varieties of soybeans were assembled (p. 214).

In 1908 the firm of Mitsui was the first to try to transport, by sea, soybean seeds from Dairen to Liverpool. It was the beginning of a new industry in England (Liverpool and Hull), in Germany, Denmark (Copenhagen), and Holland (Rotterdam & Amsterdam).

A former Belgian missionary in Jehol (West Mongolia), Father De Preter (Le T.R.P. Fl. De Preter, Supérieur de la Maison des Pères de Scheut à Yvoir) has corresponded with the author about soybeans, tofu, and soybean cake in that city. Soybeans are not cultivated on the best soils, which are reserved for wheat. One of his colleagues at Jehol, Father Cyr. De Puydt has worked to improve the soybean crop (p. 219).

Father De Preter has often helped in making tofu (fromage de soja), using magnesium chloride as a coagulant. If one uses calcium sulfate, the tofu is softer and the taste seems better. Father de Puydt has improved the manufacture of tofu by using magnesium salts (probably Epsom salts) in place of magnesium chloride. The tofu is eaten after being boiled in water or fried in fat. It is best when fresh. In winter, it is allowed to freeze [frozen tofu in northeast China] so that it can be kept for a long time; it becomes spongelike. But fresh tofu has a special aftertaste to which the European







palate finds it difficult to get accustomed. This taste does not come from the coagulant but from the soybeans. When one eats more than two pieces of tofu in succession, one experiences indigestion. It does not produce gas like the beans. Notes that the factory of the Caséo-Sojaïne near Paris, of which Mr. Li Yu-ying is the director, makes tofu and various tofu products. Cooked with eggs, tofu makes an excellent omelet. Cooked with the juice of meat, it takes on entirely that flavor. It can be used to make patés or smoked. Use firm tofu and cook in a mixture of 4:1 water to soy sauce. Then smoke it like meat. This can, for example, replace ham or bacon in an omelet. Tofu paté has much the same consistency and taste as paté de foi gras. Thus, there are many ways that tofu can replace meat (p. 221-24).

Using caséine or légumine of soymilk, the French pioneered industrial soy protein isolates in 1911 (see Beltzer). They were used in various glues, and in coating paper (p. 224-25).

The margarine industry employs only the finest quality oils. Soy oil was not introduced to margarine manufacture in Europe until about 12 years ago [i.e., 1921], but it has rapidly taken an important place on account of its good properties and low cost. Describes how to make synthetic rubber from soy oil. One of the main uses of soy oil in Europe is in making soaps. Some is also used to make explosives. Mr. Tihon is the distinguished director of the Laboratory of Industry and Commerce at Leopoldville, Belgian Congo (p. 227-28).

Soybean cake (Tourteau): Father de Preter in Jehol has assured me that soybean cake is used there to nourish and fatten beasts. For horses, this cake has a surprising effect. If a horse, returning from a trip lean and exhausted, is put on a regimen of soybean cake, it will return to normal in 15 days (p. 230).

Just like the oil, the cake is more and more in demand in Europe, and in certain countries the effect of soybeans on the economy is quite remarkable. Until about 30 years ago, Denmark was a super producer of wheat. But Dutch products were defeated by the lower prices of American goods. Aided by soybeans, the Danes were able to expand their livestock. Soybeans are now imported, the oil is extracted and used to make margarine, while the cake is used to feed livestocksome 18.5 million heads in 1926, not including poultry The result has been the development of an enormous trade in animal products, butter, cheese, ham, bacon, lard, eggs and even livestock-all accounting for about 70% of Danish exports. Holland is in a similar position (p. 230-31).

In 1912 the "Dairen Mill Owners Association" was founded, By June 1923 all but 7 of the mills in Dairen were members of the association. The oil in the Suzuki mill is extracted using benzine solvent, the most modern method. 32 of the mills, mostly owned by Japanese, use hydraulic presses, while those owned by the Chinese generally use hand-turned screw presses (p. 231-32).

A large table (p. 323) shows exports of soybean seeds, cake, and oil from the ports of Dairen, Newchwang, Vladivostok, and total, from 1908 to 1917. During this time, because of Manchurian mills, the amount of seed decreased, while the exports of cake and meal increased.

Condiments: Shoyu (shoyou) is the main one. Several processes for making soy sauce are described in detail. Lea & Perrins Worcestershire Sauce is nothing but a highly seasoned soy sauce (p. 234).

Continued (p. 365): Mr. L. L'Heureux is director of the chemical service of the Belgian Congo. Let's see what the soybean is doing in the Congo. M. Tihon of Leopoldville, said in an interesting report titled A propos du soja hispida: Encountered 30 years ago [i.e., about 1903] at Stanleyville by commander Lemaitre, it figured in the collection of the botanical garden of Eala and was the object of experiments at Sankuru in 1914-15 (p. 365).

In this report, Tihon analyzed 3 varieties of soybeans from the plantations of Eala. The soybean would be good for all our [Belgian] colonies; it could replace meat and be used in the rations of black workers (p. 366-67).

Soymilk: Describes how to prepare it and its properties. According to Prof. Laxa of Prague, fresh soymilk has an acid reaction. Mentions the work of Li Yu-ying. Notes that by adding lactose and a bacterial culture, Yogourth [yogurt] can be made from soymilk (p. 370).

In Peking, soymilk is sold in small bottles of 200-220 cc carrying the title Lait de pois-Un produit chinois. La nurriture la plus nourrissante. Préparé par ____. In 1925 one bottle of soymilk daily cost 1 dollar Mex per month. In 1919 in Shanghai, Peking and Dairen, Chinese companies furnished hospitals and private individuals 8-10 oz of concentrated soymilk in bottles (p. 371-72).

A table (p. 373) compares the composition of 3 types of soymilk with mother's milk, cow's milk, and goat's milk; all but the cow's milk (87.00%) contain 90.71% water. The soymilks are: (1) From Tsinan fu, China. (2) From Peking, China. 3. From Japan. The soymilk from Peking was low in fat, so yuba had probably first been removed from it (p. 372).

In China, soymilk is habitually drunk sweetened with sugar. Li Yu-ying reports that one of his parents was nourished from birth with soymilk and for 37 years he has always been in excellent health (p. 374).

A new method for making soymilk. In 1916 Prof. Laxa of Prague develop a method for making soymilk in homes in Europe. The cost of a liter of soymilk in Prague in 1916 was estimated by Laxa as being about 40 centimes if it was homemade. Before the war, there was in London a soymilk factory which intended to place its products regularly on the market. Plans were made to construct two other plants, one in Manchester and one in Liverpool. The synthetic milk syndicate launched a soymilk on the market that was adapted to European tastes. The syndicate's factory, established in Liverpool, used the method of F. Goessel to make 100 liters

of soymilk using the following formula (which is given). A Dutch patent (No. 2122 of Sept. 1917) and a Japanese patent (No. 28346) are also cited (p. 375-77).

A table shows the composition of 6 types of Soyama soymilk according to the analyses of Dr. G. Popp of Frankfurt. The protein ranges from 2.5% to 3.77%. Normal soy cream contained 11.5% fat, whereas that which was extra rich for diabetics contained 30% fat. It is very difficult to tell the difference between tea, coffee or chocolate to which one has added Soyama soy cream compared with regular dairy cream (p. 379).

In using the Soyama milk and cream, von Noorden confirms the following statement of Fischer, who studied vegetable milks in general: 1. In the stomach, soymilk gives a flocculent precipitate which is finer [smaller clumps] than that produced by cow's milk. 2. The digestion of soymilk requires only a weak secretion of gastric juice; the period of secretion is therefore short. 3. The time that soymilk protein resides in the stomach is shorter than that of cow's milk protein. 4. The peristaltic action of the stomach is less after ingestion of soymilk and better coordinated. Therefore, based on these observations, von Noorden recommended soymilk over cow's milk (p. 380).

Hatmaker made powdered soymilk. A table shows its composition, as analyzed by a laboratory in Paris (p. 380).

Yu P'i and Yu Ba are the Chinese and Japanese names of yuba, respectively. Recently a new method for making yuba has been patented in Japan. It consists in the use of an electric ventilator placed above the surface of the cooking pot containing soymilk that is not heated above 90°C. A table (based on analyses of the Tokyo Laboratory of Hygiene, of Embrey, and of Adolph) then gives the nutritional composition of 5 types of yuba, including Fu Chu (dried yuba sticks) which (surprisingly) contain 53.68% water.

Note: Maybe this Fu Chu was either fresh or reconstituted yuba. Address: Directeur du Service Chimique du Congo Belge.

395. Christian Science Monitor. 1933. Popular dishes of Japan. July 7. p. 6.

• Summary: "These Japanese recipes comes to us by way of a resident in the legation quarter of Peiping, China. We have been told that American and European residents in China enjoy Japanese food and often patronize Japanese restaurants there. Japanese food is nourishing yet light. The mainstays of their diet are fish and vegetables" [sic, rice].

The recipe for "Suimono, or Japanese consomme" calls for: "Soy sauce, which is easily obtainable from Japanese and Chinese grocers or other importers. If not, any good fishand-meat sauce such as Worcestershire will produce a similar effect if desired."

The recipe for Teriyaki states: "(A fish recipe whose name means merely 'Broiled' [sic, it means 'shining broiled' or 'glazed broiled']).

"Wash thoroughly and cut into pieces: 1 piece tunny fish or salmon of medium size. Soak [marinate] for about 10 hours in a mixture of: 11/2 cups sweet white wine-flavoring (non-alcoholic) [perhaps mirin] and

"4 cup soy sauce or other fish sauce, such as Worcestershire. Then broil the same liquid mixture over a slow fire for about 15 minutes, or until the fish appears done when poked lightly with a fork. The recipe need not be salted unless desired, as the soy or other sauce contains salt flavoring."

The recipe for "Mitsu mame ('Honeydew beans')" states: "The sweet red beans known as adzuki, which are similar to our dried [kidney] beans and dried peas, are a predominant ingredient in many Japanese sweets."

Note 1. This is the 2nd earliest English-language document seen (Nov. 2006) that contains the word "teriyaki." It does not contains the term "teriyaki sauce."

Note 2. The main ingredient in the dish is fish, not beef or poultry.

Note 3. The sauce is extremely simple compared with later recipes.

Also contains recipes for: Rice–Japanese style. Chawan mushi.

396. Tetsumoto, -. 1934. Chômiryô no chô-chifusu-kin oyobi korera-kin ni taisuru sakkinryoku [The sterilizing power of various seasonings toward typhoid Salmonella bacteria and cholera bacteria]. Nihon Nogei Kagakkai Shi (J. of the Agricultural Chemical Society of Japan) 10(2):123-27. [1 ref. Jap]

• Summary: Worcestershire sauce, an important constituent of which is soy sauce, is reported to have a strong sterilizing action.

397. Pierce (S.S.) Co. 1934. Spring and summer mail order catalog. The Epicure (Boston and Brookline, Massachusetts) 48(1):1-72. May. Illust. Index. 28 cm.

• Summary: This company, which delivers fine specialty foods throughout New England, was established in 1831 and incorporated in 1894. Soy related items: Chinese foods-Ingredients for making Chop Suey: La Choy Soy Sauce (6½ oz bottle, \$0.23, p. 40). Flour and meal–Dietetic flour: Cellu Soy Bean Flour (5 lb tins, \$1.00, p. 43). Sauces-Worcestershire sauce: Lea & Perrins (large, \$0.57; small, \$0.29, p. 50). Note: Under "Sauces," no soy sauces are listed. But there is Harvey Sauce from Crosse & Blackwell, and H.P. Sauce.

Vegetables-Dried vegetables, Beans: Soy (\$0.12/lb, p.

Battle Creek Foods Department [Michigan] (full page, with photo and illustrations, p. 72)-Crackers: Soy Bean Biscuits (\$0.60/package). Soy Gluten Bread (\$0.35/tin). Flour: Soy Flour (\$0.35/14 oz tin). Vegetables: Soy Beans, Baked (\$0.18/11 oz tin).

Battle Creek Foods also offers: Psyllium seed. Bran-Gluten Flakes. Zo (a cereal rich in food iron and vitamin B). Kaffir tea (made from a shrub native to South Africa). Malted Nuts ("a vegetable substitute for milk, containing malt sugar"). Minute Brew (cereal beverage with coffee-like flavor). Bran biscuit. Gluten bread. Gluten biscuits. Rice biscuits. Nut butters: Almond butter and peanut butter. Savita (yeast extract, bouillon cubes, sal-Savita salt). Vegetable meats: Nuttolene, Nuttose, Protose, Saucettes. Vegetable gelatin (agar, flaked).

Note: Inserted in this catalog is an undated leaflet titled: "You are invited to attend a special demonstration of Battle Creek Special Purpose Foods, conducted by Miss Minnie Duffy, Oct. 12 to Oct. 17 at Park Grocery Co., 18-20 North Diamond, Mansfield, Ohio." Small photos show: (1) Battle Creek Sanitarium. (2) Miami Battle Creek Sanitarium [Florida]. (3) Battle Creek Food Co. Address: Importers and Grocers, Boston and Brookline, Massachusetts.

398. Bowdidge, Elizabeth. 1935. The soya bean: Its history, cultivation (in England), and uses. London: Oxford University Press. xii + 83 p. Foreword by Sir John T. Davies (Director, Ford Motor Co., Ltd.). Illust. 20 cm.

• Summary: Contents: 1. Introduction. 2. The soya bean in the East: Europe, United States, Canada. 3. Description of the plant: Results of experiments in England, the 1934 experiment in Essex, yields from the four varieties, description of the four varieties, composition of English and other varieties. 4. Culture of the soya bean: Soil requirements, inoculation of the seed, preparation of soil, rates of seeding, sowing seed, cultivation, fertilizers, harvesting the crop, threshing, storage, yields in various countries, soya bean prices. 5. Soya bean hay: Feeding values, time of cutting, soya straw, soya in the mixed crop (in mixed cropping plans with sorghum, maize, etc.). 6. Soya beans for soil improvement. 7. By-products of the soya bean: Oil and its uses, notes on experiments in breeding for oil, methods of extraction, soya cake and meal, results of comparative feeding tests. 8. Food products of the soya bean.

This book describes the successful introduction and cultivation of soybeans in England. The Foreword notes (p. v): "In past years no sustained effort has been made to grow the plant on a large scale in England. The Royal Agricultural Society devoted several years to experiment at Woburn, but in 1914 they reported that the plant was quite unsuitable for growth in this country as it required more warmth than could be obtained here. The British Board of Agriculture reported in 1916 that 'the Japanese and Manchurian varieties hitherto tested cannot be relied upon to produce seed in this country."

In the Preface (p. ix) Ms. Bowdidge acknowledges: "That very able and unique work The Soybean, by Messrs. Piper and Morse, has been my principal source of information."

"Efforts to introduce the [soy] bean to English

agriculture were begun in 1909 and given up in 1914, and except for the work of Mr. J.L. North nothing further has been done" (p. 9).

The section titled "Results of experiments in England" (p. 15-17) states: "One of the first attempts to acclimatize the soya bean in England began in 1914 at the Royal Botanic Gardens, Regents Park, when it was shown by Mr. North that certain varieties could be 'advanced' sufficiently to produce a mature crop towards the end of September. Many years devoted to careful selection of seed from the varieties in his collection had resulted in several early strains. In 1928. a hybrid was received from Canada which, on passing the experimental stage, was planted out on a number of small plots in various parts of the country. It proved to be a very reliable cropper and matured earlier than any of the sixty varieties previously under test. Planted in the first week in May it was harvested at the beginning of September, and reports of good results came from Middlesex, Essex, Berkshire, Oxfordshire, and Hampshire.

"The largest experimental test ever conducted in this country took place in 1933 at Boreham, Essex, when fortyseven different varieties of the soya bean originating from North America, Canada, Manchuria, and Japan were grown under observation. The selection included four varieties which had been acclimatized by Mr. North. Mr. North was engaged to supervise operations, and 50 lb. of his special seeds was purchased. The results obtained were most interesting."

"There is no doubt at all that the four varieties acclimatized by Mr. North were a great success; two reached maturity on September 1st and two on September 6th. In many cases plants bearing between 300 and 400 seeds were harvested."

"It has been found by Mr. North in the course of more than twenty years' study of the subject, mainly with foreign beans grown in various parts of the country, that no variety of soya bean has any chance of success in England unless it matures in less than 100 days in America. Varieties requiring this length of time in America need nearly a month more in this country and, owing to our colder spring weather, no advantage is gained by earlier sowing. Mr. North's seeds require 124 to 127 days to reach maturity in England but, if grown in America, they would only require 85 to 90 days.

The section on "The 1934 Experiment in Essex" (p. 17-23) notes: "The result of the 1933 experiment was so encouraging that it was determined that a further attempt should be made in 1934 to ascertain whether it would be possible to grow the plant profitably as a field crop and, with this in view, a field of nearly 20 acres was specially prepared for the acclimatized seeds from the 1933 crop."

Joseph Bramah, an English engineer, invented the hydraulic press in 1796, leading to a "great advance in the oil-extraction industry." All "old methods in the western world immediately gave place to the new appliance."

More recently the method of solvent extraction has been developed; it is now used throughout the world and removes nearly all the oil from the seeds (p. 69).

"There is plenty of evidence as to the efficiency of soya meal in live-stock feeding, yet it does not appear to be used in this country as widely as its feeding value merits. The prejudice formed when it was first introduced in England as dairy food seems still to exist. It was thought at that time that the use of the meal might affect the taste of milk and butter; but, although this was disproved later, England remains a small user" (p. 72).

Food products of the soya bean (p. 80-83): "It is unfortunate that the inherent conservatism of English people to anything new has been the cause of past failures to popularize soya bean food products for consumption in this country. The bean contains iron, magnesium, calcium, and other mineral salts; phosphorus in the form of lecithin makes it valuable in cases of nervous disorders...

"Soya 'sprouts,' which have been grown and used for centuries in the East, have recently been introduced as a green vegetable. The beans gathered before ripe and prepared in the same manner as green peas are a very satisfactory vegetable and the dried beans, if soaked for forty-eight hours, may be cooked like haricot or butter beans and make a most delicious and nutritious vegetable dish."

There is no doubt that soybean products are gradually becoming established in Western countries. We sometimes eat soybeans without knowing it. "The bean, when properly prepared by roasting, makes an excellent cereal beverage which looks, smells, and tastes like coffee; a sauce, appropriately seasoned with spices, is the so-called 'Worcester Sauce', and soya soups made from the bean taste like beef extract. During the late war, when Germany found herself on the verge of starvation, glutamic acid, produced from the soya bean, was used in German hospitals to form the basis of beef-tea, and it is said that the ground bean also was used at that time for the making of bread. Soya bread, made from properly prepared flour, is obtainable in England and is stated to be of high nutritive value" (p. 81).

Soya flour has long been used in foods for diabetic persons requiring a low starch diet. "The flour contains more protein and fat, and less carbohydrates than ordinary cereal flours, and a certain variety manufactured in England is stated by the proprietors to contain 42 per cent. protein and 20 per cent. fat, having good keeping qualities, 0.13 per cent lecithin phosphoric acid and the vitamins A, B, D, and E. There are many food products on the London market under the names that conceal their soya bean origin. Just before the late war [World War I] an enterprising English firm was making great strides with soya products. Vegetable butter, biscuits, cocoa, milk chocolates and other confectionery, cream, cakes, bread, &c., proved quite a success until a wartime embargo placed upon the importation of soya beans put a stop to the business; the organizers eventually went to

America! (p. 82).

The author concludes (p. 83): "The soya bean is by far the most valuable of all known beans and our farmers ought to make a serious effort to grow it. It has already been shown that the acclimatized bean will grow in this country, and if crops can be raised profitably and on a commercial basis, a service will be rendered both to the farmer himself and to the country."

Excellent photos show (see p. xiii): (1) A typical example of the soya bean plant grown at Boreham, County of Essex, in 1933. (2) The soya bean plant in full maturity. (3) Bags of English acclimatized soya beans harvested on Fordson Estates, Boreham, Essex, in 1933. Left to right: Brown 'C,' yellow 'J,' black 'O,' and green 'Jap.' (4) A sturdy specimen of the 'Jap' soya bean plant grown at Boreham, Essex in 1934. (5) The 'J' variety. (6) The 'O' variety (for hay) at the seed stage. (7) Aerial view of the soya bean field as it appeared on 29 Aug. 1934. (8) Soya beans inoculated the previous day being fed into the horse-drawn drill prior to sowing. (9) A man seated on an ordinary horsedrawn grain-drill, planting soya beans in rows wide enough to enable cultivation later on. (10) Six men stooping in a field, planting small quantities of different varieties of soya beans by hand in 30-inch rows. (11) A man walking beside a horse pulling a cylindrical roller, which helps to give the seeds a better growth and even stand. (12) Harvesting soya beans with a reaper and binder pulled by a tractor. (13) Threshing soya beans in 1934 with a mechanical 'Ruston' Thresher; many beans were split. (14) Loading sacks of soya beans onto an open-bed truck for conveyance to storage barns. (15) The first English rick of soya hay, grown in 1933. (16) Baled and trussed soya bean straw being ricked; a man is shouldering a bale atop the rick with a ladder propped against one side. (17) Heated cakes of crushed soya beans ready for hydraulic pressing at Erith Oil Mills, Ltd. (18) Soya bean cakes, after leaving the press, are passed through a paring machine where the edges are trimmed at Erith Oil Mills. Address: England.

399. Durkee Famous Foods, Inc. [Div. of The Glidden Company]. 1935. Soybean oil as a food product (Ad). Proceedings of the American Soybean Association p. 16. • Summary: The top half of this full-page black-and-white ad is a photo showing containers and labels of the following: Durkee's Worcestershire Sauce, Durkee's Salad Dressing and Meat Sauce, Durkee's Mayonnaise, Durkee's Salad Aid, Durkee's Oleomargarine.

The text states that soybean oil, when refined and hydrogenated, "forms a prominent constituent of vegetable shortening and oleomargarine."

"One of the important products derived from the extraction process of obtaining soybean oil from soybeans is Lecithin. Lecithin is not only used in medical practice as a nerve food, but it is used in the baking and confectionery

industries in assisting the application and proper spreading of icing and chocolate coatings, and also has other industrial uses as a vegetable dispersing agent."

"In our opinion, the soybean is one lever the farmer can use to lift his living standard to higher levels." Address: Elmhurst [Illinois], Chicago, Berkeley [California].

- 400. Carque Natural Foods of California. 1935. Kar-Kay Hygienic Worcestershire Sauce (Ad). House of Better Living (Newsletter, Los Angeles) 1(3):3. Nov/Dec.
- Summary: "Wholesome natural meatless fluids, including Kar-Kay (imitation) vinegar, along with quality spices and pure vegetables enter into its competition."

A circular logo with diagonal slash through the middle shows the company's name. Note: This ad also appeared in the Jan. 1936 issue (p. 3).

401. **Product Name:** Durkee's Worcestershire Sauce, Durkee's Salad Dressing and Meat Sauce, Durkee's Mayonnaise, Durkee's Salad Aid, Durkee's Oleomargarine. Manufacturer's Name: Durkee Famous Foods, Inc. Manufacturer's Address: Elmhurst, Chicago, Berkeley. **Date of Introduction:** 1935.

New Product–Documentation: Ad in Proceedings of the American Soybean Assoc. 1935. p. 18. "Soybean Oil as a Food Product." Plants in Elmhurst, Chicago, Berkeley.

Note: This is the earliest commercial salad dressing seen in which soy oil is used as an ingreddient.

- 402. Holmes, Marie. 1936. Cooking chat: The unexpected characteristic of Chinese cookery-soy sauce, native vegetables. Toronto Daily Star (Canada). April 2. p. 35.
- Summary: In Chinese cookery, one finds "chopped meats and the smell everywhere of bean sauce" [soy sauce].

In the average Chinese home kitchen, "Chinese cookery owes much of its savoriness to the bean sauce and native vegetables."

"Soy or bean sauce should be used to flavor soups or main dishes."

One recipe calls for "1 tablespoon Chinese sauce"apparently referring to soy sauce. A recipe for Chop suey calls for "1 tablespoon Worcestershire sauce." A small portrait photo shows Marie Holmes.

- 403. Agricultor Venezolano (El) (Ministerio de Agricultura y Cria, Caracas). 1936. El cultivo de la "soya" [The cultivation the soybean]. 1(1):24. May. [1 ref. Spa]
- Summary: A short paragraph at the top of the article states: We have translated the monthly bulletin of the Royal Bank of Canada [actually The Royal Bank of Canada Monthly Letter, April 1936] which discusses the extraordinary importance acquired recently by the soybean, an agricultural product whose cultivation is being tested in Venezuela. The intensification of this crop in our country can come to signify

a new and important source of national wealth.

The article begins: "To many people, the soybean has an oriental flavour; they know it as the basic ingredient in some of the most famous English meat sauces [Worcestershire, etc.] and have heard that it is an important Manchurian export. Against this background it is something of a surprise to learn from the Wall Street Journal of February 17, 1936, that in the previous year it had become, from the viewpoint of cash return to the farmers, the fourth most important cereal crop in the United States. The crop of 1934 was about 50 per cent larger than that of 1933 and the crop of 1935 was doubled that of 1934."

The many uses of the soybean are discussed, including soybean flour (with and without the original oil content of the seed), soybean milk, butter, cheese [tofu], and coffee. Among industrial uses, in 1934, 10 million lb of soybean oil were used by the paint industry in the USA. "In varnish and lacquers soybean oil is the principal base. The Ford car is finished with a soybean lacquer and the Ford Company is erecting a \$5,000,000 plant in Detroit [Michigan] to make soybean products. In soaps, glues, linoleums and rubber substitutes, the ingredients of the soybean have come to be of predominant importance."

- 404. The Royal Bank of Canada Monthly Letter, April 1936. 1936. In: National Research Council of Canada. 1936. Proceedings of the Second Conference on Soybeans. Ottawa, Canada. 18 p. See Appendix C, p. C1-C2. Held on 4 May 1936 in the National Research Building, Ottawa, Ontario, Canada. [1 ref]
- Summary: An overview of the rapid growth of soybeans in the United States, and their potential as a crop in Canada. "To many people, the soybean has an oriental flavour; they know it as the basic ingredient in some of the most famous English meat sauces [Worcestershire, etc.] and have heard that it is an important Manchurian export. Against this background it is something of a surprise to learn from the Wall Street Journal of February 17, 1936, that in the previous year it had become, from the viewpoint of cash return to the farmers, the fourth most important cereal crop in the United States. The crop of 1934 was about 50 per cent larger than that of 1933 and the crop of 1935 was doubled that of 1934."

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405. Horvath, A.A. 1936. The soybean points the way to agricultural recovery. Scientific Monthly 43:63-69. July.

• Summary: "The soybean is a vivid example of a crop with an amazing diversity of industrial uses... In 1934 soybean oil constituted 11.6 per cent. of the world's production of vegetable oils. The United States production of soybean oil for the same year amounted to 1.6 per cent. of the total U.S. production of vegetable oils..."

"When hydrolysed by acids or enzymes, soybean protein is converted into soy sauce, which is used for bouillon extract preparations and has been for decades as the base of Worcestershire sauce."

Soybean protein "is capable of taking the place of casein (which is much more expensive and is being imported to the U.S.) in a large number of industries, such as sizing for paper, glue (waterproof) and plastics, all of which are already in existence in our country. At the 1933-34 International Exposition in Chicago [Illinois] all exterior walls and subfloors of the Hall of Science were constructed of plywood panels glued with soybean glue. To-day soybean meal is used by the Ford Motor Company for the manufacture of horn buttons, gear shift lever balls, light switch handles, distributor bases, distributor cover and window trim strips... With the completion of a new \$5,000,000 River Rouge plant for soybean plastics, the use of soybean meal will extend to making dashboards and probably also automobile bodies."

Soybean meal can also be used for making floor coverings, for hardening and strengthening steel and iron, in water paints, as an emulsifier for asphalt in roads, and as an emulsifier for mineral oils for dormant sprays. Soya lecithin also has many applications. One million pounds of soya phosphatides are used annually in the margarine industry in Germany. It can be used for making and softening leather and for milling rubber to a powder.

In 1934 the main commercial uses of soybean oil were (in million pounds): Paint and varnish 10.4. Linoleum and oilcloth 2.8. Compounds and vegetable shortenings 2.7. Soap 1.35. Printing ink 0.059.

During the last decade "whole soya flour" has steadily gained in popularity. It "contains over 2 per cent. of phosphatides, nearly all the known vitamins, and an ash of high alkalinity." Address: M.D., Chemist, Agric. Exp. Station, Newark, Delaware.

406. Rombauer, Irma S. 1936. The joy of cooking: A compilation of reliable recipes with a casual culinary chat. Indianapolis/New York: Bobbs-Merrill Co. v + 628 p. Illust. by Marion Rombauer Becker. 24 cm.

• Summary: This is the first edition of Joy published by Bobbs-Merrill. Soy is not mentioned in the index; neither is "vegetarian"-although recipes for three "meatless" soups are given (p. 29-30). However soy sauce is used in: Chow mein with fried noodles (p. 96). Chicken chop suey (p. 96). Soy sauce is not mentioned as a seasoning for gravy, sauces, or

soups-but Worcestershire sauce is (p. 248). Under "Soups" (p. 22) we read: "Canned bouillon and beef cubes are in general use, but Savita, a meatless Battle Creek product, is a better substitute..." The amount of meat and sugar used in this cookbook is surprising. Address: St. Louis, Missouri.

407. Lager, Mildred. 1938. The House of Better Living Catalog: Finer natural foods. Los Angeles, California: Published by the author. 36 p. March. 23 x 10 cm.

• Summary: The single most important document showing the creative development of commercial soyfoods in California in the late 1930s. This catalog contains a large section on Diabetic Foods, consisting mostly of soyfoods, and an even larger section titled "Soy Bean Products."

The Foreword (p. 1) begins: "The House of Better living is as unusual as its name. Its aim is to teach better living, and has made possible Mildred Lager's free educational program by radio and class work. Become a member of our evergrowing family. Secure one of our creed cards-Realize life can be a game and not a battle, and if you give to the world the best you have, the best will come back to you.

"The House of Better Living has grown in four years from what was called a brain storm to an institution. It is outstanding, unique, and built on the ideals of sincerity and service. It is teaching the ounce of prevention-the health insurance that pays dividends in years of health and happiness. It carries for you, Finer Natural Foods, selected by Mildred Lager."

A full page of delivery and order information (p. 2) shows that Mildred was shipping foods (such as California nuts and fruits, fresh and dried) all over the United States.

This catalog contains a total of 42 soyfood products, including 26 such products not found in the 1936 catalog. Soy (and other interesting) products are listed as follows (prices and weights are given for each): Beverages-Coffee substitutes: Radcliff's soy bean, Soy-Co. Other beverages: Dr. Fearn's Proteinized Cocoa, Radcliff's Malted Soya Milk, Radcliff's Soya Bean Cocolette, Soy-Malt (plain or chocolate). Sugars and syrups: Radcliff's Golden Soya Honey Spread (4-oz. glass). Natural sweets-Candies: Carque's health candies, bar, 5ϕ , Halvah bars, Sesame brittle, Soya candy sticks, 1¢ each, Soy milk "chocolate" bars, in Bavarian, cocoanut, mint, cherry, pineapple, and creme de mint flavors, Soy milk "chocolates," 1/2-lb. box or 1-lb. box, Soy chocolate, 1¢ square, ½-lb, 1 lb, 60¢, or bulk.

Desserts: Agar-Parfait mix, Agar-Hain Vege-Jell, Agar-Sanitarium vegetable gelatin. Diabetic foods: Gluten flour, Soy bean flour, 10¢ lb, Soy Bean Pancake and Waffle Flour (Bill Baker's Prepared; 2-lb. pkg. 30¢), Dr. Fearn's Soya Cereal, Dietetic Soyrina Cereal, Dr. Fearn's Soya-Date Breakfast Food, Battle Creek Dietetic Bran, Battle Creek toasted gluten bran flakes, Soy breakfast food, Cubbison's soy-gluten crackers, Soy-gluten wafers, Loma Linda soy bean wafers, Bill Baker's 100% soy-fruit slices,

Bill Baker's soy bean bread, Olson's soy bread, Soy bean macaroni, spaghetti and noodles, Soy beans-imported, Soy beans-cracked, Soy beans-red, Soy beverages (without sweetening), Bill Baker's soy melba toast, Cubbison's soy melba toast.

Nut butters: Almond butter, Almond meal, Cashew butter, Peanut butter (dextrinized or raw), Pecan butter, Soy bean butter (lb or 8-oz. can). Whole grain flours, meals, etc.: Lima bean flour, Soy bean flour (1 lb, 3 lbs, or 10 lb), Soy bean pancake and waffle flour (Bill Baker's prepared), Soy bean pancake and waffle flour (Mrs. Hauser's), Whole wheat flour, wheat germ. Breakfast cereals (to be cooked): Mildred Lager's quick cooking cracked soybeans, Dr. Fearn's soya cereal, Dietetic Soyrina Cereal. Breakfast cereals (ready to eat): Battle Creek Zo, Dr. Fearn's soya-date breakfast food, Soya breakfast food, Bill Baker's 10% soya cereal. Melba toast, crackers, cookies: Cubbison's soy toast, Bill Baker's soy toast, Cubbison's Soy-Gluten crackers, Soygluten crackers, Loma Linda soy bean wafers, Cookies: Cubbison's soy cookies, Bill Baker's 100% soy fruit slices. Bread: Olson's soy bean bread (sliced loaf), Bill Baker's soy bean bread (unsliced loaf 16¢). Macaroni noodles: Soy bean macaroni, spaghetti and noodles. Legumes: Soy beans-imported, Soy beans-cracked, Soy beans-red. Meat substitutes: Nuteena (7 oz. can 15¢), Nut Meat, Nuttose (Battle Creek), Proteena, Protose, Soy bean butter (30¢ lb.), Soy mince sandwich spread, Soy bean spread, Soy bean ravioli (12¢ and 20¢ can).

Soy bean products (40 products; those mentioned above may be omitted here): Loma Linda soy beans (plain or tomato flavored, No. 1 can), Loma Linda soy beans with Proteena (No. 1 can), Dry soy beans (quick cooking red), Soy bean spread, Soya bean honey spread, Loma Linda soy mince sandwich spread, Soy bean sauce (5 oz for 18¢ or 2 oz bottle for 10¢), Soy bean oil (45¢ pint bottle), Soyco (Soy coffee), Soya bean milk powder, Milk of soya bean (6 oz or 12 oz can), Soy-Malt, Proteinized cocoa, Radcliff's 100% soya bean beverage (1 lb package), Cubbison's soy bean cookies, Cubbison soy-gluten crackers, La Sierra Soy breakfast cereal, Diamel Soyarina cereal, Diamel breakfast cereal. Salad dressings: Imitation Worcestershire sauce (Carque's, 5 oz bottle for 25¢). Powdered dry vegetables: Dulse, Dulse leaf, Irish moss, Kelp, Kelp-fancy, Sea lettuce (leaf or powdered), Soy-banana powder. Laxative foods: Agar, Psyllium, Swiss Kriss, Sym, Tam (laxative jam). Natural aids: Savita yeast tablets, Sesame seeds, Theradophilus (4 oz bottle 75¢, 8 oz bottle \$1.25). Electric appliances: Electric juicers are not yet on the market. Index (p. 36).

There are ads for the following: Battle Creek Sanitarium Foods (p. 5; ask for literature). Ficgo coffee substitute (display ad, p. 6). Racliffe's Soya Products (p. 9, 21). Mildred Lager's quick cooking family (incl. cracked soy beans), Bill Baker's soy and lima bean products (photo

display, p. 16). Therapy, Ltd.-Foods for Better Living (Theradophilus, soy bean milk, p. 19, 29).

A photo (p. 1) shows Mildred Lager. Address: 1207 West Sixth St., Los Angeles, California.

408. Berg, D.J. v.d.; Toit, F.M. du. 1938. The soybean: Its production and industrial use. Farming in South Africa 13(151):391-93. Oct.

• Summary: Part I, by Berg, is titled "Soybean production in South Africa." It discusses adaptation, uses of soybeans as a fodder crop, for industrial purposes, and for human consumption, cultural practices, and soybeans in diversified farming systems. Concerning use in human foods, the author notes: "But it is in the meal, after the oil is extracted, that its greatest value lies. The meal contains nearly 43 per cent. of protein, an ingredient so often absent from the diet of a very large proportion of South Africa's population. The value that this meal, judiciously mixed with maize meal, would have in the feeding of the working classes and the native population of South Africa cannot be overemphasized."

Part II, by Toit, is titled "The importance of the soybean in industry." Fig. 2 (photo) shows ten soybean food products, including soybean flour (Soyolk, 7 lb), Worcestershire sauce (Lea and Perrins), soybean biscuits, soybean cocoa, soybean chocolate (Eden Chocolat au Soja), soft soap, laundry soap, invalid and diabetic food, soybean meal, and compressed soybean cake for stock feed. With the exception of the chocolate and cocoa which originated in France, all of these products were made in England. Fig. 3. shows auto parts made of soybean protein and oil made at the Ford River Rouge plant. "One firm in this country is treating and milling soybeans and preparing a meal which is becoming increasingly popular as a source of protein in the rations of mine natives. This firm is to-day forced to import a large proportion of its requirements owing to the low production of soybeans in the Union." Address: 1. Research Officer and Superintendent, Summer Cereal Station, Kroonstad; 2. Field Husbandry Section, Div. of Plant Industry.

409. Argus (The) (Melbourne, Victoria, Australia). 1939. Queries answered. March 11. p. 32.

• Summary: "A. A. M. (Gunbower) asks for a recipe for Worcestershire sauce.

"The following has been recommended:-Take ½lb. each of whole black pepper, whole ginger, eschalots, and garlic, two quarts of vinegar, one pint of Indian soy sauce, 1oz. of ground black pepper, ½oz of powdered mace, ½oz of bruised cloves. Put all the ingredients into an earthenware vessel, let them stand for two weeks closely covered, stir them every day with a wooden spoon. At the end of two weeks boil the mixture for 30 minutes. Strain through a fine sieve, bottle when cold and seal tightly. The Indian soy is a vegetable sauce, and if it is unobtainable mushroom ketchup might be tried instead."

Note: This is the most recent of 144 documents seen (Oct. 2009) in the Australian Newspapers database that contains the term "India Soy."

- 410. Brewer and Wine Merchant (The). 1939. Brewing in Worcester. June. p. 48. [1 ref]
- Summary: "The Worcester News and Times recently contained a well produced industrial supplement, in which were described the many and varied industries of Worcester. One is apt to look upon Worcester merely as an old quiet cathedral city. It is true the cathedral was one of its principal charms..."

After a section on "Vinegar brewing in Worcester" comes a section titled "The Origin of Worcestershire Sauce" which quotes from the News and Times: "The origin of the firm is based like all romantic histories, on tradition. The great grandfather of the present managing director, Capt. J.A. Dyson Perrins, was in partnership with a brother in a chemist's shop at Evesham. On October, 1828, a split occurred for some unknown reason, and Mr. William Perrins went into business with Mr. John Wheeley Lea in the shop at present occupied by Mr. A.E. Coverdale in Broadstreet, Worcester.

"Here, it is supposed, one day Sir Marcus Sandys, who had held many offices out East, including that of Governor of Bengal, came in with the recipe of a certain sauce to be made up. The two partners worked on this recipe and in due course brought forth 'Lea & Perrins Worcestershire Sauce, made from the recipe of a nobleman in the Country.

"In 1897 Mr. C.W. Dyson Perrins built the present factory in Midland-road, and the whole business was transferred from Broad-street.

"In 1930 the firm was amalgamated [merged] with H.P. Sauce, but the two ventures were kept quite distinct. There is also a Lea & Perrins, Incorporated, in New York, and Lea & Perrins (Australia) Ltd., in Sydney."

Note: This is the earliest document seen (Feb. 2012) that uses the word "Bengal" in connection with Lea and Perrins' Worcestershire Sauce. It is also the earliest document published in England that mentions "Sandys" or "Sir Marcus Sandys" (Governor of Bengal) in connection with this sauce. Address: England.

- 411. Borth, Christy L. 1939. Pioneers of plenty: The story of chemurgy. Indianapolis, Indiana and New York: Bobbs-Merrill. 303 p. Portraits. 22 cm.
- Summary: Soy is discussed at length (usually in connection with Henry Ford Sr. and Edsel A. Ruddiman) on p. 22, 40, 42, 202-06, 208-11. Henry Ford is also discussed on p. 21-22, 30, 69, 76-77, 118, 144, 246.

"A few years ago, Henry Ford was ridiculed when he said the time would come when most of an automobile would be grown on the farm. Since then, Ford chemists have perfected processes whereby soy beans are converted into

plastic substitutes for automobile parts formerly made of metal. Ford Chemist Russell Hudson McCarroll estimated that the use of plastics for interior window moldings alone would increase that company's use of farm-grown metalsubstitutes twenty-five million pounds annually." (p. 21-22).

"Dearborn was selected as the [first chemurgic] conference site because it was the home of Henry Ford, an industrialist who had demonstrated his understanding of the meaning of the farm problem, and because there were, in near-by Edison Institute, working exhibits of the processing equipment which Ford researchers had developed to convert soy beans into some thirty industrial products." (p. 40).

At the chemurgic conference Russell Hudson McCarroll, a Ford chemist, described how soy beans are converted into raw materials for industrial use. "From the bean oil Ford chemists make a lacquer which is claimed to be superior to the pyroxylin paints usually used in coating metals. From the residue of meal after extraction of oil, Ford chemists make plastic parts for automobiles, these farm-derived parts being substitutes either for metals formerly mined or for rubber formerly imported." (p. 42).

Chapter 10, titled "Ford links farm and factory" (p. 200-12) is about Henry Ford, chemurgy, and soy beans. "Do you recall the gibes that greeted his [Henry Ford's] prediction that man would one day find a substitute for the cow, as revolutionary as the automobile which displaced the horse? It was very funny when the cartoonists and columnists leaped upon it gleefully-but it may not be so fantastic as it once seemed.

"Let's investigate it.

"Come now to the foot of Elm Street, in Dearborn, to a rejuvenated farmhouse whose homelike exterior masks a modern laboratory."

"Follow the truant chemurgists inside and meet Ford's boyhood companion, Dr. Edsel a. Ruddiman, the foodchemist whose services were enlisted by his old deskmate. In the back room, once a farm kitchen, is an electric refrigerator, filled with food made from soy beans. Milk, butter and cheese-the latter, fresh, dried, smoked and fermented—are there, soy-bean products all. In the pantry are breakfast foods, macaroni, salad oils, crackers, diabetic foods, infant foods, flour, bouillon cubes, soups, confections, coffee substitutes, sauces, gravies and beef substitutes-all produced from the soy" (p. 202-03).

A wonder bean indeed!" "During the World War [I], when Germany faced famine, German chemists extracted from the soy the glutamic acid which became the basis of the 'beef-tea' that kept patients alive in hospitals." The soy bean "gets into Heinz and Lea & Perrins' sauces and into oleomargarine" (p. 203).

A full-page photo (between pages 206 and 207) shows Irénée du Pont and Henry Ford talking and enjoying a meal together at a table.

- 412. Food Industries. 1940. Formulas for foods. 12(8):99, 102. Aug.
- Summary: Page 102: Formula No. 104: Worcestershire sauce, No. 2. "Indian black soy sauce... 1 gallon."
- 413. Balzli, Jean. 1940. La culture du soja "magique" et sa contribution au redressement de la France [The cultivation of the "magical" soybean and its contribution to the recovery of France]. L'Eclaireur de Nice et du Sud-Est. Sept. 17. Later published Revue Internationale du Soja, March 1941, p. 41-45. [1 ref. Fre]
- Summary: Includes a discussion of uses for human foods, including defatted soy flour, soy coffee, soy chocolate, Worcestershire sauce, soymilk, tofu, and soy sprouts. Other uses include lecithin and industrial uses of soy oil and soy proteins.
- 414. Food Industries. 1940. Formulas for foods. 12(9):101, 104. Sept.
- Summary: Page 104: Formula No. 113: Worcestershire sauce, No. 3. "Japanese black soy sauce... 1 gallon."
- 415. Read, Bernard E.; Wagner, W. 1940. Shanghai vegetables. China Journal (The) 33(5):206-20. Nov.; 33(6):259-71. Dec.
- Summary: In the "Science" department, the Introduction begins: "Recent advances in the science of nutrition show the great need for more so called Protective Foods in the diet. This term refers to those things which are rich in essential vitamins and minerals."

In section 2, "The Legumes" (p. 210+), the first two entries are: (1) The soybean. Latin names. Chinese name: (Cc = Chinese characters given), Ta Dou. "The yellow, black and green varieties are common in China and marketed from Manchuria, Tsingtao and Shanghai. The young soybean in the pod is a common article of diet in Shanghai, Chinese name, Cc. Shanghai: Mau Deu; Peking, Mao tou. Followed by: season, price, nutritive value, and a recipe.

(2) Soybean sprouts. Chinese name, Cc. Shanghai: Waung Deu Nga; Peking, Huang Tou Ya. Followed by: season, price, how to make, nutritive value, and serving suggestions.

"There are very many other soybean preparations of high nutritional value well worth adding to the diet. Soybean sauce (soy) with added spices is the basis of such things as Worcester [Worcestershire] sauce. Beancurd is really a king of junket containing good digestible protein, it can be added to soups or stews. Made fresh daily... A dry cake is made [pressed tofu], also spiced, pickled, fried and fermented. The latter is just like a kind of strong cheese." Soybean milk is made by "grinding the [soy] bean with water, one part of bean to about 9 of water

Photos (on unnumbered pages, against a black background, with a small cm ruler show): (1) Four young soybean pods with beans inside. Four soybean sprouts 8-10 cm long.

Also discusses many other edible Chinese legumes. Address: 1. Henry Lester Inst. of Medical Research; 2. Public Health Dep., Shanghai Municipal Council.

- 416. Bragg, Paul C. 1940. The four generation health food cook book and menus. Los Angeles, California: Published by the author. Printed by Aetna Printing Co., Los Angeles. 169 p. Illust. No index. 24 cm.
- Summary: This book is especially interesting for the genealogical information and family photos it contains. Paul Bragg is now a grandfather [with two grandchildren], apparently unmarried, with three living children: Lorraine Bragg Stoddard, Polly Bragg, and Bobby Bragg. Lorraine has a son named Shocky. Paul's father, also apparently no longer married [to Carrie Chappius], is called "Daddy Bragg" and "Grand-daddy" Bragg; his true name [Robert E. Bragg] is not given. A nice portrait photo shows each of the family members separately; they all look healthy and happy. The cover photo shows Paul Bragg standing by a stove wearing a chef's white top hat and white clothing, and holding up a tasting spoon. The frontispiece is a half page photo showing Paul, his father, Lorraine, and Shocky seated, side by side on a wall, facing forward, each with arms around the back of the person setting next to him or her. The text states: Each of them displays the highest type of physical perfection in normal weight, abundance of energy, vitality, and absolute freedom from sickness." They attribute this perfection to their diet, but they "are not faddists."

Contents: Part I: Four generation menus. 1. Daddy Bragg's first generation menus: Everyday menus for the 'past middle age' group, high energy diet for the youthful maturate. 2. Paul Bragg's second generation menus: The gaining diet, the reducing diet, maintaining normal weight, supreme vitality diet. 3. Lorraine's third generation menu: The modern housewife's health and beauty menu. Polly's third generation menu. Bobby's third generation menus: The athlete's menu, the camper's menu. 4. Shocky's fourth generation menus: Baby's diet, children's foundation diet.

Part II: Important principles of modern health food cookery: Introduction, food combinations-are they necessary? (no), condiments (avoid vinegar, cayenne pepper, Worcestershire sauce), cooking utensils (avoid aluminum and tin), health cocktails (made of fruit or vegetable juices), should we drink liquids at meals? (is fine if you wish), how to enjoy food, milk (important for its calcium), shortenings (some are OK, as from peanut oil, sesame seed oil, soybean oil, corn oil, etc.), salt (use in moderation, or use Sprinkle), white sugar (avoid), white flour (avoid), foods to avoid (long list, starting with alcoholic beverages, soft drinks, tea, coffee, tobacco, and drugs), the adequate diet (includes as serving of soybeans once a week, and 2 tablespoons of vegetable oil, such as soybean oil, daily), the importance of supplementary

feeding (vitamin and mineral supplements plus orange juice and Tava-a drink rich in vitamins).

Part III: Recipes. 1. This is the way to prepare delicious, healthful soups. Chapter 10 is about meat substitutes, and calls frequently for Bragg Meal Wafers, Bragg Broth or Bevron, Bragg Meal cereal, etc. Chapter 11, which is about meats, begins: "Meats are one of the greatest energy building foods we have when properly prepared." Recipes call for steak, chicken liver, sweetbreads, veal kidney, boiled heart, scrambled brains, stewed tripe, roast beef, meat loaf, leg of lamb, roast chicken, roast turkey, etc.

The most important principle is (p. 25): "Eat food as close to Nature as you possible can. Keep it primitive." Brown rice is the best type of rice. Molasses must not contain sulphur dioxide. Honey is the best sweetener, followed by raw sugar or brown sugar. Raw milk is preferred. Avoid foods that contain "benzoate of soda or lye" [preservatives] or any other synthetic ingredient. Unsulphured dry fruits are the best. Use natural cheese, not processes. Avoid cured meats such as ham, bacon, corned beef, salami, bologna, or frankfurters. Buy whole grain flour and cereals. Avoid vinegar and baking soda. Try to save and eat the skins of vegetables, such as potatoes, carrots, beets, tomatoes, etc.

Note: Polly Bragg married a Mr. Sorrel and on 10 Feb. 1936 gave birth to a boy, Robert Paul Sorrel, in Los Angeles. Address: P.O. Box 428, Burbank, California.

- 417. Balzli, Jean. 1941. La culture du soja "magique" et sa contribution au redressement de la France [The cultivation of the "magical" soybean and its contribution to the recovery of France]. Revue Internationale du Soja 1(2):41-45. March. Originally published in the "Free Zone" on 17 Sept. 1940 by L'Eclaireur de Nice et du Sud-Est. [1 ref. Fre]
- Summary: Includes a discussion of uses for human foods, including defatted soy flour, soy coffee, soy chocolate, Worcestershire sauce, soymilk, tofu, and soy sprouts. Other uses include lecithin and industrial uses of soy oil and soy proteins.
- 418. Rouest, Antoine. 1942. Le Soja dans l'alimentation humaine [The soybean in human nutrition]. Revue Horticole: Journal d'Horticulture Pratique (Paris) 114(2089):112-14. June 1. (New Series, Vol. 28, No. 5). [Fre]
- Summary: Discusses the reasons that soya has a poor image as a food. Discusses individually: Soymilk, soy oil, lecithin, soybean cake, whole soy flour, soya coffee, and soy sauce (which forms the base of Worcestershire sauce from England). Address: In 1946: Professeur d'Agriculture, Conservatoire National des Arts et Metiers, France.
- 419. Von Loesecke, Harry W. 1942. Outlines of food technology. New York, NY: Reinhold Publishing Corporation. 505 p. Illust. 24 cm. 2nd ed. 1949. [1 soy ref]

• Summary: The section titled "Soybeans" (p. 139) states: "At he present time there are about six commercial canneries in the United States canning green soybeans. The beans are blanched, drained, and run into containers. Hot brine with sugar (about 2 ounces of sugar for each gallon of water) is added and the cans sealed. Pieces of pork are sometimes added. No. 2 cans are processed 85 minutes at 240°F."

Brief recipes for making soy sauce and Worcestershire sauce are given (p. 364). In the latter (whose source is Blumenthal and Thuor, 1932), soy sauce is one of the major ingredients. Address: Senior Chemist, in charge, U.S. Citrus Products Station, Bureau of Agricultural Chemistry and Engineering, USDA, Winter Haven, Florida.

420. Wall Street Journal. 1943. Beatrice Creamery asks listing of more shares: Application to NYSE follows purchase of La Choy Food Products, Inc. Sept. 28. p. 24. • Summary: From the Wall Street Journal Chicago Bureau. Chicago-The first part of this article is similar to that published in the Chicago Daily Tribune today.

La Choy owns and operates its main plant on 23 acres of land in Archbold, Ohio. Its business consists of processing and packing [mung] bean sprouts, tomato products, salted black beans, chow mein noodles, meat products of all kinds, Worcestershire sauce [soy sauce], fruit butters, and other food specialties.

In the future, Beatrice will distribute many of these products. This is a step in Beatrice's further diversification, according to president Clinton H. Haskell.

La Choy's net worth is \$564,086 and net plant value is \$442,687. Current assets are \$267,558 and current liabilities are \$65,407. Beatrice will assume a long-term loan of \$115,000.

The president of La Choy, French Jenkins, will continue as general manager of the La Choy division of the Beatrice Creamery Co. The reorganization will be voted on by La Choy stockholders at a special meeting to be held on 30 Sept. 1943.

- 421. Glidden Company (The), Soya Products Div. 1943. From Glidden: Always a new development (Ad). Soybean Digest. Sept. p. 53.
- Summary: Lists all products made by Glidden's Soya Products Division. "For bakery, meat products, confectionery, cereals, and institutional use-Soya flours and Soyalose grits. Available products include: Soyarich Flour-A full-fat soya flour. Soyalose Flour-A low-fat soya flour. Soyafluff Flour-A practically fat-free soya flour. Soyalose Grits -Low-fat soya grits-sized for specific uses in many food preparations.

For household use-Watch for the names: Durkee Soyarich Flour and Durkee Soya Bits-Two new products for home use. Durkee Oleomargarine. Durkee Worcestershire Sauce. Durkee Salad Dressing.

"For confectionery use-Albusoy: A water-soluble proteinaceous material derived from the soybean-of a noncoagulating nature-used as a whipping agent."

Note. This is the earliest document seen (May 2002) that mentions Albusoy.

For industrial use, soya protein products include: Alpha Protein-An isolated protein for industrial uses. Prosein-A special soybean protein adhesive product. Spraysoy-A special soybean product for use as a sticker and spreader for agricultural spray materials. Mulsoya-A water-soluble isolated soybean protein derivative for textile sizing. Prosoy-G-A filler and extender in molding resins.

For pharmaceutical use: Two products synthesized from soybean sterols used in replacement therapy for endocrine deficiencies.

This ad also appeared in the Oct. 1943 issue. Address: 5165 W. Moffat St., Chicago, Illinois.

- 422. Drown, Marion Julia. 1943. Soybeans and soybean products as food. USDA Miscellaneous Publication No. 534. 14 p. Dec. [1 ref]
- Summary: Contents: Introduction. Nutritive value of soybeans: Why soybean protein is important, minerals and vitamins of soybeans, the fat of soybeans-soybean oil. Recent increase in soybean production [in the USA]. Soybean products: Soya flour, soya grits, flakes and meats, soya with sausage and in soup. Soybeans as a green or dried vegetable: Varieties, growing and harvesting, preparation and cooking. Soybean "milk." Soybean curd. Soybean sprouts. (Note: A description is given of how to make the three previous foods at home.) Other edible soybean products (Soy sauce, Worcestershire sauce, soya crackers and breakfast foods, a coffee substitute, and salted soys [soynuts]).

"In 1942 nearly 210 million bushels of soybeans were produced on about 11 million acres [yield = 19.1 bushels/ acre]. If the 4.6 million acres on which soybean plants were grown for forage and other purposes are added to this figure, only five other crops-corn wheat, hay, oats, and cottonoccupied more land in the United States in that year. These figures contrast strikingly with those of 1924, when less than 5 million bushels of soybeans were harvested from 448,000 acres" [yield = 11.16 bushels/acre]. Figure 1 shows soybean production in the USA (in million bushels) from 1924 to 1942. The rapid increase in production began in 1934. In 1942 production doubled as a result of wartime needs.

"Soybean meats are split or coarsely ground soybeans, dehulled and debittered. They are chiefly used in place of roasted peanuts in confectionery and baked goods, but they can also be cooked and eaten like navy beans.

Vegetable soybeans make an excellent Victory Garden crop. "The most suitable varieties for green shelled or dried beans have straw-yellow or olive-yellow seeds that cook easily and have a mild flavor." A table (p. 8) shows: "Some of the desirable garden varieties for green and dried beans,

classified as to their length of growing season" (from Morse & Stuart, Nov. 1943). State experiment stations can usually supply information about the "seeds of vegetable varieties of soybeans... Many State experiment stations furnish pure cultures of soybean bacteria at cost, and commercial seed firms also sell them" (p. 9).

"When soybeans follow corn on fertile land, they should produce a good crop without direct application of fertilizers. The use of fertilizers, however, is recommended on sandy soils or soils of low fertility, the best results being obtained with stable manure or superphosphate and muriate of potash. Wood ashes may be used if the potash is not available."

Note: This is the earliest English-language document seen (May 2005) that uses the word "debittered" (or "debitter," "debitters," or "debittering") in connection with flavor problems in soybeans. Most early documents that used the term were written in German. Address: Associate editor, Bureau of Plant Industry, Soils, and Agricultural Engineering.

- 423. Argus (The) (Melbourne, Victoria, Australia). 1944. Try this recipe from China. Feb. 3. p. 6.
- Summary: "The British Ministry of Food has culled the cook-books of the world to bring tasty and economical recipes to the British housewife, and her Australian sister now coping with rationing will also find them of great value. Try this interesting recipe:

"Chop Suey (Tsap Sui, Chinese origin)." After cooking, "add the gravy mixture. A few drops of Worcester sauce would be an improvement to the gravy, and would take the place of the Soya bean sauce, so much used in China. Stir the gravy in well..."

- 424. Paddleford, Clementine. 1944. Lunchtime in Washington: What do the nation's executives eat? These sandwiches and salads. Los Angeles Times. April 16. p. F18.
- Summary: "These hard-working men want their sandwiches made with basic foods-meat, cheese, eggs and fish-tuna fish!... And regardless of the governmental push for the soy, the executives shun sandwiches and salads made with this 'little miracle' bean from the Orient."

Everyone in Washington, it seems, drinks a half pint of milk a day. One executive keeps a small condiment cupboard in his desk drawer-"salt shaker, pepper grinder, a shaker of chili powder, and a bottle of Worcestershire. If he can't get a meat sandwich he likes toasted double-deckers" with peanut butter.

Contains 6 recipes, two of which call for ½ or 1 teaspoon "Worcestershire sauce."

- 425. Minor, Lewis J. 1945. Soya sauce processes and how they can be improved. Food Industries 17(7):758-60. July.
- Summary: Contents: Introduction. Present status in U.S.

Composition. Methods of manufacture (two). Costs and equipment. Acid method: Digestion, finishing, bottling. Mold-enzyme vs. acid: Quality and equipment. Quality control. Patent review.

Describes the preparation of a sauce by hydrochloric acid hydrolysis and by mold enzyme digestion of a mixture of soybeans and wheat.

All of the Worcestershire sauces contain soy sauce. The better varieties contain as much as 30% while the less expensive ones have only 10-15%. Before World War II, American soy sauce manufacturers were probably producing less than 1,000,000 gallons per year. Chinese restaurants were using possibly an additional 2,000,000 gallons imported from China.

When using the acid hydrolysis method of certain protein-bearing grains, constantly boiling hydrochloric acid (a 20% solution of hydrogen chloride gas in water) is generally used, in the proportion of 3-5 parts of acid to one part protein. "Hydrolysis is carried out by refluxing the mixture until a maximum concentration of amino acids is obtained," as estimated by the amino-nitrogen method of Van Slyke.

Two firms in the USA are making HVP soy sauce in 6-8 weeks "through modernization of the ancient process." Address: McKay Davis Co., Toledo, Ohio.

- 426. Eaton (T.) Co., Limited. 1946. Order foods early Tuesday for delivery Wednesday (Ad). Toronto Daily Star (Canada). Jan. 7. p. 29.
- Summary: "Soya Bean Sauce, 7½-oz. bottle-15¢. "Eaton's Tuck Shop Worcestershire Sauce, 5-oz. bottle-15¢." Address: College St., Toronto. Phone: TR. 3311.
- 427. Lea & Perrins, Inc. 1946. The secret of seasoning: With illustrated lessons in carving. New York, NY: Lea & Perrins. 96 p. Illust. Index. 18 x 10 cm.
- Summary: Mostly recipes for using Lea & Perrins' Worcestershire Sauce. Contents: The Englishman's secret. Preparing flavorful meals. The table trio. Appetizers. Soups. Fish and sea food. Meats and entrées. Stuffings. Stews and hashes. Eggs and cheese dishes. Tempting sauces. Spaghetti and rice. Savory vegetables. Garnishes and relishes. Salads and salad dressings. Sandwiches. Party and snack dishes. Lessons in carving. Pages 87 to the end, titled "Recipe scrapbook: Notes," are blank pages. The first section, titled "The Englishman's secret," begins (p. 4): "Over a hundred years ago an English nobleman who had spent many years in India returned to England.

"He carried with him a treasure from the Orient. Not gold or jewels but a recipe: the recipe for a marvelous Sauce, a secret blend of rare spices and seasonings that lent to food a new savor and delight.

"From this recipe, a Sauce was compounded by Lea & Perrins, of Worcestershire, England."

"Many have tried to imitate the Original Worcestershire... of course. But the blend remains a secret. It is easy to tell the genuine; just be sure that the name 'Lea & Perrins' is written diagonally across the label."

The front and back covers are color (see next page); the inside photos and line drawings are black and white / monocolor. On the front cover is a plump, smiling chef wearing a toque and holding a frying pan. On the rear cover is a large photo of a bottle of Lea & Perrins Sauce: The Original and Genuine Worcestershire-wrapped in tan paper with red writing. Address: 241 West St., New York 13, N.Y.

- 428. Rombauer, Irma S. 1946. The joy of cooking: A compilation of reliable recipes with an occasional culinary chat. Indianapolis, Indiana, and New York, NY: The Bobbs-Merrill Co. 884 p. Illust. by Marion Rombauer Becker. Index. 22 cm.
- Summary: This is the first edition of The Joy of Cooking since the end of World War II. It was actually printed from the 1943 plates with very few changes. It has the same number of pages as the 1943 edition, but less emphasis on soy. Soy-related recipes: Chicken chop suey (with soy sauce, p. 143-44). Sukiyaki (with soy sauce, but no tofu, p. 163). Chow mein with fried noodles (with soy sauce, p. 164). Dried bean loaf (with whole dry soybeans, p. 176). Soybeans, green (p. 280). Soybeans (dried) (p. 280). Seasonings and ingredients for sauces (incl. soy sauce, p. 379).

Includes a delightful Foreword and "Preface to the 1943 edition." Also well-known recipes for Peanut butter cookies and Peanut brittle. Worcestershire sauce is used to season many sauce or gravy recipes (p. 379-92). Words notably missing from this edition: Blender, milk shake. Address: St. Louis, Missouri.

429. Radwansky, Andor (pseudonym of Dr. A. Medriczky). 1947. Der "Gelbe Gottessegen," die Sojabohne im Haushalt und Kleingarten [The "golden blessing," the soybean in home and garden]. Murnau (near Munich): Verlag Sebastian Lux. 31 p. Series: Die kleine Reihe, 4. 17 cm. [21 ref. Ger] • Summary: Contents: Foreword. 1. Soybeans and nutrition. 2. What does the soybean look like? 3. The soybeancommercial products (Edelsoja whole soya flour, soy flakes, soy oil, soy margarine, soy lecithin, soymilk and tofu [these were once made by a German firm in Frankfurt], soy sauce, Worcestershire sauce, soy chocolate and cocoa). 4. Soybeans in the household (incl. the above commercial products plus soy coffee, soy sprouts). 5. Growing soybeans on farms and in home gardens. Hope for the founding the "Society of Soybean Producers and Friends of Soya" (Gesellschaft der Soja-Anbauer und Sojafreunde). 6. The different methods of soybean production. Growing soybeans in a small garden.

On page 15 the author uses the term "Sojaspeisen" to refer to soyfoods. On page 17 he uses the term





"Gruenbonen" to refer to green vegetable soybeans. Address: Herwegstr. 5, Stuttgart, Germany.

430. New York Times. 1948. John Duncan, aide of Lea & Perrins: Treasurer of sauce concern since 1930 dies at 44-Was officer in navy. Feb. 11. p. 27.

• Summary: John P. Duncan, treasurer of Lea & Perrins, Inc., 241 West Street [New York City], manufacturers of Worcestershire Sauce, died yesterday at age 44 after an illness of several months; he lived in Ridgefield, Connecticut.

Born in Tuxedo Park, New York, he was graduated from Groton School [in Groton, Connecticut] and, in 1925, from Harvard [in Massachusetts].

"In 1925 Mr. Duncan became associated with one of the predecessor companies of Lea & Perrins and he had been the latter's treasurer since its incorporation in 1930. His father, Stuart Duncan of New York, is the retired board chairman of Lea & Perrins."

431. Kagawa, Aya. 1949. Japanese cookbook (100 favorite

Japanese recipes for Western cooks). Tokyo: Japan Travel Bureau. 162 p. Illust. (line drawings, and color-, and black and white photos). 19 cm. Series: Tourist Library No. 11. • Summary: Contents: Preface. General remarks (The why of Japanese food, its nutritive value, table utensils, an ordinary meal, meals for guests, table etiquette, kitchen utensils, how to cut up fish and vegetables, glossary {incl. aburaage, miso, shoyu, tofu}). Japanese cookery: Table of measures, soups, boiled foods, broiled foods, fried foods, saucepan foods, steamed foods, hitashimono (boiled greens in soy [sauce]), aemono (dressed vegetables), vinegared foods, sliced raw fish (sashimi), rice foods, sushi (vinegared rice foods), pickles, seasonal menus, New Year's foods, Girls' Festival foods. How to make Japanese cakes (incl. bean paste from

Many recipes call for "shoyu" [soy sauce]. Soy related recipes: Scrambled egg soup (with shoyu or Worcester sauce, p. 42). Tofu and Japanese leek soup (p. 49). Miso soups (p. 50-51). Broiled egg-plants (with miso, p. 70). Beef sukiyaki (with tofu, p. 79-80). Fish stew (with tofu, p. 81). Odamaki mushi (with yuba, p. 85). Boiled greens in soy (p. 91-92). Dressed food with white sesame [seeds] and vinegar (and aburaage {fried beancurd}, p. 96). Dressed carrot and kidney beans in pod (with tofu, p. 97).

red beans).

On p. 14 we read: "Soy beans are used very much in Japanese food; especially in hilly regions where fish is scarce, or in vegetarian menus (in connection with Buddhism). Beans are not only simply boiled but eaten in various ways. They are made into tôfu (beancurds), aburaage (fried tôfu), nattô (steamed and fermented beans), shôyu. miso, [azuki] bean-paste used in cakes, etc." Key flavorings are miso, shoyu, sugar, and vinegar. Sake, mirin, dashi and ajinomoto (seasoning powder) are also important. "Seaweeds are usually eaten dry. Nori (seasoned laver), kombu (tangle), wakame (lobe leafed undaria), hijiki (spindle-shaped bladder-leaf), and so on, are rich in iodine,..."

"Our special thanks are due to Dr. R.H. [Reginald Horace] Blyth, professor of Gakushin University, who translated the original Japanese manuscript into English." Aya Kagawa was born in 1899. The book was first published in December 1949 but not copyrighted until 1952. The almost identical 9th printing appeared in April 1955. Only the color photos were changed (upgraded) by 1955. The first true revision and 2nd edition was the so-called "Fourteenth & revised edition" of 1962. Address: M.D. and president of Joshi Eiyô Tanki Daigaku (Women's Nutrition College), Tokyo, Japan.

432. Von Loesecke, Harry W. 1949. Outlines of food technology. 2nd. ed. New York, NY: Reinhold Publishing Corporation. vii + 585 p. 24 cm. 1st ed. 1942. [7 soy ref] • Summary: Soybeans are discussed in several places: Canned soybeans ([green vegetable soybeans]; use the vegetable variety, harvested just before any white or yellow beans appear), and soybean sprouts (p. 150). Soybean flour (p. 294-96). Soybean oil and lecithin (p. 323-24). Soy sauce and Worcestershire sauce (p. 416-17, of which soy sauce is a major ingredient). Address: Chemist, USDA, Washington, DC.

433. Sun (Baltimore, Maryland). 1950. On making things taste more like themselves. April 17. p. 10.

• Summary: Monosodium glutamate has been garnering a lot of publicity lately. In fact, the name is now so well known that it is popularly known in commercial circles as MSG.

"The virtue of monosodium glutamate is that it intensified flavor. This has been known to the Chinese for generations. The knowledge was passed on to the Japanese," who started manufacturing it and sold it in the United States prior to the start of World War II.

"However, what with the running out of Japanese patents and the disruption of the war, manufacture of MSG was commenced in this country," where annual production is now some 9 million pounds. It is used chiefly in canned soup and soup powders.

MSG is a type of amino acid. It may be extracted [sic, hydrolyzed] from corn gluten, wheat gluten, or soybean gluten [sic]. "Another important source is the molasses from beet sugar which yields a product [substance] known as Steffens waste."

"The Chinese extracted their MSG from soybean gluten [sic] and called it ve-tsin." When the Japanese began to manufacture it commercially, they named it ajinomoto, which means 'element [basis] of taste.""

You can add a dash of MSG to any dish, just as you would Worcestershire sauce or paprika.

It is claimed that, under certain circumstances, "glutamic

acids increase the mental ability of persons with low I.Q.'s."

- 434. Cooking with a foreign accent: A collection of international recipes for everyday kitchen use-each one tested in the Sunset magazine kitchen. 1952. Menlo Park, California: Lane Publishing Co. (A Sunset Book). 64 p. Feb. Illust. Index. 28 cm.
- Summary: Contents: About this book. Soup. Fish. Breads and pancakes. Cereal products. Meats and poultry. Vegetables. Pastries and desserts.

Soy related recipes: Stuffed clams (with soy sauce, China, p. 12). Chinese lobster (with [mung] bean sprouts and soy sauce, p. 12). Fried fish (China, with soy sauce, p. 12).

Note 1. Soy sauce is called for in many other East Asian recipes in this book (p. 13, 25, 27 {incl. Worcestershire sauce}, 39, 41, 45, 47, 48). Sukiyaki (with soy sauce but without the usual tofu, p. 47).

Note 2. Most of these recipes are from European countries. Of the Asian recipes, there are 17 from China, 4 from India, 1 from Japan (Sukiyaki), and none from Indonesia, Korea, or the Philippines. Neither tofu nor miso is mentioned. Address: Menlo Park.

- 435. Lea & Perrins, Inc. 1952. Dishes men like: New recipes and old favorites. Easy to prepare-Sure to please. New York, NY: Lea & Perrins. 64 p. Illust. Index. 20 cm.
- Summary: Contains 168 recipes that call for Lea & Perrins' Worcestershire Sauce. Contents: If you have a husband who likes to cook, pamper him. The cocktail hour. Soups and chowders. When the main dish is meat. When the main dish is chicken. When the main dish is seafood. When the main dish is cheese, eggs. When the main dish is beans, spaghetti, rice. The barbecue: indoors and out. Salad specialties. Good "go-togethers." How to carve.

The first section, titled "If you have a husband..." contains the following: "Yellowed with time this framed parchment expresses the sentiment that for more than a century has made Lea & Perrins a world favorite. It hangs in the company offices in New York." Inside the red frame, on a parchment-like background, is printed: "Tell Lea & Perrins that their sauce is highly esteemed in India and is in my opinion the most palatable as well as the most wholesome sauce that is made." Below the parchment, also inside the frame, we read: "Extract of a letter from a medical gentleman at Madras, to his brother at Worcester, May 1851."

The front and back covers are color; the inside photos and line drawings are black and white / monocolor. The front cover is divided into 15 rectangles, each of equal size with a color photo of a prepared dish in it. On the rear cover is a large photo of a bottle of Lea & Perrins Sauce: The Original Worcestershire-wrapped in tan paper with red writing.

Owned by Texas Woman's Univ. (Denton, Texas), Woman's Collection. Address: 241 West St., New York 13, N.Y.

- 436. Nichols, Nell Beaubien. 1952. Good home cooking across the U.S.A.: A source book of American foods. Ames, Iowa: Iowa State College Press. 560 p. Illust. by Ray Irwin. Index. 22 cm. [79* ref]
- Summary: The recipes are arranged by region of the USA. The Southwest: Mulligan stew, Arizona style (p. 275, with soy sauce-a reminder of the Chinese cooks in the cow and mining camps. They also used soy sauce to season Spaghetti chop suey).

The Great Lakes: Broccoli, cauliflower and cabbage seasoned with butter and cheese (p. 324. "Women sometimes send a cruet of soy sauce or vinegar to the table with them").

The Farm Belt: Illinois soy chili (p. 384, with 3 cups cooked soy beans). Illinois baked beans (p. 391, with 3 cups cooked soy beans and 2 teaspoons Worcestershire sauce).

The Pacific Northwest: Barbecued crab (p. 457, with soy sauce and Worcestershire sauce).

California: Fried rice Chinese style (p. 494, with soy sauce). "Californians appreciate seasonings-not as a substitute for good cooking, which they consider basic, but to give a dish distinction. For instance, they borrow from the centuries of experience of Chinese epicures and keep soy sauce on the kitchen shelf. With it they baste chicken, turkey, lamb, pork, and veal during roasting; they say it encourages beautiful, rich browning and oozes fine, subtle flavor" (p. 505).

The Hawaiian Islands: Teriyaki steak (p. 533-34. Ingredients: 3 pounds beef. ½ cup soy sauce. 2 tablespoons sugar. 1 clove garlic. 1 small piece ginger root, crushed).

Hawaiian barbecues and beach picnics are much like those of California. "The sauces for basting meats as they broil reveal one difference. They contain more soy sauce and frequently a seasoning of curry powder" (p. 538).

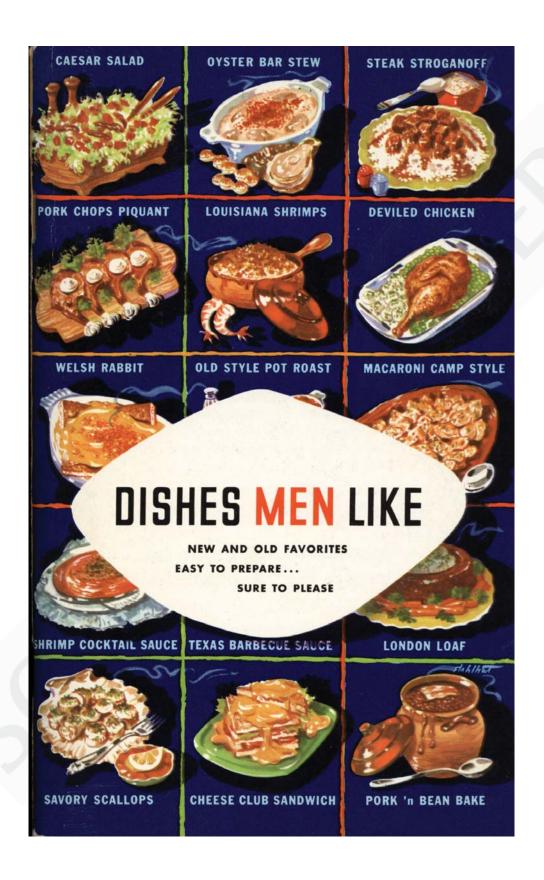
Note: Worcestershire sauce is used in more than 25 recipes in this book. Address: Topeka, Kansas.

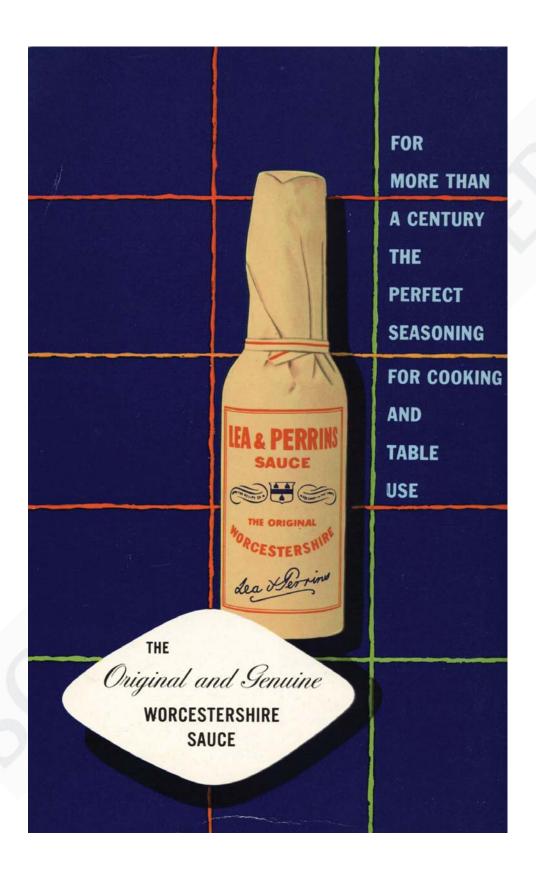
437. Church, Ruth Ellen. 1953. Soy sauce is a necessity for most Oriental foods. Chicago Daily Tribune. April 10. p. A1. • Summary: "Ten years ago [during World War II] there was a rather intensive campaign among people interested in improving the state of nutrition of all Americans to promote the use of soybeans in the human diet. The campaign, for the most part, was a big flop. Admittedly, soy beans are nutritious as all get out; but nobody likes them.

"One of the few forms in which soybeans are acceptable on the American table is in soy sauce, which is a staple in oriental cooking. Most of us dote on chop suey and other Chinese [or pseudo-Chinese] dishes, and chop suey without soy sauce isn't worth the rice it's served upon.

"Soy sauce is the salt of a Chinese meal." A recipe, given in Far Eastern Cookery, by Elinor Burt, is summarized here

"Soy sauce is an ingredient in most of the brown





seasoning sauces we use in cookery, and is the essential sauce for worcestershire sauce."

A recipe for "Eggs foo yung" is given. It was submitted by a Japanese from the Island of Maui [Hawaiian Islands], first published in the Mary Meade column in 1949, and is enjoyed by both Japanese and Chinese; it calls for "2 teaspoons soy sauce." Cartoons show: (1) Black soy beans, a soybean plant, a Chinese person with a conical hat carrying baskets at each end of a shoulder pole, and a Chinese pagoda. (2) Five Chinamen, each with a pigtail, Chinesestyle hat, and elevated wooden shoes, each carrying a bowl of steaming rice.

438. Kay, Tutu. 1954. Wiki wiki kau kau. Honolulu, Hawaii: Watkins Printery, Ltd. 77 + [2] p. Illust. 22 cm. [Eng] • Summary: Cover text: "Quick cooking recipes from Hawaii." Contains a glossary of Hawaiian words, a brief history and: "How to have a luau, make a lei, sew a muumuu,

speak Hawaiian, and entertain simply."

Soy-related recipes: Meat sticks (with "shoyu sauce," p. 15). Deviled macadamia nuts (with Worcestershire sauce, p. 19). Lorie Bachran's spareribs, a la apricot (with shoyu, p. 22). Taylor Mercer's filet de boeuf flambe (with "shoyu sauce," p. 23). Suggested dinner menus: Japanese miso soup and sukiyaki (p. 24). Abalone with cucumber (and shoyu, p. 25). Meat sticks (with "Soy Sauce," p. 26). Hot buttered abalone (with shoyu, p. 27). Note: Many other meat, poultry and fish dishes are also seasoned with shoyu or Worcestershire sauce.

Sukiyaki (with tofu and shoyu, p. 54). Address: [Hawaii].

- 439. Thorpe, Jocelyn Field; Whiteley, M.A. 1954. Soya bean. In: J.F. Thorpe and M.A. Whiteley. 1937-1956. Thorpe's Dictionary of Applied Chemistry. 12 vols. 4th ed. London, New York, Toronto: Longmans, Green & Co. See vol. XI, p. 46-48. 23 cm. [15 ref]
- Summary: The section titled "Soya Bean" has the following contents: Introduction. Composition of soya beans. Soya-bean products: Oil, cake and meal, flour, milk, soy sauce ("known in Japan as 'Shoyu' and in the west under such names as 'Worcester Sauce,'..."), miso, tofu, immature soya beans, roasted soya beans (eaten like peanuts), coffee substitute, chocolate substitute. Agricultural uses (green fodder, hay, silage, bean pods and straw). Sir Jocelyn Field Thorpe lived 1872-1940.
- 440. Thorpe's dictionary of applied chemistry. 4th ed. Revised and enlarged. Vol. XI. Soil-Z. 1954. London, New York, Toronto: Longmans, Green and Co. x + 1145 p. See p. 46-48. Illust. Index. 23 cm. [16 ref]
- Summary: The entry for "Soya bean" (p. 46-48) was written by A.W. Marsden, M.Sc., D.I.C., A.R.C.S., F.R.I.C., Director, Commonwealth Bureau of Dairy Science,

Shinfield, near Reading, England. Contents: Introduction. Composition of soya beans. Soya-bean products: Oil, meal, flour, soya-bean "milk," soy sauce, Worcestershire sauce, miso, tofu, immature soya beans (eaten, after shelling and cooking, just like green peas), sprouts, roasted soya beans (eaten like peanuts), coffee substitute, chocolate substitute. Agricultural uses. Soya bean oil (see Vol. IX, 27a, 29a, 53c, 55c). Address: London, England.

- 441. Paddleford, Clementine. 1955. Cooking team: The Dunlops work together in their own kitchen. Jim specializes in barbecues. Los Angeles Times. March 20. p. K27.
- Summary: James R. Dunlop and his wife, June, are a cooking team, famous around Chevy Chase, Maryland. A recipe for Marinade for steaks calls for 6 tablespoons soy sauce. Another for Barbecued spareribs calls for 1/3 cup Worcestershire sauce. Address: This Week food editor.
- 442. Lea & Perrins, Inc. 1955? A guide to tempting dishes. New York, NY: Lea & Perrins. 47 p. Illust. (color). * • Summary: Mostly recipes that call for Lea & Perrins' Worcestershire Sauce. Owned by Texas Woman's Univ. (Denton, Texas), Woman's Collection. Address: New York, NY.
- 443. Paddleford, Clementine. 1956. Chinese chops: Sweetand-sour pork chops made in a new way. It's a one-dish meal served with rice. Los Angeles Times. Jan. 29. p. L15.
- Summary: A recipe for Sweet-and-sour pork chops calls for 1 teaspoon soy sauce and ½ teaspoon Worcestershire sauce. Address: This Week food editor.
- 444. Tomoda, Yoshinori; Sakaguchi, Kinichiro. eds. 1956. Hakkô shokuhin [Fermented foods]. Tokyo: Kyoritsu Shuppan K.K. 359 p. Series: Bisei-butsu kôgaku koza (Microbial technology course), no. 8). [Jap]
- Summary: Contains long sections on miso (p. 1-92), shoyu (p. 93-248), HVP shoyu (p. 225-50), pickles (p. 251-74), vinegar (p. 275-304), Japanese-type "sauce" and Worcester sauce (p. 307-329), and fermented dairy milk products (p. 331-59; incl. acidophilus milk, kefir, and koumis).
- 445. Times (London). 1957. And spice and all that's nice. Jan. 21. p. xvi, cols. 5-6.
- Summary: Spices were first used to disguise the flavour of meat. Eventually it was found that thin sauces, "made with spices and vinegar, would keep and could be used from meal to meal. These were the first sauces to be manufactured. Perhaps the oldest firm of 'oilmen,' or 'oilermen' as they were then known, was founded in 1706. The firm-then West and Wyatt, some years later to become Crosse and Blackwell-produced their sauces in china containers of rare beauty. Some of their sauces were issued in containers of Wedgwood china.

"These thin sauces were mostly designed to hide rather than to enhance the flavour of meat. But early in the nineteenth century the first of the piquant sauces, Lea and Perrins' Worcestershire sauce, was produced. Mr. William Perrins and Mr. Wheeley Lea, a chemist who founded the firm in 1838, were asked by Lord Sandys, of Ombersley Court, who had returned to England from his Governorship of Bengal, to make a sauce from (presumably) an Indian recipe, for use at his table. A four-gallon jar of the sauce was first made, but the demand was so great that the next brew was made in a 25-gallon container. Lea & Perrins still use the original recipe, a closely guarded secret, for their sauce, which matures is vats for a long time before being bottled. They now export over a million bottles a year, about 50 per cent of their production, to all countries except Russia and her satellites.

"The sauce list of Crosse and Blackwell of 1838 shows that they were producing 38 different types of sauces..."

Alexis Soyer, inventor of the Soyer stove, was one of the most famous chefs of his time and maitre de cuisine of the Reform Club.

- 446. Paddleford, Clementine. 1957. The captain's herb chicken: A barbecue party is Joe Canet's idea of fun. Try his poultry and Lazy Man's Chili Beans. Los Angeles Times. Sept. 22. p. M36.
- Summary: Joseph and Dorothy Canet of Mill Valley, California, like to cook. Before barbecuing chickens, Joe marinated them for several hours in peanut oil with wine vinegar, Worcestershire sauce, and soy sauce, with pepper and garlic, which he pulverized with salt.
- 447. Chicago Daily Tribune. 1959. Costly gospels. Jan. 21. p. 16.
- Summary: Sotheby's of London held a notable auction in October, 1958. "This time some books and manuscripts collected by the late C.W. Dyson Perrins [of Lee {sic, Lea} & Perrins' Worcestershire sauce] were for sale. Fifty lots brought almost a million dollars, said to be the largest amount ever realized in a single auction of literary property."

Later a 12th century Latin gospel on vellum was sold for £39,000 (about \$109,200). Note: 1 British pound sterling is worth about \$2.80.

448. Egami, Tomi. 1959. Typical Japanese cooking. 1st ed. Translated by V.A. McKenzie Skillman. Tokyo: Shibata Publishing Co. Ltd. Exclusive distributors: Japan Publications Trading Co., Ltd (Tokyo). [viii] + 146 p. Illust. (incl. color photos by Yoshikatsu Saeki). Index. 27 cm.

• Summary: Foods marked with an asterisk (*) are exported from Japan to the USA. Many recipes include "soy sauce" and monosodium glutamate (Ajinomoto). Soy related recipes include: Aburage * ("fried soy bean curd"-4 recipes). Broiled soy bean curd [yakidofu] (3 recipes.

Sukiyaki, Yasainabe, Osechi). Chu-miso paste * ("made from soy beans, salt and rice malt [koji], seasoning for miso soup"-2 recipes). Ganmodoki * ("fried soy bean curd and vegetables"-Nikomi oden). Nama-age ("half fried soy bean curd"-Boiled vegetables). Okara ("soy bean curd leftovers"-Yoshino sushi). Red miso paste * ("made from soy beans, salt and rice malt [koji], seasoning for miso soup"-2 recipes). Soy bean (3 recipes). Soy bean curd * (14 recipes, incl. Gizeidofu / Gisei-dofu, p. 39). Soy bean powder * [kinako] (2 recipes; Kinakomochi, Kushi dango). Soy sauce ("Kikkoman"). White miso paste ("made from soy bean, salt and rice malt [koji], seasoning for miso soup"-2 recipes). Worcestershire sauce (Skewer nibblers).

Note: This is the earliest English-language document seen (June 2011) that uses the word "nama-age" (spelled with a hyphen) to refer to deep-fried tofu cutlets.

Other interesting recipes include: Amazake. Azukisarashian ("red bean powder"-7 recipes). Black sesame seed (in Sekihan). Mochi rice. Red bean [azuki] (Sekihan). Rice cake ("made of mochi rice"). Seaweeds (kanten / agar-agar, kombu / konbu, nori / green laver & purple laver, wakame). White sesame seed. Yamaimo ("Japanese yam"). Tomi Egami was born in 1899. Address: [Japan].

- 449. Lee, Calvin. 1959. Chinese cooking for American kitchens. New York, NY: G.P. Putnam's Sons. 190 p. Illust. by Mabel Wong Lilienstein. Index. 22 cm.
- Summary: An excellent book, says Craig Claiborne. The many styles and forms of Chinese cooking "can be grouped into five schools: Canton, Fukien, Honan, Shantung [incl. Pekingl, and Szechuan. Cantonese cooking is the most popular, even in China itself." This is a Cantonese cookbook. "Fukien probably produces the best soy sauce in China (p. 20). Canton is known for its steamed bass with black bean sauce (Jing yu) (p. 22).

Soy related recipes: Steak à la Lee (with "2 tablespoons Worcestershire sauce," p. 33). Pork chops à la Lee (with "2 tablespoons Worcestershire sauce," p. 35).

"Perhaps the most interesting of the condiments used in authentic Chinese cooking is the lowly soy bean." It is a rich source of oil. "The pulp of the bean is ground to make a curd extremely high in protein content. These bean curds (dow foo) look somewhat like little rectangles of white custard and can be boiled, stir-fried, or baked. Some of the fresh bean curd is permitted to ferment, making a richly aromatic and tangy cheese. Commonly called Chinese cheese, foo yu [fermented tofu] is sold in bottles and does not require any cooking." "Dow see [fermented black soybeans] are small fermented [soy] beans which are used commonly for seafoods such as strong-smelling fish, shrimps or lobsters. They have a delightful spicy flavor and should be rinsed in water and crushed before using" (p. 46-47).

Vegetables: "Bean sprouts (ngar choy). Sold fresh by the pound. Also sold in supermarkets canned." Used in many recipes (p. 50). Note 1. It is unclear what type of bean is used to make these sprouts.

"Black beans (dow see). Sold by the ounce. Wash and soak for 10 minutes before using. Recipes: Lobster Cantonese (Chow lung har). Beef with green peppers and tomatoes (Fon care lot tzu ngow). Pork with tomatoes (Fon care gee)" (p. 50).

Seasonings and sauces: Bean curds (dow foo). Sold fresh or canned in Chinese or Japanese groceries. Recipes: Beef with bean curds (Dow food ngow). Steamed fish with bean curds (Dow foo jung yu). Bean curd soup (Dow foo tong) (p. 52). Brown bean sauce (mien see). Sold canned in groceries (p. 52). Haisien sauce [Hoisin sauce]. Sold canned or bottled in Chinese groceries. Used chiefly as a condiment.

Fried fish with bean curds (Dow foo jeen yu, p. 106). Steamed fish with bean curds (Dow foo jing yu, p. 107). Soy sauce cooked chicken (See yow gai, p. 116). Beef with bean curds (Dow foo ngow, p. 135). Roast pork with bean curds (Dow foo char shu, p. 145).

Note: Most recipes call for ½ to 2 teaspoons "monosodium glutamate." Address: [New York City].

450. Lin, Tsuifeng Liao; Lin, Hsiangju. 1960. Secrets of Chinese cooking. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. xviii + 238 p. With an essay by Lin Yutang. Illust. (line drawings by Siu Lan Loh). 21 cm.

• Summary: Lin Tsuifeng is married to the well-known author Lin Yutang, and Lin Hsiangju is their daughter. Both worked to popularize Chinese cuisine in the United States. "This book is the result of many years spent away from China,..." The introductory essay by Li Yutang is titled "The art of cooking and dining in Chinese" (p. ix-xviii). In it he says (xvi-xvii): "Soya sauce is pretty well known; its quality and its possibilities in combination with sugar, wine, vinegar or sesame oil is not yet known." "There are other important ingredients which a good Chinese cook cannot do without. Among these are the pickled black beans (toushi), essential in preparing sea bass... They just fit in like a perfect match. This toushi appears as tiny black spots in the sauce of 'lobster Cantonese style' and is essential to its peculiar flavor. There is wined bean curd (fuju, or toufuju), tasting like an exotic cheese, but unlike any other flavor known before... There is the seafood sauce (haishientsiang) [hoisin sauce] which strengthens the flavor of any food that takes sweet and sour well... But above all I place the greatest importance on toushi, pickled black beans, one of the greatest creations of Chinese cuisine. It helps digestion to the extent that it takes away all feeling of heaviness after a sumptuous dinner. Given a bit of this crushed black bean, the stomach has a feeling of positive happiness in doing its duties."

Soy related recipes: Soy sauce fish (with "3 tablespoons soy sauce," p. 41-42). Soy sauce chicken (with "1 cup soy sauce," p. 92). Soy sauce eggs (p. 111-12). Fried eggs with soy sauce (p. 113).

Chapter 9, "Seasonings and sauces," notes (p. 135, 137): "Monosodium glutamate is a marvelous discovery which has recently been introduced to America from the Orient. In the United States, it is sold under such trade-mark names as Accent, Enhance. Unlike salt or sugar, it has no individual or original taste, but it enhances the flavor of the food it seasons... This will do much to restore the taste of frozen foods, or foods otherwise altered by new methods of packaging..."

Soy sauce contains both salt and monosodium glutamate... Soy sauce has been for years an ingredient of Worcestershire Sauce, but it has only recently come into its own in America. The soy sauces available in Chinese groceries are on the whole more full-bodied than those sold elsewhere.

"The Chinese way of making soy sauce is to boil soybeans, mix the beans with roasted wheat and introduce a mold. Three kinds of mold may be used. When the molds have developed sufficiently, the mixture is placed in a salt solution,..."

Black beans [fermented black soybeans] are sold in cans. They are very salty and have a pungent odor. Use only about 2 tablespoons to season 2 or more cups of food. "Bean Cheese or Bean Cakes [Fermented tofu] are a kind of vegetable cheese made from the fermentation of boiled soybeans and crushed rice or barley. The cakes are sold in jars in a semi-liquid form. The taste closely resembles that of Camembert cheese, being strong and pungent. This is a ready-to-eat condiment which is often served in a little dish along with salted peanuts, pickles, scrambled eggs, or as an accompaniment to congee" [rice gruel].

More recipes: Bean curd soup (with "1 or 2 cakes bean curd," p. 153-54). Fried bean curd ("Drain on absorbent paper, 4 cakes bean curd," p. 171-72). Bean curd salad (p. 172). Pressed bean curd (How to make at home from regular bean curd, p. 173). Spinach or watercress with bean cheese [fermented tofu] (with "1 tablespoon bean cheese mixed with 1 tablespoon water," p. 173). Sea bass with bean cheese [fermented tofu] (and bean curd [tofu], p. 174). Fish with black beans [fermented black soybeans] (p. 174-75). Address: USA.

- 451. Mendoza, Jose M. 1961. Philippine foods, their processing and manufacture. Manila: Published by the author. 421 p. See p. 152-59. Chap. XV, Sauces and Similar Products. [7 soy ref]
- Summary: Contents of Chapter 15 titled "Sauces and similar products" (p. 152-58): Soybean sauce (toyo). Japanese soya sauce: Preparation of the starter, preparation of the material, inoculation, fermentation. Modified Chinese soya sauce. Coco sauce or coprameal sauce (The taste compares favorably with Chinese soy sauce and Japanese soy sauce). Hints and suggestions. Philippine bean sauces. The tao-si [fermented black soybeans], tokua [tofu, not

fermented], tahore [taori, taore; probably fermented tofu], the tajo (unpressed tofu curds, usually served with medium brown sugar), mongo [mung bean] sprouts, soybean sprouts, Vetsin (contains 1 part monosodium glutamate, 7 parts lactose, and 3 parts salt). Includes a formula for Worcestershire sauce (which contains no soy sauce).

Note 1. This is the earliest document seen (May 2003) that contains any Filipino word (tajo) for unpressed tofu curds, usually served with medium brown sugar.

Note 2. The section titled "Tahore" (p. 157) states: "This product is simply taori whereby the already prepared taore is macerated to mass. Tokua [tofu] is used frequently with tahore. They are both popular food [sic, foods] among Chinese. The Chinese eat them with soft-boiled rice called 'barabasa.'" Address: Lecturer in Food Technology and Fermentation Technology, Manuel L. Quezon Univ., Manila.

452. Yokoyama, Yohan. 1961. Shôyu no jôzô to gôseihô; fu sôsu seizô-hô [Shoyu: Fermentation and synthetic methods, with a supplement on the manufacture of Worcestershire style sauce]. Tokyo: Meibundo. 435 p. [Jap]

453. Binsted, Raymond; Devey, James D.; Dakin, John C.

1962. Pickle and sauce making. 2nd ed. Revised. London: Food Trade Press. viii + 274 p. Jan. Illust. Index. 22 cm. • Summary: Soya is discussed only in chapter 5, titled "Thick and Thin Sauces." "Worcester sauce is traditionally a thin sauce, very spicy in flavour and made so that a sediment is present in the bottle" (p. 88). Many of these sauces use 20's vinegar as the main ingredient. In England, this means normal malt vinegar. "The vinegar should be of approximately 20's strength, i.e., contain about 5 per cent of acetic acid" (p. 89). Soy (i.e. soy sauce) is used as a relatively minor ingredient in various thick fruits sauces which also contain many other minor ingredients: With mango chutney and dates (p. 96). With tomato puree, mango chutney and dates (p. 97). With tomato puree (p. 98). As a major ingredient with garlic and sugar (p. 99). With vinegar, molasses and onions (p. 99). With syrup and tomato puree (p. 105). In Mushroom Ketchup, soy [sauce] is the second most

Concerning thin sauces (p. 108-23), "By far the most popular of thin sauces on the market is Worcester sauce, so much so that when a reference is made to thin sauce it is often assumed that Worcester sauce is referred to" (p. 108). "Recipes are legion and are jealously guarded by the leading manufacturers of the product, but general principles may be considered. Soy [sauce] tamarinds, anchovies, garlic and spices are basic ingredients, while some sauces contain, in addition, citrus juices, wines and meat extract" (p. 111).

predominant ingredient after mushrooms in brine. In Walnut

Ketchup, soy [sauce] is the third ingredient after walnuts in

brine and 20's vinegar.

Four recipes for Worcester Sauce are given, with the leading ingredients (in descending order of predominance)

as follows: Good quality: Vinegar 17 gallons, walnut catsup 11 gallons, mushroom catsup 10 gallons, sherry wine 5 gallons, soy sauce 4½ gallons, ground hogs livers 21 lb, salt 11 lb, tamarinds 10 lb, plus ground cayenne pepper, black pepper, allspice, and coriander, plus mace and brandy. Medium quality: Vinegar 198 gallons, walnut catsup 11/4 gallons, soy sauce 1 gallon, sugar 25 lb, salt 7½ lb... Cheap quality: Vinegar 15 gallons, soy sauce 3½ gallons, water 2½ gallons, salt 2 lb... Basic Worcestershire Sauce: 20's vinegar 35 gallons, tamarinds 30 lb, walnut ketchup 6 gallons, soy 3 gallons, lemon pulp 2 gallons, anchovies 10 lb, sugar 10 lb, etc. The complex method is then given.

The section on flavorings in sauces (p. 121) lists "Soy, a fermented soya bean and wheat liquor produced in the Far East, is a dark brown liquid with a piquant and salty flavor." Address: 2. A former pickle and sauce factory chief chemist; 3. Head of Dep. of Pickle and Sauce Products, British Food Manufacturing Industries Research Assoc., Leatherhead, Surrey, England.

454. Kagawa, Aya. 1963. Japanese cookbook: 100 favorite Japanese recipes for Western cooks. [14th & rev. ed.]. Tokyo: Japan Travel Bureau. 198 p. Illust. (some color). Index. 19 cm. Series: Tourist Library No. 11.

• Summary: The first edition was published in 1949. This is actually the 2nd ed., which is 36 pages longer. Most of the information about soyfoods in the 1st edition is also in this 2nd edition, but often on different pages: Several examples: Long passage about soybeans and soyfoods (p. 16). Glossary (soy entries, p. 40-42). Nameko miso soup (p. 81). Misoshiru (introduction, p. 82). Tofu and Japanese leek soup (p. 89). Four kinds of miso soup (p. 90-92).

The last two pages in the 1963 printing are devoted to full-page ads: (1) "Zest that's best with Kikkoman." "Brewed by Noda Shoyu Co., Ltd., Tokyo, Japan. Sole agent in U.S.A.: Kikkoman International Inc., 900 Marin St., San Francisco 24, California. 930 San Mateo St., Los Angeles, Calif. 11-31 31st. Ave., Long Island City 2, New York." Photos show a can and a bottle of Kikkoman All-Purpose Soy Sauce.

(2) "Try Aji-no-Moto: The super seasoning." "Just add a pinch of Aji-no-Moto before, during, or after cooking and see how it unlocks those hidden flavors in all foods-raw, cooked, dried, canned, or frozen." A illustration show an Italian chef with a white chef's hat (toque blanche), moustache, kerchief, and upward pointing right index finger. Illustrations show a small glass shaker and a metal can of Aji-no-Moto.

Aya Kagawa was born in 1899. Address: M.D. and president of Joshi Eiyô Tanki Daigaku (Women's Nutrition College), Tokyo, Japan.

455. Rombauer, Irma S.; Becker, Marion Rombauer. 1963. Joy of cooking. Indianapolis/New York: Bobbs-Merrill Co. [x] + 849 p. Illust. by Ginnie Hofmann and Ikki Matsumoto. Index. 24 cm.

• Summary: One of the great American cookbooks. A classic and an all-purpose cookbook, this is the first authorized edition prepared by Marion Rombauer Becker-who transformed the book. Irma, her mother, died in 1962.

Soy-related recipes: Chop suey or Chow mein (with soy sauce, p. 229-30). Soybeans, green (p. 260). Shrimp teriyaki (with "1/2 cup pineapple juice" and "2 to 4 tablespoons soy sauce"-but no recipe for teriyaki sauce, p. 377). Sukiyaki (with "½ cup 3/4-inch squares bean curd: Tofu" and "2 cups bean sprouts or cooked, drained Shirataki," p. 402).

Vegetable milks (incl. soy bean milk, almond milk, p. 487-88). About non-wheat flours (incl. soy flour, corn meal, rice flour, rye flour, potato flour, tapioca and sago flour, arrowroot flour or starch, barley flour, cotton seed flour, peanut flour, oat flour and oatmeal, bean flour, p. 498-501). About commercial sauces (incl. soy sauce and Worcestershire sauce, p. 542. Note: Soy sauce is not mentioned as an ingredient in Worcestershire sauce). Cornell Triple-Rich flour formula (with 1 tablespoon soya flour, p. 556).

Also discusses Whole-grain or Graham flour (p. 498). And how to make "coconut milk" and coconut cream. "Coconut milk and cream are very sensitive to high heat. For this reason they are added to hot sauces at the last minute or are cooked over hot water." They are prized in curries [and many Indonesian tempeh recipes].

456. Baens-Arcega, Luz. 1966. Feasibility of mold-process production of sauce from copra and soybean mixture with authentic Philippine strain of Aspergillus oryzae (Ahlburg Cohn). Araneta J. of Agriculture 12(2):80-105. June. [21 ref] • Summary: People in various countries have developed a preference for the sauce produced in their native countries. "The Filipinos relish 'patis'; the Thailanders, 'nam-pla'; and the Vietnamese and Cambodians, 'nuoc-mam.' These sauces are prepared by the natural fermentation and hydrolysis of fish which is salted with a suitable proportion of salt, usually 25 to 30 per cent, to prevent the growth of undesirable bacterial contaminants... In Europe the favorite sauce is 'maggi,' a food seasoning prepared from meat.

"Perhaps the most popular sauce is 'toyo,' or shoyu,' a condiment made from the highly nutritive soybean... In the United States this typical oriental soy sauce is used as an important condiment and a basic constituent of quality Worcestershire sauce, a compound spicy food seasoning."

"Figures obtained from the Bureau of Census and Statistics and the Department of Agriculture and Natural Resources" show that local Filipino production of soy sauce, which may roughly represent home consumption of soy sauce, from 12 selected establishments alone amounted to 3,031,957 pesos in 1959. "It may be reasonably estimated that should all manufacturers of soy sauce submit reports on their production, the amount could easily be doubled." Since

soybean, a major "raw material for the production of soy sauce, is not yet commercially produced in the Philippines," importation of these protein-rich beans amounts to thousands of pesos annually.

The experimental work described in this article was conducted from Nov. 1962 to Sept. 1963 in the laboratory of the Biological Research Center, National Institute of Science and Technology, covering a period of ten months. Different proportions of molded copra meal (a coconut by-product containing 25% protein) were used to supplement the regular soy sauce koji. The sauces were harvested after 2 months of brine fermentation.

"A supplementation of 50 parts copra meal to 50 parts soybean was selected as the ideal combination of proteinous substrate which yielded, after 2 months of fermentative brining, a clear, yellow-red, appetizing sauce containing 5.51 per cent of protein..."

Table 7 gives the names of 8 commercial soy sauces sold in the Philippines (2 imported, 6 made locally) together with their content of protein and of sodium chloride.

Contains 7 tables, 3 graphs (incubation time vs. proteolytic activity, etc) and two photos. Address: Araneta Univ.

- 457. Pickles, H. 1968. Are traditional fermented foods and lactic acid nutrition out of date? British Vegetarian. Nov/ Dec. p. 520-25.
- Summary: Includes a discussion of soy sauce, Worcester Sauce, and miso, and of the writings of Dr. Johannes Kuhl (Professor, the Nuclear Research Institute in Rome), and O. Warburg (the Nobel Prize winner).

"In Asia, mould-enzymes are used to break down soyabeans rich in proteins, when making the spicy sauces [i.e., soy sauce]. The well-known Worcester Sauce is made from a Japanese recipe from the enzymes of soya beans with the same mould Aspergillus orsae [sic, oryzae] that is also present in correctly-prepared muesli."

- 458. David, Elizabeth. 1970. Spices, salt and aromatics in the English kitchen. Harmondsworth: Penguin Books. 279 p. See p. 10-13, 89-91, 249-53. Index. 20 cm. [80 ref]
- Summary: The period of the late 1600s and early 1700s gave rise to the English interest in Indian chutneys and pickles, brought to England by East India merchants. After that, together with the establishment of curry dishes as part of England's national cookery, "came the relishes, the ketchups and sauces which were the forerunners of the bottled sauces today. They too came to us via the East India Company and its traders, and like so many 18th- and 19th-century foods owe their development to the need for products which would stand up to long sea voyages and help to relieve the monotony of the food available both to the crews of ships and their passengers. The old 'store sauces' based on vinegar and horse-radish, soy and garlic, on pickled

walnuts, oysters, cockles, mushrooms, lemons, anchovies, and onions gradually became known either as catsups (the word seems to have derived from caveach, a form of spiced vinegar pickle in which cooked fish was preserved. In different forms, such as scabeche, caviche, and so on, the term occurs throughout European cookery, and turns up in Mexico and Japan) or by the name of some individual who was thought to have originated a particular blend. By the mid-19th century, hundreds of British families must have had their own-or what they thought was their own-formula for some such sauce. Some of these sauces were regarded as particular to fish, some to grilled meat, others to roast game, others again were hailed as 'universal sauces.' One such, which appears to have been commercialized in the late 18th century was Harvey's. A recipe for this sauce, mentioned in cookery books and lists of necessary stores throughout the nineteenth century, is given in a cookery dictionary of 1832 (Footnote: *The Cook's Dictionary* by Richard Dolby, late cook at the Thatched House Tavern, St. James St. New edition, 1832). Ingredients were anchovies, walnut pickle, soy and shallots, plus a whole ounce of cayenne, three heads of garlic, a gallon of vinegar and cochineal for colouring. The whole lot was mixed together, stirred two or three times, every day for a fortnight, strained through a jelly bag until perfectly clear, bottled and corked down. Harvey's, like its rival Worcestershire sauce commercially launched in 1838, was used as a condiment to flavour other less ferocious compounds."

There follows a list of sauces that were popular in the late-Victorian era. Elizabeth Lazenby had a range of sauces; Harvey's was among them.

"The all-conquering tomato sauces and ketchups of today were little known before 1900. The first recipes had appeared in English cookery books during the first years of the 19th century."

The author gives a recipe for a Piquant Sauce (p. 91) that comes from a "modest little manuscript cookery book" in her possession. "The date of the manuscript is probably early Victorian [Queen Victoria reigned 1837-1901]. The recipe reads: "1/2 oz. of Mace, 1 oz. of Ginger, 1/2 oz. of Piminto (Allspice berries of Jamaica pepper), 1/4 oz. of Chillies, 1/2 oz. of Mustard seed, 1 oz. of Long Pepper (Piper longum, a variety used in Indian cookery), 1/4 pint Soy, 1 quart of Vinegar. Bruise the spice and simmer them in the vinegar a few minutes. Strain it, afterwards add the Soy. Excellent. Address: 24 Halsey St., London SW3, England.

459. Kikkoman International Inc.; Kikkoman Shoyu Co., Ltd. 1970. Sekai ni aiseru aji no shuyaku [World renowned sauces (Ad)]. In: Hokubei Mainichi Shinbunsha, comp. 1970. Hokubei Mainichi Nenkan [Hokubei Mainichi Year Book]. San Francisco, California. p. 8. [Eng; jap]

• Summary: Ad (full page). The bottom 1/8 of this ad, plus one line near the top, are in English. The top line of the ad, in

Japanese, means "The main character of taste, which is loved by the world." Just below that is the title in English. And to the right below that is the "Kikkoman signature" in English. Near the top left in Japanese: Kikkoman products are made using the best selected ingredients and long experience. They start with shoyu, and include teriyaki sauce, sukiyaki sauce, Menmi (noodle broth base), and Manjô Mirin (sweet saké for cooking). They are the masters of the food seasoning craft. Kikkoman is working hard in the kitchens of the world.

Photos show: (1) A large, metal 1-gallon can of "Kikkoman Shoyu" (written in English). (2) Bottle of Kikkoman Hawaiian Teriyaki Marinade and Sauce. (3) Bottle of Kikkoman Sukiyaki Sauce. (4) Bottle of Kikkoman Worcestershire Sauce. (5) Bottle of Kikkoman Memmi / Menmi. (6) Smaller and slightly flattened bottle of Kikkoman Manjô Mirin.

In the lower left corner is the Kikkoman hexagonal logo. Above: "Since 1630." Below (in Japanese): Kunaicho goyôtatsu (Purveyors to the Imperial Household). Address: San Francisco, Los Angeles, New York, Chicago, USA; Tokyo, Japan.

460. Stobart, Tom. 1970. The International Wine and Food Society's guide to herbs, spices and flavourings. Newton Abbot, England: David & Charles. 262 p. See p. 236-37. Illust. by Ian Garrard. 26 cm. 1977 ed.-International Wine and Food Publishing Co. Penguin Books ed.

• Summary: In the Acknowledgments, the author includes thanks to "Mr Lea of Lea and Perrins Ltd., Worcester, England;"

"Worcestershire sauce (Worcester sauce): This bottled commercial sauce is so famous and so worldwide in its use in every country outside the Iron Curtain that it deserves to be mentioned. The story of its origin is probably this. About 1837, the year Queen Victoria came to the throne, a retired governor of Bengal [Sir Sandys or Lord Sandys] went to his local druggists in Worcester, one of several shops belonging to two pharmacists by name Lea and Perrins, and ordered that a recipe he had brought back from India be made up. This was done but it did not pass muster with the ex-governor and he rejected it. The matter was forgotten until some years later when Mr. Lea and Mr. Perrins were turning out the cellar and the barrel came to light. On tasting it they found it was now quite superlative. Unlike O. Henry's tale of the Apollinaris water, they still had the recipe, and began to make it up for local consumption. The sauce so rapidly became popular that ten years later it was used in the household of many noble families, and the druggists had even begun to export it. Its fame was quickly spread around the world by the pursers [those responsible for the comfort and welfare of the passengers] of the early steamships. For instance, in June 1843, it was recorded [no source is given] that 'The cabin of the Great Western had been regularly supplied with Lea and Perrins' Worcestershire Sauce which

is adapted for every variety of dish-from turtle to beef, from salmon to steaks, to all of which it gives a famous relish. I have great pleasure in recommending this excellent sauce to captains and passengers as the best accompaniment of its kind for any voyage.' Not only does Worcestershire sauce come into most bar cures for a hangover, but it helps to soften the sight of salt pork when one is seasick.

"Worcestershire sauce is now manufactured in many countries and the same old recipe is used. Indeed, the Lea and Perrins factory in Worcester still uses the same splendid Victorian cast iron and wood machinery which, together, with vaults full of barrels of maturing sauce, convey the atmosphere of a winery, belied only by the smell of vinegar and spices.

"Worcestershire sauce is a thin piquant sauce of a general type popular in the days of the East India Company. It is based on vinegar, soy and molasses and contains the juice of salt anchovies together with red chilli, ginger, shallots and garlic; in all, over twenty different tropical fruits and spices. It is not a cooked sauce but is a product of maceration and is matured in oak hogsheads for a long period as it was in the pharmacists' cellar.

"Probably the greatest international use of 'Worcester' is in bars for flavouring tomato juice, and, as already mentioned, for reviving people with a hangover (e.g. prairie oyster). But a look through old correspondence shows that Worcestershire has been used by a surprising number of great chefs as one of their 'secrets'. It is clear that whilst nothing is worse than the excessive use of Worcestershire sauce to disguise bad cooking, it is a valuable flavouring when used with skill and moderation. There is someone to advocate its use in almost any dish: soups, fish, shellfish, meat and game and poultry, eggs, cheese, salad dressings and sauces. Cooks do better to steer clear of made-up flavourings, but an item which has been popular and unchanged for over a century and is used by chefs in so many countries must be an exception. Indeed, one could almost say that it has graduated as a basic natural ingredient."

Note: This is the earliest document seen (Feb. 2012) that tells the story about Lea and Perrins and the barrel of sauce, based on a recipe from India, being left in the cellar and forgotten, only to be later discovered and found to be delicious. Thus Mr. Lea of Lea and Perrins told Tom Stobart a tall tale (embellishing the history of his company), Mr. Stobart carefully recorded it as if it were true, and (as of Dec. 2008) it has been passed down through history as if it were actually true!

461. Stobart, Tom. 1970. Herbs, spices, and flavorings. New York, NY: McGraw-Hill. 261 p. Illust. (part color). Index. 26

• Summary: Also titled: The International Wine and Food Society's guide to herbs, spices, and flavorings. For a book published in 1970, this book contains a great deal of original and useful information. Note that the word "seasoning(s)" does not appear in the title or the index. For many entries, the equivalent word in various European languages is given. In addition, for plants, the botanical name and family are usually given. Contents: Black and white illustrations. Colour plates. Introduction: The history of flavourings, the importance of flavourings, the origin of this book ("I come to this subject as a traveller who has lived in a number of different countries"), the scientific basis of flavouring, scientific, popular and foreign names, synthetic and harmful flavourings, flavouring in practice, growing herbs. An alphabet of herbs, spices and flavourings (The entries are in alphabetic order). Appendix.

Soy related entries: Harvey's sauce: "One of the old English sauces... In 1870, the courts decided there was no exclusive commercial right to the name 'Harvey's Sauce', as there are recipes for it dating back to at least the 17th century.

"Though there are many formulae, it is, in general, based on walnut and mushroom ketchup-flavoured with anchovy, garlic, and often soy sauce and vinegar. It has the appearance of Worcestershire sauce, but is not hot although it does contain some chilli."

Soy [sauce]-Soya bean: "The soy bean is undoubtedly the world's most important legume." It can be eaten as a fresh bean [green vegetable soybeans], as a dried bean and as soybean flour. It is a leading source of cooking oil "much used as a substitute for olive oil in Spain." From it one can make a kind of milk [soymilk]. "In the East [East Asia], it is also fermented to make various kinds of curd and bean cheese. The soy product which concerns us is soy sauce."

It originated in China and "is thought to have been brought from China to Japan by a Buddhist priest about A.D. 500. In the West it became well known during the nineteenth century. It is one of the ingredients of Worcestershire sauce and Harvey's sauce."

Worcestershire sauce: See the original 1970 ed. published in England.

Also discusses: Ketchup, M.S.G., oil ("The word 'oil' is derived from 'olive'"), sesame (incl. tahina. "The pure oil is almost without taste or smell and does not easily go rancid in hot countries, which is one reason for its popularity"). Address: England.

462. Lea & Perrins, Inc. 1970? The Lea & Perrins exciting ideas cookbook: with the easy find index inside cover. Fair Lawn, New Jersey: Lea & Perrins. 32 p. Undated. Illust. (color). Recipe index. 22 cm.

• Summary: A booklet of recipes that call for Lea & Perrins' Worcestershire Sauce. Contents: Appetizers. Soups. Meat main dishes. Poultry. Seafood. Vegetables. Salads. Sandwiches and fillings.

The inside rear cover is titled "Lea & Perrins' Worcestershire Sauce: What's in it for you." An illustration shows two bottles side by side. One is full of the sauce and bears the distinctive orange label. The other contains layers of the ingredients; each layer is described by the side of the jar as follows: "Juicier red onions from the Finger Lakes. Spicier cloves from Zanzibar. Sweeter tamarinds from the West Indies. Snappier garlic from Venice. Bitier chili peppers from Mombassa. Livelier anchovies from the Cantabrian Sea. Choicer eschalots from Holland."

The bottom caption reads: "In a fast changing world we think some things should remain constant. This is why we haven't varied Lea & Perrins Sauce in over 130 years... only pure, natural products of the choicest grades and qualities available. And it is still aged naturally in wooden casks, like fine wine. Some things are just too good to change!"

Note 1. How about the change during World War II from soy sauce to HVP (hydrolyzed vegetable protein)? Is HVP a pure, natural product?

Note 2. Letter (e-mail) from Marlys McGuire, librarian, University of Minnesota in Minneapolis. The typeface looks like it was printed sometime in the 1970's. Also owned by Texas Woman's Univ. (Denton, Texas), Woman's Collection. Address: Fair Lawn, New Jersey 07410.

463. Brozan, Nadine. 1971. If you've never seen a soybean before... New York Times. Jan. 23. p. 18.

• Summary: Denis Barber owns about 75,000 bushels of soybeans at any given time-yet he's never seen a soybean. As president of General Arbitrage, a New York commodity trading company, he buys and sells commodity futures. The soybeans he purchases are usually resold before the date he is required to take delivery; if they are not, they end up in a warehouse in Chicago.

In the financial world, the soybean is known as "the Cinderella crop." It contains more protein than any other vegetable-and costs less. Yet in America, soybeans are not widely available in food stores-except in health food stores and Chinese markets. Although supermarkets do not stock the bean, they do sell many products, ranging from salad dressings to pet foods, that contain soybean oil, meal, or flour. They also carry soy sauce and Worcestershire sauce. Babies allergic to cow's milk will probably be given soy milk. Observers of orthodox [kosher] Jewish dietary laws, which do not permit the consumption of meat and dairy products at the same meal, are now able to enjoy imitation sour cream, ice cream, or steaks-each made from the soybean. According to Mr. Barber, less than one half of one percent of the crop is used for human nutrition; its main use is as a meal for livestock.

Dr. Joseph J. Rackis, principal chemist for the Northern Marketing and Nutritional Research Division of USDA's Agricultural Research Service in Peoria, Illinois, agrees that most soybeans are processed into oil and meal. And even if more were available for sale as food, most people don't like their taste-according to a spokesman for General Foods.

The "future of the soybean probably rests more in what it can become than what it is." The food industry, scientists and nutritionists believe that the wave of the future lies in the simulation of foods from soybeans. Already they are transforming soybeans into "hamburgers, canned stews, bacon strips, hors d'oeuvre dips, chow mein, pasta, sea food, and a wide range of frozen dinners approximating ham, chicken and beef." A photo shows soybeans in a plastic bag.

464. Sunset (Menlo Park, California). 1971. An introduction to soybeans. 146:226, 228. April.

• Summary: "'They taste so good!' was the exclamation we heard over and over again from our taste-testers who were sampling soybeans for the first time. The intriguing nutlike flavor and tender texture of these highly nutritious legumes comes as a pleasant surprise.

"Soybeans are indigenous to China and Japan, where they have been used since before recorded history. Here in the West the dried beans are readily available in health food stores and Oriental markets."

Describes how to soak soybeans (6-8 hours or overnight; reserve liquid for cooking), and how to cook them (simmer for 3 hours). Gives recipes for: Dry-roasted soybeans [soynuts]. Baked soybeans (with onion, salt pork, molasses, catsup, salt, mustard, Worcestershire sauce, and pepper). Marinated soybean salad. Refried soybean tacos.

465. Changing Times. 1971. The story behind Lea & Perrins Sauce-The Original Worcestershire. July. p. 24.

• Summary: "Most of the history of Lea & Perrins Worcestershire Sauce is right there on the label. John Wheeley Lea was a druggist in the English market town of Worcester. William Perrins ran a chemist shop in the nearby town of Evesham. On January 1, 1823, they organized Lea & Perrins, a Worcester chemist shop that was also a distribution center for pharmaceuticals, toiletries and food products concocted on the premises.

"From a recipe of a nobleman in the county (inscribed on either side of the shield) refers to Lord Sandys, native of Worcester, ex-governor of the Indian state of Bengal and a connoisseur of exotic eastern sauces and spices. In 1835 Lord Sandys returned from Bengal with a recipe for what became the first Worcestershire Sauce-hence the words the original to distinguish it from the multitude of imitators.

"Worcestershire translates to 'county of Worcester,' and the shield emblazoned on the label is the ancient coat of arms of the county. Lord Sandys's recipe, calling for tamarinds, garlic, eschalots, onions and molasses, almost turned out to be a catastrophe. The initial batch was unpalatable. Lord Sandys rejected it, and crocks of the stuff sat unused in Lea & Perrins's basement, where, like old wine, it mellowed.

"Sometime later someone had the temerity to try another lick. It was delicious. How long did the mixture age? The company isn't telling.

"The recipe, too, is top secret and has never been changed. Neither has the shape of the bottle or its wrapping... After all, why change something that's been a best-seller for 136 years?"

466. Huang, Su-Huei. ed. 1972. Chinese cuisine: Wei-Chuan cooking book. Taipei, Taiwan: School of Home Economics, Wei-Chuan Foods Corp. 181 p. Illust. No index. 22 cm.

• Summary: On each page is one recipe and a half-page color photo of the prepared dish. The title of the recipe is written in English in large bold letters and is also given in (to the right) in small Chinese characters, just above the number of servings. Most of the recipes call for 1/4 to 1/2 teaspoon of MSG; many call for soy sauce.

On unnumbered pages at the front of the book are (1) A two-page color photo, on a light blue background, of 39 special ingredients, each numbered, with the numbers and names across the bottom of the pages. These include: "9. nori. 24. pickled plum (umeboshi). 25. bean curd noodle [pressed tofu noodles]. 30. bean curd wrapper (pronounced 'bai ye') [pressed tofu sheets]. 35. bean curd skin [yuba in large, semicircular thin sheets].

(2) Description of some other special ingredients: "Hot bean paste (pronounced 'la jiao jiang'). This is made with red peppers [and soy beans] and has a very hot taste." "Sweet bean paste ('t'ien mien jiang'). This is made with steamed, fermented bread (black color)." Note 1. Why is this called "Sweet bean paste"? What kind of beans are used to make it?

"Soy bean paste ('do ban jiang'). This is made with fermented soy beans (black color)." "Fermented black bean ('do shr'). This is black [soy] beans which are steamed, then marinated in soy sauce or salt." "Pickled bean curd [fermented tofu] ('do fu ru' or 'Chinese cheese'). This is bean curd which is dried and then pickled; there are many different kinds with different seasonings."

(3) Helpful hints: "In all recipes you may substitute Worcestershire sauce for dark vinegar."

In Chapter 3, "Pork and beef," soy related recipes are: Shredded pork with sweet soy bean paste (with 1.3 tablespoons "sweet soy bean paste," p. 39). Note 2. This is the earliest document seen (Feb. 2009) that contains the term "sweet soy bean paste." See also p. 104 below.

Pork ribs with dried black fermented beans (p. 41). Pork in preserved bean sauce (p. 42).

In Chapter 4, "Sea Food," is a recipe for Steamed carp with fermented black beans (p. 64).

In Chapter 5, titled "Bean curd and eggs" (p. 102-15) are recipes for: Stewed bean curd (with "1½ squares bean curd"), Assorted dish with hot sauce (with "1/2 tablespoon hot soy bean paste, 1½ tablespoons sweet soy bean paste," p. 104), Bean curd stuffed with minced pork, Ma-Po's fried bean curd with pork, Bean curd leaf rolls with minced pork (With "bean curd wrappers"), Beancurd noodles with celery salad

(with "4 oz. {storebought} bean curd noodles"), Vegetarian chicken (with "16 bean curd sheets").

Also: Green peppers stuffed with chopped meat (p. 122, with "1 tablespoon fermented black beans, crushed"). Bitter gourd stuffed with fermented black beans (p. 126, with "2 oz. fermented black beans"). Eggplant with bean curd skin (p. 133, with "1 sheet beancurd skin" and "1 sheet nori" [sea vegetable]). Bean curd in earthen pot (p. 142, with "3 squares bean curd"). Address: 19 West Nanking Road, Taipei, Taiwan.

467. **Product Name:** Chef Bonneau's Premium Worcestershire Sauce [Vegetarian].

Manufacturer's Name: Bonneau Products Co. Manufacturer's Address: 81 N.E. Columbia Blvd., P.O. Box 17180, Portland, OR 97217. Phone: 503-289-7181.

Date of Introduction: 1972.

Ingredients: Soy sauce, distilled water, white distilled vinegar, cider flavor, garlic, onion, pepper, sugar, spices & other flavors.

Wt/Vol., Packaging, Price: 3.785 liters.

How Stored: Shelf stable.

Nutrition: Per ½ oz (14.3 gm): Sodium 300 mg. New Product-Documentation: Talk with Seth Tibbott of Turtle Island Foods. 1997. This small company makes a vegetarian Worcestershire sauce. The quality is good but it contains honey so it is not vegan.

Label and laboratory analysis sent by Bonneau Products. 1997. April 30. The sweetener is given as sugar, not honey. Ph: 3.3 to 3.9. Specific gravity: 1.09 to 1.09. A handwritten note states that the company started making Worcestershire sauce in about 1972. The company's food specialties, as stated on the letterhead, are: Distilled vinegar. Vinegars. Soy sauce. Worcestershire sauce. Private label manufacturing. A photocopy of the Worcestershire Sauce label (1 gallon) is attached.

Note: This is the earliest known vegetarian worcestershire sauce made in the USA.

468. Ikeda, Masanori. 1973. Food additives moving into wider applications. Business Japan 18(7):51, 56, 61-62, 64.

• Summary: The section on "Shoyu (Soy Sauce)" states: "Of the various condiments used by the average Japanese over a given year, shoyu or soy sauce constantly ranks first or second, accounting for 18.2 to 20 per cent of total condiments, according to figures by the Prime Minister's Office Statistics Bureau."

"There are about 4,000 shoyu producers in Japan, turning out approximately 1,200,000 kiloliters per year. About 40 per cent of the total is produced by five leading producers, and 60 per cent by the rest." The quality of shoyu make by all companies in Japan is excellent "because the government maintains a strict inspection system under the

Japan Agricultural Standards (JAS).

"Before World War II, some shoyu was exported. But in the 10 years following the end of the war [1945-1955], Japan had little capacity to export due to the difficulty of securing sufficient raw material. Production barely met domestic demand. As the Japanese economy began to recover, exports were resumed.

"Full scale exports began in 1957. Since then Japan has shipped approximately 2,600 kiloliters annually overseas. In 1972 Japan exported approximately 8,000 kiloliters."

"Shoyu produced for export is graded into two categories-A and B-and the inspection standards are considerably higher than the JAS for domestic consumption. Only products that pass this strict examination are approved for export."

"Sauces: Sauce manufacturers in Japan (producers of fruit sauce and Worcestershire type sauce) total about 300 in number." The top ones are Kagome, Ikari, Bulldog, Kikkoman and Chicken. Address: Director General, Food and Marketing Bureau, Ministry of Agriculture and Forestry.

- 469. Matsumoto, Shinichi. 1973. Executive marketing: Active promotion captures market share. Business Japan 18(12):112-13. Dec.
- Summary: Page 112 begins: "A number of foreign manufacturers have been making enthusiastic attempts..."

"The first was characterized by combined marketing efforts for Kikkoman Worcestershire sauce and Delmonte tomato ketchup. We came to the decision on this combined marketing effort first because they were distributed in similar marketing..." Address: Asst. Manager, Planning and Advertising, Kikkoman Shoyu K.K.

- 470. Goldbeck, Nikki; Goldbeck, David. 1973. The supermarket handbook: Access to whole foods. New York, NY: Harper & Row. xvii + 413 p. Illust. by Ellen Weiss. Index. 22 cm. Second ed. published 1976 by New American Library/Plume Books. 460 p.
- Summary: This influential book is dedicated "To the Preservation of the Family Farm." The authors believe that butter is a better spread than margarine, which is made by saturating polyunsaturated oils and adding many artificial ingredients (artificial color, preservatives). The chapter on beans contains a table titled "Protein for Pennies" that includes soybeans at the top of the list: Calories/lb: 1,828, protein/lb 154.7 gm, cost/lb: \$0.25. Soybeans, unlike other beans, are a complete source of protein. "Soybeans: Soybeans are the most virtuous of all beans. They are the only food in the vegetable kingdom that contains all the essential amino acids the body needs to synthesize protein. People often talk about masking the flavor of soybeans with gravies and lots of seasoning; we don't know why since these beans actually have quite a pleasant taste of their own. Although cookbooks dealing exclusively with soybeans have

been written, soybeans can be used just as you would any other bean and require no special handling" (p. 124).

A quarter pound soybeans grow into about 1 pound of soy sprouts. A nutritional comparison of the whole beans and the sprouts is given, showing the increase in vitamins. An illustrated description of making sprouts is given (p. 130).

Prepared sauces: Imported natural and "tamari" soy sauces are recommended. "The American simulation of soy sauce is unfortunately doctored with sugar, caramel coloring, and preservatives. Kikkomen [sic, Kikkoman] is the purest of these, tainted only with preservatives." Lea & Perrins, "the original Worcestershire Sauce," is considered the best and the only natural one. Other brands add corn syrup, artificial coloring and flavoring, and stabilizers. Recommended soy oil brands: Melba, Hain, Hollywood. They contain no artificial additives.

"The section 'Soybeans: The greatest snack on earth' (p. 282) recommends: 'Soy Ahoy, roasted, unsalted soy nuts; Flavor Tree Peruts, plain or seasoned; Parker's Soy Joys.' Flavor Tree also makes a variety of 'chips.'" But these contain no soy. Note that neither tofu nor miso are mentioned in this book. The book does not advocate a vegetarian diet, but in the chapter "Meeting the Challenge of Meat," it discusses the many health problems with meat and recommends that if you still want to eat meat, try to find a natural, good quality product.

A photo on the back of the dust jacket shows Nikki and David Goldbeck. Address: R.D. 1, Box 452, Woodstock, New York 12498.

- 471. Ali-Bab. 1974. The encyclopedia of practical gastronomy. New York, NY: McGraw-Hill. vii + 471 p. Illust. 24 cm. *
- Summary: This is a translation of Gastronomie pratique. The Joy of Cooking (1963, p. 542) states that the author "refers to soy, Worcestershire, catsups, tabascos, and other such commercial condiments as 'sauces violentes,' which mask out all other flavors."

Page 44: "83. The *catjang* is a fermented bean curd." Note: The author, whose real name was Henri Babinsky, was of Polish ancestry, born in 1855 in Paris and died in 1931. The 1st edition (314 p., 20 cm) was published in 1907 by the same publisher in Paris. The 2nd edition (636 p., 26 cm) was published in 1912.

- 472. Food Processing (Chicago). 1975. Worcestershire sauces vary in quality, solids content-affect formulation, usage. 36(3):58. March.
- Summary: Lea & Perrins, maker of a traditional brand, found that the solids content of some "average" Worcestershire sauces was as much as 50% lower than their brand. Lea & Perrins "produces its Worcestershire sauce from fresh vegetables-most sauces are made from dehydrated vegetables-and uses no heat for extraction. No

colors, chemicals, or preservatives are added. Anchovies, tamarinds, eschalots, garlic, and onions are received at the plant, cleaned, soaked in vinegar, and aged from one to two years. The flavor-containing liquid is then squeeze-extracted.

"Cold extraction eliminates loss of volatiles by heat and also eliminates bitterness or off-flavor often associated with heat extractions. This is especially true with anchovies, where cold extraction gives a smooth flavor with no fish flavor. After extraction the liquid from the various raw ingredients is blended, and then the complete sauce is further aged in wooden casks for several months. After final aging, the sauce receives a short burst of heat for pasteurization purposes."

It is estimated that there are more than 100 brands and grades of Worcestershire sauce. For more information contact Lea & Perrins Inc., Pollitt Dr., Fair Lawn Industrial Park, Fair Lawn, New Jersey 07410.

473. Shurtleff, William; Aoyagi, Akiko. 1975. Tempeh (fermented soybean cakes) (Document part). In: W. Shurtleff and A. Aoyagi. 1975. The Book of Tofu. Hayama-shi, Kanagawa-ken, Japan: Autumn Press. 336 p. See p. 68-69. • Summary: "These cakes of cooked soybeans, bound together by a fragrant, white mycelium of Rhizopus mold, have a delectable flavor: fried or deep-fried, they taste remarkably like fried chicken or veal cutlets. Rich in protein (18.3% fresh or 48.7% dried), tempeh is also highly digestible, and Rhizopus serves as an effective deactivator of trypsin inhibitor (p. 70). Like other fermented soy products (miso, shoyu, natto) and sea vegetables, tempeh is one of only a few non-meat sources of vitamin B12.

"For centuries prepared daily on a cottage scale throughout Indonesia (where it is a basic food for millions of people and makes use of more than 50 percent of the country's soybean crop), tempeh is also an important staple in New Guinea and Surinam, and is eaten on a small scale in Malaysia and Holland. Its adaptability to household industries and its low cost should make it, like tofu, a food of worldwide commercial interest during the coming decades.

"Tempeh can be prepared without difficulty in any Western kitchen using either whole soybeans, okara (p. 81), or cooked grains (wheat, rice, barley, or rye) fermented alone or mixed with soybeans. In Indonesia, ½ cup portions of partially cooked, inoculated soybeans are wrapped in banana leaves, tied, and fermented. For larger scale preparation, use (stainless steel) trays with 1/8-inch holes every 2 inches throughout the top and bottom, or similarly-perforated, sausage-shaped plastic bags 1½ inches in diameter. Be sure that all containers are well washed since even small amounts of oil or salt hinder mold growth.

"The starter is available from the U.S. Department of Agriculture, Northern Regional Research Lab., 1815 N. University Ave., Peoria, Illinois 61604. The Farm (p. 316) is now making up a brochure on tempeh preparation which will soon be available with the starter.

"To prepare new starter, carefully scrape darkened (sporulated) mycelium from the surface of freshly fermented cakes or from the wrapper or tray in which tempeh was fermented. Mix with 1 teaspoon (sterile) water and use in place of commercial starter.

"Homemade Tempeh: Makes 6 cakes.

"1 cup soybeans, washed and soaked for 18 hours in a mixture of 1 quart water and 1 teaspoon vinegar or lactic acid.

"1/2 teaspoon tempeh starter (Rhizopus oligosporus mold spores).

"Squeeze beans firmly and repeatedly with one hand in soaking water to remove all seed coats, then carefully pour off water and coats. Refill soaking container with water and repeat until all coats are removed. Combine drained beans and 4 cups water in a pot, bring to a boil, and simmer for 60 minutes. Drain beans, rinse 4 to 5 times under water, then drain well. Allow to cool to body temperature, then mix in starter. Divide inoculated beans into 6 equal portions, placing each at the center of a 7 by 9 inch piece of aluminum foil.

"Fold over sides, then ends of foil, sealing tightly, to form a 4- by 3- by ½-inch thick 'package.' Place packages in a warm clean place or incubator and allow to stand for 24 hours at 88° (or as long as 30 hours at 78°), or until beans are bound together into a cake by a fragrant white mycelium. For best flavor, serve these fresh tempeh cakes as soon as possible, cooked in any of the following ways:

"Deep-fried or Fried: Deep-fry cakes (or pan-fry on both sides) until crisp and golden brown. Serve topped with shoyu, ketchup, Worcestershire, or any of the following Basic Sauces (pp. 48 to 49): Onion, Mushroom, Sweet & Sour, Ketchup-Worcestershire, or Tomato & Cheese. Also delicious in sandwiches and soups.

"Tempeh Goreng (Savory Cutlets): Score both surfaces of 3 fresh tempeh cakes to a depth of 1/8 inch. Combine 3 tablespoons water, ½ teaspoon salt, ½ clove of crushed garlic, and ¼ teaspoon coriander. Add tempeh, marinate for 5 minutes, and drain well. Deep-fry in (coconut) oil (p. 130). Serve as an accompaniment for rice dishes, topped with redpepper sauce (sambal) if desired.

"Tempeh Kemul (Crisp Chips): Cut 3 tempeh cakes horizontally into paper-thin slices; sun-dry for 5 minutes if desired. Combine 6 tablespoons (rice) flour, 1 clove of crushed garlic, ½ teaspoon salt, and ¼ teaspoon coriander. Mix in enough (coconut) milk to form a fairly thin batter, then add tempeh slices and allow to stand briefly. Deep-fry until crisp, and serve like potato chips. For variety use a well-salted tempura batter.

"Tempeh Bacham [Bachem] (Rich Fillets): Combine in a skillet \(^1\)4 grated onion, \(^1\)2 teaspoon salt, 3 to 4 tablespoons brown sugar, and 11/2 cups water. Add 3 tempeh cakes (cut crosswise into fourths), bring to a boil, and simmer until all liquid has evaporated. Deep-fry cakes and serve as for

Tempeh Goreng.

"Tempeh Kering (Fiery Sauté): Cut 3 tempeh cakes into paper-thin 1/2-inch squares; sun-dry for 1 to 2 hours if desired. Deep-fry and drain well. Sauté ½ clove of crushed garlic and ½ minced onion in 3 tablespoons oil for 5 minutes. Add 2 tablespoons each brown sugar and water, 1 to 2 minced red peppers, ½ teaspoon salt, and spices (salam, laos, asam) to taste: sauté for 2 minutes more. Add tempeh slices and sauté for 4 more minutes. Scoop out tempeh with a slotted spoon or spatula, drain briefly over wok or skillet, and serve as a topping for cooked rice.

"In Soups: Add diced fresh tempeh to soups and simmer for 30 minutes. Season with salt, miso, or shoyu.

"Baked or Roasted: Bake at 350° for about 20 minutes, or until nicely browned and fragrant. If desired, use as the basis for a pizza-type preparation, or serve topped with any of the sauces mentioned above."

Illustrations show: (1) Small round and square cakes of tempeh. (2) How to fold inoculated, cooked soybeans a small packet when making Indonesian-style homemade tempeh.

Note 1. This is the earliest published document seen (Oct. 2011) that describes how to make tempeh at home. The process was learned from an Indonesian couple, Mr. and Mrs. Mustam, in Tokyo, Japan, in March 1975.

Note 2. On 1 Sept. 1975 Shurtleff (in Tokyo) sent a copy of the section on "Tempeh" (typeset galley proofs) from this book to Cynthia Bates at The Farm (Summertown, Tennessee) and requested her comments. Address: Lafayette, California.

- 474. Goulart, Frances Sheridan. 1975. Bum steers: How and why to make your own delicious high protein mock meats, fake fish & dairyless desserts, and avoid useless calories, cholesterol, sodium nitrate, salmonella, trichinosis & high prices. Old Greenwich, Connecticut: Chatham Press. 205 p. Illust. Recipe index. 21 x 19 cm.
- Summary: This vegetarian cookbook, interspersed with many well-selected anti-meat quotations, describes how to make meatless meats and milk-free dairylike products at home. Contents: Introduction. On the block: Major mockmeat-making supplies. Vegebutchering: Master mock-meat recipe file. Bogus beef. Pseudo pork. Unreal veal. Sham lamb. Con game. Phony poultry. Fake fish. Un-innards. The vege-deli. Mocking up: General dishes. The mock crock. On the side. Dairyless desserts. Steerage (sources of unfamiliar ingredients).

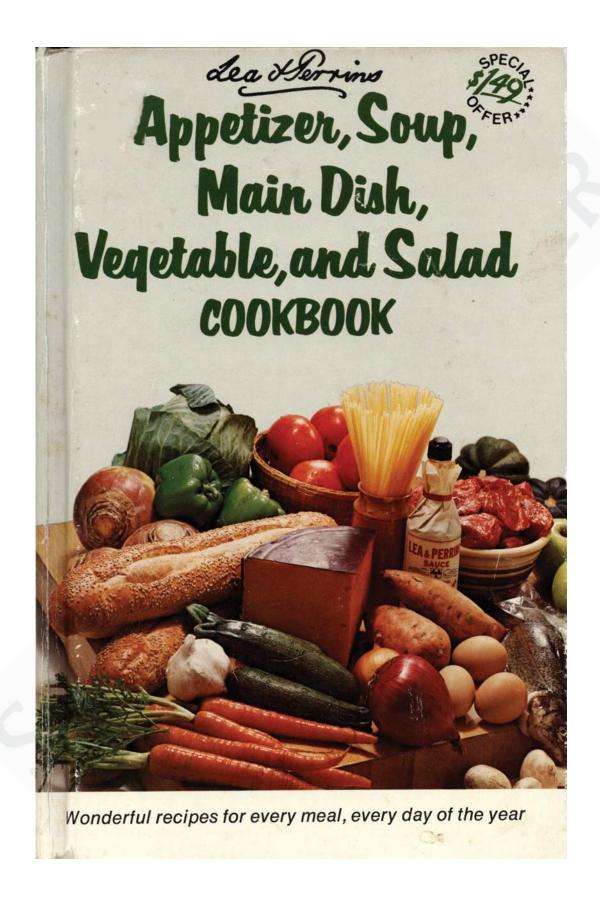
Chapter 1 begins with an introduction to and nutritional composition of tofu, followed by the soybeans, gluten flour, other legumes, etc. Under "Flavors enhancers" are listed soy lecithin granules or flakes, miso, yeast extract (marmite), soy sauce and tamari, and Worcestershire sauce. Chapter 2 contains recipes for making gluten, tofu, grainola (with soy grits), a stock with miso for non-meat dishes (p. 32), mock milk I (made with soy flour), mock milk II (made with raw

cashews or almonds), mock (soy) butter, and mock cream (with soy flour), and mock yogurt (with cashew nuts and soy yogurt culture). A sampling of the many other soy-related recipes include: Moo-less ragout (with tofu, soy sauce, and soy butter, p. 43). Vegetarian rolladen (with cooked ground soybeans, p. 52). Good red meat (with gluten or tofu, p. 53). Greenbutcher's meatballs (with tofu, p. 57). Mock Mac I (burger with soybeans, p. 64-65). Pineapple pig (with tofu, p. 72). Half-calf (with tofu, p. 79). Surrogate salami (with "bean pulp (residue from making Tofu)" [okara], p. 125). Bumsteads: Two burgers for meat-totalers (with tofu, p. 131). Meatless mincemeat (p. 142). Soybean mustard (with soy sprouts, p. 165). Cow tow: Cowless milk candy (with soy milk powder). Jersey bounce: A moo-juice-less junket (with soy milk, p. 184). Bum bombe: Egg-less, cream free (with soy cream, p. 184). Two 100% vegetarian ice creams: Eggless, milkless (with soy powder, p. 186).

Many recipes also contain wheat gluten: Charisma: Char-broiled bum steers (p. 48). Pig-less pork sausage (p. 70-71). Roast loin of veal (p. 80). Fake steaks: Two sham schnitzels (p. 80-81). Vegetarian cutlets (p. 82). Mocking birds I (p. 83). Fruit stew (p. 86). Sham lamb (p. 89). Sham lamb curry (p. 91). Bum bunny (p. 97). Sweet breads (p.

Aduki beans are used in Moo-less rice pudding (p. 183). Sources of ingredients include: Walnut Acres, Penns Creek, Pennsylvania 17862 (herbs, spices, oils, whole grains, flours, seaweeds, etc.). Erewhon Trading Co., 342 Newbury St., Boston, Massachusetts 02115 (seaweeds and general goods, grains, beans, vegetables, seeds, etc.). Shiloh Farms, Route 59, Box 97, Sulphur Springs, Arkansas 72768. Arrowhead Mills, Box 866, Hereford, Texas 79045. Dynamic Nutritional Products, P.O. Box 528, North Hollywood, California 91603 (Milk-free yogurt culture. Trade names: Soyadophilus and Theradophilus). Address: Wilton, Connecticut.

- 475. Lea & Perrins. 1975. Appetizer, soup, main dish, vegetable, and salad cookbook. New York, NY: Supermarket Book Company. 128 p. Illust. (color). Index. 22 cm.
- Summary: A book of recipes that call for Lea & Perrins' Worcestershire Sauce. Contents: Starters and snacks. Savory soups. Meat main dishes. Poultry main dishes. Seafood main dishes. Beans and rice. Eggs and cheese. Vegetable variety. Refreshing salads. This and that. Contains many fullpage color photos of prepared dishes. Address: Worcester, England.
- 476. Wright, Louise. 1975. The road from Aston Cross: An industrial history, 1875-1975. Imperial House, Learnington Spa, Warwickshire, England: Smedley-HP Foods Ltd. 84 p. Illust. 25 x 19 cm. No index.
- Summary: This book was published on the centenary of the HP Foods Co. The story begins in 1875 when Edwin Samson Moore bought land in Tower Road, Aston Manor,



and built his vinegar brewery, registered as the Midland Vinegar Company. He is believed to have taken up agencies for Mellors Sauce and Banquet Sauce. In 1886 the wheat sheaf was registered as the company's trade mark. In 1901 The Moores registered the offices of F.G. Garton Sauce Manufactory at Tower Road. In 1903 H.P. Sauce was launched and sold in Canada. Today it contains soy sauce. In 1902 adjacent Vulcan Brewery was acquired by the Moores. In 1904 the name H.P. was re-registered by the Midland Vinegar Co. In 1906 hundreds of donkey carts toured Great Britain to introduce H.P. Sauce. In 1913 H.P. Sauce was sold in the USA, and by 1917 in France and South Africa. In 1924 the Midland Vinegar Co. was sold to the British Shareholders' Trust, then floated as a public company named HP Sauce Ltd.

In 1930 HP Sauce Ltd. acquired Lea & Perrins Ltd. of Worcester by an exchange of shares. Lea & Perrins Inc. of New York remained a separate entity. Three members of the Perrins family (Dyson, Capt. Allan, and Col. Charles) joined the board of HP Sauce Ltd. Captain Alan Perrins visited Australia to arrange for the manufacture of HP Sauce and Lea & Perrins Sauce there. In 1931 manufacture of HP Sauce started in Sydney, Australia.

In 1940 bottling of Lea & Perrins Worcester Sauce was moved to Tower Road. In 1942 because of shipping losses, HP Sauce was manufactured by E.D. Smith and Sons at Winona, Ontario, Canada. In 1945-46 the bottling of Worcester Sauce was transferred back to Worcester.

In 1950 the purchase of market research data from A.C. Nielson started. In 1957 J.E. Lea was appointed managing director of Lea & Perrins. In 1966 first computer was installed.

In 1967 HP Sauce Ltd. was acquired by the Imperial Tobacco Co. In 1969 H.P. Fruity Sauce (which now contains soy sauce) was launched.

In 1972 the company was renamed Smedley-HP Foods Ltd. (Smedley-HP for short) and the company offices were moved in phases to Imperial House, Leamington Spa.

Note: In 1916 the Dyson Perrins Laboratory was established at Oxford University. Founded with an endowment from Charles Dyson Perrins, heir to the Lea & Perrins Worcestershire sauce company, it was the main centre for research into organic chemistry at Oxford from 1916 to 2003, when it was retired. "During its 87 year working life, the laboratory had an extremely distinguished career; it can claim a stake in shaping the scientific careers of two Nobel Laureates, namely Lord Todd (1957) and Sir John W. Cornforth (1975) who passed their formative years as young chemists in the laboratories" (Source: Wikipedia). Address: Warwickshire, England.

477. Wright, Louise. 1975. History of Lea & Perrins Worcestershire Sauce (Document part). In: Louise Wright. 1975. The Road from Aston Cross: An Industrial History,

1875-1975. Imperial House, Learnington Spa, Warwickshire, England: Smedley-HP Foods Ltd. 84 p. See p. 30-37. 25 x

• Summary: Continued (p. 30): "Another important matter was on the move: A merger between HP Sauce Ltd. and the world famous makers of Worcestershire sauce, Lea & Perrins. Mr. John Wheeley Lea and Mr. William Perrins went into partnership in 1823. Mr. Lea was druggist in Worcestershire; his friend had a chemist's shop in Evesham. Over their Christmas festivities, they decided two heads were better than one and on New Year's Day [1823] pooled their resources to develop the Worcester business as Lea & Perrins. They set up as wholesalers and retailers of pharmaceuticals, toiletries, cosmetics and groceries. Long before the days of ice-cream parlours and Coca-Cola, their shop on Broad Street, Worcester, became the precursor of the modern American drug-store.

"Both men were analytical chemists. Both were aware of the advantages of marketing their own products and their fist catalogue listed more than three hundred items. Although trading from a quiet country town, they kept themselves informed and studied world trade. Aware of the rapid growth of Queen Victoria's empire, they also realised that the industrial revolution was rapidly altering Birmingham and the Black Country. Soon their medicinal products were in great demand throughout the Midlands. Later they opened a chemist's shop in London, patronised by Queen Adelaide.

"Their concentrated Essence of Sarsaparilla was recommended for scorbutic affections (scurvy), cutaneous (skin) diseases and for freeing the system from the illeffects of taking mercury. They recommended Taraxacum (dandelion coffee) for liver complaints because of its gentle diuretic and diaphoretic effects. Presumably their customers were sufficiently conversant with medical terms to know that a diuretic excites the discharge of urine and a diaphoretic produces perspiration.

"Mr. Lea & Mr. Perrins were perfecting their medicines, hair lotions and marrow pomades when Marcus, Lord Sandys visited the shop in Worcester. Late Governor of Bengal, he had retired to his country estate at nearby Ombersley Court, and would be obliged if they would make up one of his favourite Indian sauces. They obliged. Having already arranged their own supplies of spices and dried fruits, from Asia and the Americas, they had the ingredients to hand. Scrupulously following his lordship's recipe, they made the required quantity, plus some for themselves. One taste was enough. The sauce was ghastly: an unpalatable, red hot, fire water. His lordship was entirely satisfied. The remainder however was consigned to a cellar below the shop and there it stayed until the annual spring cleaning and stocktaking.

"It was on the point of being poured away when Mr. Lea and Mr. Perrins detected its appetising aroma. Tasting it once again they discovered it had matured into a rare and piquant sauce. The sauce was saved, more was made. Customers

were persuaded to try the new Worcestershire Sauce, and did not need more persuasion: the sauce was an instant success. Sales rose. In 1842, Lea & Perrins sold 636 bottles. In 1845, a manufactory was set up in Bank Street, Worcester. Ten years later the yearly sales were up to 30,000 bottles of Worcestershire Sauce. Travellers covered Great Britain and there were agencies in Australia and the United States. As well as sauce, they found a steady export market for their medicines. No sensible traveller left England without a Lea & Perrins medicine chest."

"By 1862, the firm's international trading had become an extensive two-way traffic. An American firm in New Jersey was asking them to find an English market for hermetically sealed 3 lb cans of fresh fruits, tomatoes, green corn and ovsters.

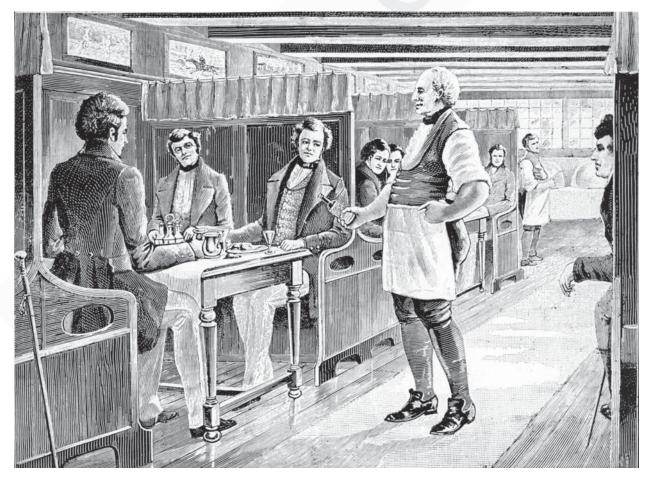
"When it became necessary to build a new factory in Midland Road, Worcester in 1897, Mr. Lea & Mr. Perrins used the latest steel girder construction. The factory rises over vast cellars, which house hundreds of casks of maturing sauce and maturing raw materials. No anchovy is allowed into the cellars under a year old. It matures for at least another year before being used in the sauce manufacture. The steel girders of the cellar roof, which supported the circular yard and its traffic of one ton drays in 1897, are now having to be re-inforced to take 32 ton freight-liners. A royal

warrant was granted to the firm by Edward VII in 1904 and has been proudly held ever since. It helped alleviate trouble with imitations of their sauce. In the High Court of Justice in 1906, Mr. Justice Swinfen Eady decreed that no firm other than Lea & Perrins be allowed to call their Worcestershire Sauce, 'The Original' or 'The Genuine'.

"In 1823, William Perrins' son married Sarah Dyson of Huddersfield. Their grandson christened Charles William Dyson, was known as Dyson Perrins. A benefactor to the City of Worcester, to his home town of Malvern and to his old University of Oxford, where he developed his great love for the earliest printed books... He also inaugurated the Dyson Perrins Porcelain Museum at Worcester.

"After the First World War, Lea & Perrins rapidly expanded. When the merger with HP Sauce Ltd. was settled by mutual agreement in 1930, it had been a private limited company for some time. The branch in the United States, Lea & Perrins Inc., was not officially brought into the new company until a year later, but a gentleman's agreement between the two boards had sufficed while the trans-Atlantic marriage was being formally established. The amicable relationship dated back to Mr. Lea and Mr. Perrins.

"The believed in having friendly dealings with their overseas agents. Foremost among them were their New York agents, John Duncan & Sons. Established since 1819



as importers of wines, quality foodstuffs and preserves, they began to handle Worcestershire Sauce in 1840. Soon, they were handling ever-increasing amounts. During the succeeding forty years, close friendship developed between the two family businesses; indeed, the Duncans have adopted Dyson as one of their own family names.

"By 1875, the demand for Worcestershire sauce had spread throughout the United States. It was agreed to import the sauce in casks and bottle in New York. On the personal side the friendship between the families became so strong that the secret formula was divulged and the rights of manufacture granted to the Duncans. After eight years of manufacture in their various New York factories, they acquired in 1910 a nine storey building in West Street. Following their partnership with HP Sauce Ltd., they remained in West Street until expansion forced them to move to the Industrial Park at Fair Lawn, New Jersey." Continued. Address: Warwickshire, England.

478. Wright, Louise. 1975. History of Lea & Perrins Worcestershire Sauce (Document part–Document part II). In: Louise Wright. 1975. The Road from Aston Cross: An Industrial History, 1875-1975. Imperial House, Learnington Spa, Warwickshire, England: Smedley-HP Foods Ltd. 84 p. See p. 30-37. 25 x 19 cm.

• Summary: Continued: Fair Lawn, near Route 4 out of New York, is an industrial park. Behind the lawns and dignified

facades "Lea & Perrins Inc. alone produce 500 bottles of sauce every minute of every working day. The company is now a member of the Imperial Foods Group, but retains its American identity, with its own board of directors and its own purchasing and marketing procedures. The company has been marketing HP Sauce for some years." It is known as HP Steak Sauce.

An early engraved advertisement titled "The First Introduction" (facing p. 32) shows an innkeeper or restaurateur (see previous page) introducing Lea & Perrins' Sauce to three well-dressed gentlemen at a table. Two photos (facing p. 33) show: 1. A view of the front of the Lea & Perrins factory, built at Midland Road, Worcester, in 1897. 2. "The disastrous fire in 1964, which destroyed much of the building. With fine cooperation by management and employees, the sauce manufacture was held up for a mere 10 days."

In the New Zealand town of Te Wairoa, destroyed by a volcanic eruption in 1886, an undamaged bottle of Lea & Perrins Worcestershire sauce was found preserved by the volcanic dust. It is on display in the museum there (p. 34).

Plate 51 shows three ads published in 1871 by Lea & Perrins in three Australian newspapers (the Coulburn Herald, Bathurst Free Press, and the Manaro Mercury) to caution people against purchasing fraudulent imitations of their "celebrated Worcestershire Sauce." The two agents in Australia were Montefiore, Joseph & Co. (Sydney), and John



Lee & Co. (Maitland). The sauce was exported by Lea & Perrins (Worcester) and by Crosse and Blackwell (London); it was sold by "Grocers and Oilmen universally."

Plate 54 states: "Lea & Perrins have been exhibiting since the historic Chicago Exhibition [in Illinois] in 1876, which celebrated the first hundred years of American Independence. The vase and bottled where were displayed there, are on permanent exhibition in the entrance hall of the offices of Lea & Perrins Inc., New York." Plate 55 shows the products of HP Sauce Ltd. and Lea & Perrins Ltd. on display at the British Industries Fair of 1949. Pages 42-43 discuss problems faced by Lea & Perrins in Worcester during World War II. "An army medical unit had taken over their factory, leaving only a small, sealed section in which to continue the highly secret process of making the sauce... One sniff was enough; there is no mistaking a cask of fiveyear-old anchovies." Lea & Perrins soon moved its bottling machinery from Worcester to Aston Cross. Plate 59 shows a empty glass bottle of Lea & Perrins sauce from 1880.

Plate 60 shows seven old Lea & Perrins Worcestershire sauce bottles. The oldest two, made of green glass with glass stoppers, were both filled in 1866. Two others are from about 1870. The earliest one with a label is from 1920. Plate 83 shows old bottles (with labels) of Worcestershire Sauce made by other manufacturers in Kobe, Japan; Cardiff, Wales; Hamburg-Altona [Germany; Altona became part of Hamburg in 1937]; the United Kingdom, and Portugal. Address: Warwickshire, England.

- 479. Shurtleff, William; Aoyagi, Akiko. 1976. Appendix B: Varieties of Chinese chiang, Korean Jang, and Indonesian Tao-tjo [Tauco] (Document part). In: William Shurtleff and Akiko Aoyagi. 1976. The Book of Miso. Hayama-shi, Kanagawa-ken, Japan, Soquel, California, and Brookline, Massachusetts: Autumn Press. 256 p. See p. 277-331. Sept. Illust. by Akiko Aoyagi. Revised ed. 1981. New York, NY: Ballantine Books, 620 p.
- Summary: Contents: Introduction. Note: Of the romanized Chinese names given in curly brackets below, the first is in the Wade-Giles transliteration; the second is in the more modern pinyin transliteration.

Chinese chiang: Introduction, Red or regular chiang (chunky chiang, hot chunky chiang, Szechwan red-pepper chiang, Hamanatto chiang, Cantonese red chiang, great chiang, yellow-red chiang), black chiang (sweet wheat-flour chiang, black chiang), assorted chiangs (introduction, redpepper chiang, Canton sweet simmered chiang, dried chiang, other varieties (none of which contain soybeans or grain koji; sesame chiang, peanut chiang, umeboshi chiang, shrimp chiang, corbicula chiang, tangy chiang, semi-fermented chiang)), chiang sauces (bean sauce, hoisin sauce {hai-hsien chiang, haixiang jiang}, oyster sauce, barbecue sauce, other chiang sauces, none of which contain soybeans or grain koji; shrimp sauce, Chinese Worcestershire sauce, Chinese

ketchup). Note 1. The Chinese (Wade-Giles) names and characters for each of these sauces are given on page 230.

Korean jang: Introduction, Korean soybean jang (doen jang), Korean red-pepper jang (kochu jang), Mild red-pepper jang (mat jang), Chinese sweet black jang (cha jang or chungkuk jang), Japanese red jang (wei jang or ilbon jang).

Note 2. This is the earliest English-language document seen (March 2009) that uses the word "kochu jang" (or "kochu-jang") to refer to Korean-style red pepper and soybean paste (miso).

Indonesian tao-tjo: Summary.

Note 3. This is the earliest English-language document seen (Jan. 2012) that uses the term "chungkuk jang" to refer to a fermented Korean soyfood or seasoning. Actually, the term refers to Korean-style natto which, although it is a salted paste, is fermented using bacteria (Bacillus subtilis) and therefore does not belong in a book about miso. Address: 790 Los Palos Dr., Lafayette, California 94549.

- 480. Claiborne, Craig. 1978. The saga of a sauce [Worcestershire]. New York Times. April 19. p. C1, C8. Living section. Wednesday.
- Summary: An interesting, supposedly in-depth history of Lea and Perrins and their famous Worcestershire sauce, said to have been on the market by the 1830s. Much of the information in this article first appeared in the Worcester News and Times in 1939.

Like Cross and Blackwell, the names Lea and Perrins are inextricably linked in the world of food and beverages. Lea and Perrins are makers of the original Worcestershire sauce, and a label states: "the original and genuine, from the recipe of a nobleman in the county." The county is, of course, Worcestershire, England, but to this day the manufacturers will not reveal the name of the nobleman.

The story of this sauce is said to date back to the early 1800s, when the governor general of Bengal returned from his colonial post to his native land, England. He brought with him a formula for a sauce that had been created in India, one which he had enjoyed at his home and offered to his guests. John Lea and William Perrins, chemists in the Midlands of England at the time, were partners in a "chain" of chemists shops. Their association had begun in the 1820s and their main office was in the town of Worcestershire in the shire or county of the same name. The governor general is said to have taken the recipe to the two chemists and to have asked them to try to reproduce it as closely as possible. It is said that they did so, but that the resulting product smelled and tasted bad-so they stored it in a cellar and forgot it.

Some months or year later they sampled it again and found the flavor and aroma to be not only acceptable, but haunting. Soon they were bottling the brew and before long it came to be known and coveted in kitchens throughout the world. The governor general's family, not invited to join in the production and marketing, was upset and refused to allow the family's name to be used in connection with the product.

The great haste with which the reputation of Worcestershire sauce spread is often accredited to the fact that the manufacturers had cases of the sauce loaded on most of the ocean liners that came in and out of England's ports. The stewards were "encouraged" with a few pounds and shillings now and then to offer the sauce to the passengers. Passengers were invited to buy samples to take with them when the embarked.

The author traveled to Fair Lawn, New Jersey, where Lea and Perrins' sauce is manufactured and aged. He spoke with Ransom Duncan, age 40, the technical director of the American firm and the great-great grandson of the original American importer of the sauce from England. In the lobby of the building where the sauce is aged and bottled is an antique display case, which had been built for the Exposition of the Industry of All Nations in New York in 1853, and was used again for the Centennial Exposition in Philadelphia [Pennsylvania] in 1876. Displayed in this case were 20-30 of the earliest bottles of Lea & Perrins available in the USA. One label reads: "Butlers in the best families... tell you that soups, fish, meats, gravy, game, salads and many other dishes are given an appetizing relish if flavored with Lea & Perrins sauce." Another: "Club men and all good livers appreciate the appetizing relish given to Oyster cocktails, Welsh rarebits, Lobster Newburgh [also spelled Newburg, meaning served with a sauce made of cream, butter, sherry, and egg yolks] and all dishes flavored with this sauce."

The first American importer of the sauce, John Duncan, had a small business in Manhattan, New York, named John Duncan and Sons, which imported liquors and wines from Europe, and preserves, jams, and jellies from England. He learned or Lea & Perrins' sauce in the 1830s and ordered a small shipment. Imports grew rapidly and soon salesmen were peddling the product across America. "Demand became such that he opened a processing plant using the exact English formula and using English imports."

Since his childhood, Ransom Duncan has enjoyed reading the bottles labels. The ingredients (tamarind, anchovies, shallots, garlic, molasses, soy, cloves, peppercorns, etc.) reminded him of exotic things and faraway places. Unpeeled red-skinned onions are one of the few domestic ingredients. The author noted a pleasant smell around the 35 giant wooden curing vats-each holding a total of 6,000 gallons. No one would tell him how long the base for the sauces is aged, but he estimated a minimum of two

There follow six recipes that use Worcestershire sauce. Photos show: Ransom Duncan, an executive in his ancestor's company. A man standing among six huge aging vats. Address: New York.

481. Perkins, David W. ed. 1978. Hong Kong and China Gas Chinese cookbook. Hong Kong: Published for the Hong

Kong & China Gas Co. by Pat Printer Associates Ltd. (Hong Kong). 319 p. Illust. (mainly color). Index to recipes. 31 cm. • Summary: A treasure for anyone who admires Chinese cookery, this large, oversized, visually spectacular and beautifully designed book is also rich in culture and history. Comprehensive, with many insights, it contains numerous two-page color spreads. One of the best books seen to date (1978) on Chinese cookery, except for its poor index.

Hong Kong is located on the Pearl River Delta in China, bordering the province of Guangdong to the north and facing the South China Sea to the east, west and south. Its cuisine resembles that of Canton.

A full-page color map of China shows (with different colors) China's four main regional cuisines: Northern (incl. Beijing), Eastern (incl. Shanghai and Nanking), Southern (incl. Canton, Kwantung and Kwangsi), and Western (incl. Hupei, Hunan, Szechwan, Kweichow, and Yunnan).

Peking is only 40 miles away from the nearest point of the Great Wall of China, which started to be built during the Ch'in / Qin Dynasty (225 BC to 207 BC) as protection against invasion by Tartar Hordes. Genghis Khan (1162-1227) is said to have been the first to penetrate it (p. 21).

The last period of Imperial rule in China was the longlasting Ch'ing / Qing Dynasty (1644-1911) (p. 22).

Since ancient times, when the feet become swollen, the Chinese have eaten peanuts and soya beans (p. 38).

Buddhist vegetarian cookery has existed in China since the 10th century AD (p. 60).

The section titled "Soya beans" (p. 62-63) mentions bean curd or tou fu ("the most versatile of foods in the hands of any cook with any degree of imagination"), soy sauce, soya bean 'milk,' dried bean curd, frozen bean curd, and mao tou [green vegetable soybeans] (which "make a delicious hors d'oeuvre when prepared Shanghainese-style").

The "mysterious MSG (Monosodium glutamate) is a ubiquitous 'instant flavouring'; but more dishes have been spoiled by the addition of too much MSG rather than by the addition of too little" (p. 76).

A large colored photo and accompanying numbered outlined diagram (p. 77-78) shows many different seasonings, incl. Hoisin sauce, hot bean paste, dark soy sauce, light soy sauce, and Worcestershire sauce. "Soy sauce rules the kitchen as undisputed emperor. Basically a fermented extract of the soya bean with salt added, it is available in three main types: heavy or 'black'; dark, containing caramel as colouring and light (both in colour and flavour)." The finest, most expensive, and most concentrated is the first extraction. Specialty soy sauces flavoured with mushrooms or shrimp roe are also available.

"Black bean sauce is a near relative of soy sauce, being made from salted, fermented black soya beans. Again, mention must be made of the three main types of soya bean pastes: hot (with chillies), sweet (with flour, sugar and spices [t'ien mien chiang]) and yellow, which is very salty indeed...

Hai Hsien [Hoisin] sauce combines garlic, chilli, beans and ginger with other elements."

A color photo shows most recipes. Soy related recipes include: Shredded pork with dry beancurd saute (p. 112). Chopped soya bean sprouts with pork (p. 113). Stewed lamb with dried beancurd (p. 127). Stir fried chicken with [soya] bean paste (p. 135). Roast Peking duck (with 4 tablespoons "sweet bean paste," p. 153). Braised duck with lo han vegetables (and 60 gm "fried beancurd cubes," p. 156). 'Lu Shui' goose (p. 157; the Lu Shui sauce is made with 250 gm sugar, 250 gm salt, 2 five-spice bouquets, 250 ml light soy sauce, 10 slices ginger). Braised fish with beancurd and vegetables (p. 161). Eight treasure beancurd soup (with "4 squares soft beancurd," p. 193). Vermicelli and fried beancurd soup (p. 199). Beancurd with shredded pork in soup (p. 201). Fried beancurd (p. 204-05). Spicy beancurd with ground pork (Ma P'o tou fu, p. 208). Braised beancurd with mushrooms (p. 212). Beancurd stuffed with shrimp paste (p. 215). Steamed fish and beancurd cake (p. 221). Vegetarian goose (Su ngo, with "20 dried beancurd skins [yuba], about 41 cm = 16 inches in diameter," p. 227). A fullpage photo shows a quern = hand turned stone mill (p. 243). Sweet bean paste dip (tien tou chiang, with "4 tablespoons sweet bean paste," p. 278).

Also: Sweet red bean paste (hung tou sha hsien, with small red beans [azuki], p. 278).

Glossary (p. 302-11; all Chinese words are given only in Chinese characters, which we have romanized in pinyin) incl.: Beancurd (doufu). Beancurd, dry (toufu gan). Bean curd cubes, fried (zha doufu). Beancurd cubes, preserved (la furu, spicy fermented tofu); also known as preserved beancurd and Chinese cheese. Beancurd skins, dried (fupi) [doufu pi, yuba]. Beancurd sticks, dried (fuzhu; [dried yuba sticks] used frequently in vegetarian cooking. Bean pastes (gan shi jiang). Sauces produced from soya beans and other ingredients: Hot bean paste (xiang shi la jiang), soya bean paste (mo shi jiang), "sweet bean paste (tian shi jiang; produced from fermented black soya beans, flour, sugar and spices. Substitute: Hoisin sauce." Note: This is the earliest document seen (Feb. 2009) that uses the term "sweet bean paste" to refer to a Chinese paste made with soybeans. Yellow bean paste (dou ban jiang). Bean sprouts: Shoots of the mung bean or the soya bean (da dou ya cai), the latter being much larger and stronger flavoured. "Black beans (dou shi): Salted, fermented black soya beans, Lightly salty in flavour. Used as seasoning. Will keep indefinitely in dry conditions. Chinese cheese (see beancurd cubes, preserved). Dry beancurd (see beancurd, dry). Flour-"High gluten flour (gao jin fen): A special kind of 'strong' flour, which gives extreme elasticity, making it possible to roll out the dough to very fine layers. Used for wonton wrappers." Fried beancurd cubes (see beancurd cubes, fried). "Hoisin sauce (hai xian jiang): A seasoning sauce or condiment made from red beans (hong dou) [azuki], soya beans, sugar and spices. Sweet-

spicy and tangy in flavour. Sold in cans or jars... Also known as Seafood Sauce and Barbecue Sauce." Hot bean paste (see bean paste). 'Lu Shui' sauce (lu shui zhi, in Cantonese 'Lu Soy'). A 'master sauce' or more accurately, a stock made with soy sauce, sugar, five spices and ginger. Used for simmering foods, particularly poultry, It gives a rich flavour and deep brown colour. For recipe see p. 157. Note: Widely used in Shanghai, and in Jiangsu and Zhejiang provinces). "Mao tou green peas (mao dou): Small beans, grown in the north, with dark-green, slightly hairy pods, which should be removed. Substitute: lima beans." Monosodium glutamate. Oyster sauce (hau you): A viscous dark-brown sauce made from oysters and soy sauce through a process of fermentation. Used as a flavouring and/or colouring agent ad as a condiment. Sold in bottles." Preserved beancurd (see beancurd cubes, preserved). Red beans (hong dou), [azuki]. Soya bean paste (see bean paste). Sweet bean paste (see bean paste). Yellow bean paste (see bean paste).

Talk with Cecilia Chiang, founder of The Mandarin restaurant in San Francisco. 2009. Feb. 16. She has this book. The authors of this book are not well known in China; they are mostly amateurs. The best Chinese cookbooks are written by Fu Peimei, a lady who was a real authority on all the different styles of Chinese cooking; she is no longer living. Many of her cookbooks are in both English and Chinese. Concerning "Bean paste," some of these are no longer available in the USA. Cecilia says Sweet bean paste may be something like t'ien mien chiang. Hoisin sauce is not used in Beijing, Shanghai, or anywhere in northern China; it is used mainly in Canton and south China. Cecilia thinks "Sweet bean paste" (t'ien shih chiang, p. 303) may be used only in Hong Kong. Most Chinese have never heard of this kind of sweet bean paste. True Cantonese food is quite different from that of Hong Kong. Cecilia knows Cantonese cooking very well; she goes there several times every year. Cantonese make the best soups, the best steamed fish and steamed chicken, and also their famous pork sausage (la chong?). Beijing cookery uses hard tofu, but most soft and silky tofu is imported from Japan.

482. Berry, Mary. 1979. Lea and Perrins Barbecue cookbook. Cambridge, England: Martin Books. 96 p. Foreword by Julian Lea, Marketing, Sales, and Distribution Director, Lea & Perrins Ltd. Illust. (color). 22 cm.

• Summary: A book about barbecuing (more than you could want to know) and Worcestershire Sauce. Contents: Acknowledgements. Introducing barbecues: What is barbecuing all about, how to build your own barbecue, barbecues to buy, fuel for the barbecue, lighting the fire, cleaning and caring for the barbecue, safety first, barbecue extras, planning a party, how to buy and cook the basic meat and poultry.

Variety recipes: 28 recipes all of which call for meat, fish, or poultry.

Bastes, sauces, dips, marinades, and savoury butters: All recipes call for "Worcestershire sauce."

Good things to go with barbecues: Soups, salads and vegetables, sweets, and drinks. All recipes call for "Worcestershire sauce." Address: TV personality and cookery expert.

483. Lea & Perrins. 1980? Light & elegant: superb recipes for chicken, fish & lighter foods. Fair Lawn, New Jersey: Lea & Perrins. 23 p. Undated. Illust. (color). 21 cm. *

- Summary: A booklet of recipes that call for Lea & Perrins' Worcestershire Sauce.
- 484. Root, Waverley. 1981. A cordial bow to the byproducts of the soybean. Los Angeles Times. Jan. 15. p. J42.
- Summary: This article is indebted to: Simonds, Nina. 1979. "Chinese cuisine: Bean curd." Gourmet. Sept. p. 28-29, 84-91.

The soybean, which offers extraordinary versatility as a human food, can be transformed into soybean milk, "the soybean milk skin [yuba] derived from the milk, the bean sticks [dried yuba sticks] made from the milk skin, the also edible sediment given off by the milk [okara], untreated bean curd [regular tofu and perhaps silken tofu], pressed bean curd which produces bean curd noodles [pressed tofu noodles], more tightly compressed bean curd cakes, and frozen-and-thawed bean curd [dried frozen tofu]." Note: This is the earliest English-language document seen (Nov. 2011) that uses the term "frozen-and-thawed bean curd" to refer to dried frozen tofu.

In the process of making "pressed bean curd, another soybean food is created-bean curd skin [pai yeh, pressed tofu sheets], which should not be confused with soybean milk skin [yuba]. Dried bean curd skin," which needs no refrigeration and is often stuffed, for example with chopped meat, is sold by weight by Chinese specialty shops throughout the world; five or six sheets weigh one ounce.

"There is a whole family of foods made from fermented bean curd" [fermented tofu]. Bean curd can be fermented in various ways. Bean curd loaves, for example, can be stored for the winter in a cool dark place; micro-organisms from the air cause fermentation. "The loaves acquire a fungoid coating, which has to be scraped off, and as far as I know is not used for food,..." Fermented bean curd, which has been called "soybean cheese," is easier to digest than unfermented bean curd. Bean curd can also be marinated in rice wine, flavored with spices, and then allowed to ferment. A most unusual type of fermented tofu is stinky bean curd (sh'ou tou fu), a favorite Chinese snack. In Taipei, there are many street vendors who ply the streets with their portable deep fryers. This fermented tofu is usually deep-fried and usually eaten with one's choice of soy sauce, vinegar, mashed garlic, and chili paste.

Other fermented foods include miso, natto, hamanatto

(which is of Korean origin), tempeh (of Indonesian origin), and shoyu (Soybean sauce, soy sauce).

"It is said that the best grades of soy sauce can take as much as six to seven years of aging to reach perfection, and that the making of a superb soy sauce requires 'as much art in its preparation as good French wines.""

Flavorings are added to some Chinese soy sauce "various herbs, especially citronella; spices (ginger); aromatic vegetables (onions); and not only fermented fish, but even fermented chicken meat. To produce three liters (3.1 quarts) of sauce requires on kilogram (2.2 pounds) of beans.

"Fukien has the reputation of producing the best soy bean sauce in China and consequently stews many foods in it, giving them a color which has caused the culinary techniques of this region to be called 'red cooking."

Soybean sauce is "often an important ingredient in many more complicated sauces-for instance Hoisin sauce in China and Worcestershire sauce in England."

- 485. Drake, Milan. 1981. Re: HVP soy sauce. Letter to William Shurtleff at Soyfoods Center, Feb. 26-in reply to inquiry letter dated 21 Dec. 1981. 2 p. Handwritten.
- Summary: Where do Hercules and Stange make their soy sauce? (1) Hercules, 79 East State St., Harbor Beach, Michigan 48441. Contact: Art Cronin. He encloses some information about Hercules. (2) Stange makes their soy sauce at Keratene Co., P.O. Box 560, Winsted, Connecticut 06098. Contact: Rudy Krukar.

A.E. Staley makes both soy sauce and HVPs. So do Hercules and Keratene.

Milan believes that fermented soy sauce was used in early Worcestershire—but he is not positive. Address: Director, Research & Development, La Choy Food Products, 901 Stryker Rd., Archbold, Ohio 43502. Phone: 419-445-8015.

- 486. Stobart, Tom; Owen, Millie. 1981. The cook's encyclopedia: Ingredients and processes. New York, NY: Harper & Row, Publishers, Inc. xii + 547 p. Illust. 25 cm. [20]
- Summary: Soy related entries include: Bean curd (incl. tofu). Bean-curd cheese [fermented tofu]. Bean paste and bean sauce (incl. Red bean paste) is sweet and made from adzuki beans. Yellow bean paste is made from soybeans and is salty and pungent. "Fermented salted black beans" is made from a black variety of soybeans; these salted black beans can be used to make "black bean sauce" which can be used as a flavoring in fish, lobster, chicken, and pork dishes.

Soybean (incl. soya bean, soja bean, flour {"pork soya links" used in Britain during World War II}, sprouts, soy oil, soy sauce, soymilk, vegetable yogurt [soy yogurt], vegetable cheese [soy cheese], tempeh, bean curd skin [yuba], miso, tamari, soy sauce, soy protein isolate, soy granules or grits, textured plant protein [textured soy protein]). The name in

four European languages is given.

Soy sauce or shoyu (It "is said to be one of the ingredients of Worcestershire sauce." Incl. the "very heavy Indonesian *ketjap {ketjap manis or ketjap benteng}*, which is a type of soy sauce,..."). The name in four European languages is given.

Textured plant protein (a high-protein foodstuff manufactured from plants (soybeans, peanuts, wheat, cottonseed, etc.). "Originally it was aimed at the vegetarian market." Also called "textured vegetable protein" in the USA. Incl. textured soy flour, textured soy protein gel and fibers).

Worcestershire sauce: Begins with a history (starting in 1837) based on the fanciful story so widely known. "Thus was born what is probably the world's best-known and most ubiquitous bottled sauce, one which has become a standard ingredient." Note: How about soy sauce? "The exact formula is secret. Although it is much imitated, nobody seems to be able to get quite the taste of the original."

Also contains entries for adzuki, ketchup ("Javanese katjap [ketjap], for example, is a very sweet soy sauce"), peanut (groundut or monkey nut), pulses, seaweed, sesame seed, tahini.

Note: Millie Owen prepared the American edition of this book. Address: 1. Hassocks, Sussex, England; 2. Northfield, Vermont.

487. Coyle, L. Patrick, Jr. 1982. The world encyclopedia of food. New York, NY: Facts on File, Inc. xv + 790 p. Illust. Index. 28 cm.

• Summary: Contains basic information (sometimes interesting, often superficial, with quite a few errors) about some 4,000 foods and beverages, including worldwide staples (potatoes, soybeans, apples), local specialties, delicacies, major brand-name products (Coca-Cola) and oddities (penguin eggs, grasshoppers). With 200 line drawings, 150 black-and-white photos, and 50 color plates.

See entries for soybean (incl. black soybeans, fermented tofu, miso, soybean flour, soybean milk, soybean oil, soy sauce, tempeh; tofu, "white soybeans"), and Worcestershire sauce (which "is said to contain more than 100 ingredients, including soy sauce, vinegar, molasses, chili, anchovies, garlic, shallots, tamarinds, limes and many spices").

Tofu: "A fermented form of this, called stinking tofu, is a favorite snack of the Chinese. It has a pungent smell and is usually deepfried [deep fried] and seasoned with soy sauce, vinegar, mashed garlic or chili paste. The food value is high..." (p. 643).

Note: This is the earliest English-language document seen (Oct. 2011) that contains the term "stinking tofu."

Also has entries for: Almond, chufa, peanut, peanut butter, peanut oil, seaweed (incl. algae, dulse, laver, rock weed / sea wrack, agar-agar, carrageen, kelp), sesame (with illustration of leaves, flower, and pods). Address: Freelance

writer, Oceanside, California.

488. Stobart, Tom. 1982. Herbs, spices, and flavorings. Woodstock, New York: The Overlook Press. 320 + 8 p. of plates. Illust. (some color). Index. 24 cm.

• Summary: This 1982 edition—though about 60 pages longer than the 1970 edition (which see)-is identical to it in all entries related to soy, except that the entries are on different pages.

About the author: "Tom Stobart, O.B.E. [officer of the Order of the British Empire], is not only an expert on cookery, but is also a well-known photographer and mountaineer. As a member of the successful Hunt-Hillary expedition in 1953, he filmed The Conquest of Everest,... Recently he has directed and photographed the *Master Chefs*, a series of films showing famous dishes being prepared in their local settings." He has traveled widely. Address: England.

489. Driver, Christopher. 1983. The British at table, 1940-1980. London: Chatto & Windus-The Hogarth Press. xi + 212 p. Illust. Index. 23 cm. [220* + 169 endnotes]

• Summary: Chapter 2, titled "The seven lean years," discusses the period from 1941 to 1947 when food was rationed during World War II in Britain. An excerpt from the diary of Vere Hodgson for 7 May 1944 (p. 16) states: "I have an order with the Dairy for a pound of sausage... of soya bean flour."

Chapter 6, "Tastes of Britain: the age of choice" includes long discussions (p. 99-107) of the rise of vegetarianism and health / whole foods. Since "the free market in 'flesh food' returned to Britain it has been clear that shortages converted fewer people to vegetarianism than abundance does." "The distinction between vegetarianism and whole food is fine." Almost all health food restaurants are vegetarian, but not all vegetarian restaurants serve health food. "By 1980, the profession of vegetarianism no longer sounded like the equivalent of wearing sackcloth and ashes." Also discusses TVP and Worcestershire sauce (p. 99), "plant milk" and single cell proteins (p. 137-38), "TVP (texturised vegetable protein)," "meat extenders or substitutes of this kind, chiefly derived from the soy-bean," "march up to Soho Chinatown and sit down to a dish of beancurd [tofu] made from the same soybean staple by a cottage industry process ecologically superior to the multi-million pound machinery and vast energy input that western culture tolerates for the sake of making fake steak," "The first tentative flights of artificial protein may seem a long way from the precious mating calls of contemporary British foodies..." (p. 139).

World population continues to grow, and global food production must grow with it. "At some point not very far along that road, the role played in human diet by comparatively inefficient protein conversion machines such as cows, pigs and chickens, however intensively bred and farmed, would have to be diminished or abandoned. Here and there, the animals concerned would be relegated to agricultural zoos, to be gazed at with wild surmises by people who obtained their nourishment chiefly from the protein output of those industrious worms, bugs, and funguses, appropriately flavored."

Contains an interesting bibliography and endnotes. Address: England.

490. Wood, Brian J.B. 1984. Re: Bean Products Ltd. in Scotland. Letter to Richard Leviton at Soyfoods Magazine, Encinitas, California, April 9. 1 p. Typed, with signature on letterhead.

• Summary: "Bean Products Ltd. is now wholly owned by British Vinegars Ltd. [a division of Nestlé] and I have not part of it, I am sorry to say... We had one factory at 42 Telford Road, Lenziemill, Cumbernauld. The telephone number is Cumbernauld 0236 738310. Mr. Christopher Corden will be able to tell you if a visit can be arranged. A company called Soyco, based somewhere in London, is also making soy sauce. The authentic and original Worcester Sauce is made by Lea and Perrins Ltd. in Worcester; they belong to the Imperial Tobacco Co. via H.P. Sauce Ltd." Address: Reader in Applied Microbiology, Dep. of Bioscience and Biotechnology, Applied Microbiology Div., Univ. of Strathclyde, Royal College Building, 204 George St., Glasgow G1 1XW, Scotland. Phone: 041-552 4400.

491. **Product Name:** Angostura Worcestershire Sauce. Very Low Sodium (Vegetarian).

Manufacturer's Name: Angostura International Ltd. (USA Div.).

Manufacturer's Address: Ramsey, New Jersey.

Date of Introduction: 1984. August.

Ingredients: Vinegar, water, molasses, corn syrup, sugar, natural and artificial flavors (not derived from animals), salt.

Wt/Vol., Packaging, Price: Bottle.

How Stored: Shelf stable.

New Product-Documentation: Spot in Specialty Foods Marketing. 1984. Aug. The soy sauce has 62% less sodium than regular soy sauce and the Worcestershire has 72% less sodium than its regular counterpart. The company is 160 years old.

Letter in Vegetarian Times. 1991. Dec. p. 10. "Vegetarian Worcestershire." Jane M. Clark of Hollis Center, Maine, states: "After a diligent two-year search I found a commercial vegetarian worcestershire sauce made by Angostura. I wrote to the company, which confirmed that this product is totally free of anchovies and other animal products." It is available in "the major supermarket chain in the Northeast."

Talk with Carol Wiley at Vegetarian Times. 1991. Nov. 21. The USA Division has moved to: 1745 Elizabeth Ave., Cranford (Rahway), New Jersey 07065. Phone: 908272-2200. The label is light brown, and only the "very low sodium" variety is available. The company also makes Angostura Aromatic Bitters. Note that no soy sauce is used as an ingredient.

Talk with Angostura International in Cranford. 1991. Nov. 27. Worldwide, this product was first made in Cranford, New Jersey, in 1984. The company also makes a lime juice, a grenadine syrup, and a bloody mary seasoning in Cranford. The Angostura Aromatic Bitters are made in Trinidad, but bottled in New Jersey. Other divisions are in Canada and Trinidad. The company's main business is distilling/ making rum; they are one of the largest manufacturers of rum in the world. The company is 166 years old (founded 1824) and its first product was Angostura Aromatic Bitters, which is a secret combination of herbs and spices, water and alcohol, that is used as a flavor enhancer in alcoholic beverages. For years, a couple of dashes have been added to the Manhattan, Old Fashioned, Champaign Cocktail, etc. The famous bitters were developed from plants in the town of Angostura (probably Colombia) by one Dr. Siegert, who was a physician in the army of Simon Bolivar (lived 1783-1830) in the 1820s. They were found to contain medicinal/ therapeutic properties; to cure hiccups in 30 seconds, put some biters on a wedge of lemon and suck the lemon. In the mid-1800s the company moved to Trinidad, when the political situation in South America got to "hot." The bitters are "the oldest imported item continuously sold in America," where they have been sold for 110 years (since about 1881). It is also one of the few U.S. products (along with Coca-Cola, Hershey chocolate, Ivory soap) that has lasted more than 100 years. Indeed, the product contains no anchovies or other animal products.

492. Whitman, Joan. comp. 1985. Craig Claiborne's The New York Times food encyclopedia. New York, NY: Times Books (div. of Random House). 496 p. Illust. (line drawings). 25 x 20 cm. [120* ref]

• Summary: The soy-related entries are as follows: Kecap (ketjap, p. 237): The Indonesian name for soy sauce in its basic form. "Kecap, with its broad uses in Indonesia, became simply 'table sauce' to English-speaking foreigners. By extension, ketchup became the national table sauce in America. See also Ketchup."

Ketchup (p. 238): The New York Times prefers to spell it ketchup, but catchup and catsup are generally accepted. The late Tom Stobart, in his The Cook's Encyclopedia, says that the word came into English 'from the Orient, perhaps from the Malay or Chinese.'

"You find ketjap benteng or ketjap manis in Indonesian recipes and that is a form of sweet soy sauce,' he wrote. 'Cookbooks of the last century abound with recipes-oyster ketchup (oysters with white wine, brandy, sherry, shallots and spices), mussel ketchup (mussels and cider), pontac or pontack ketchup (elderberries), Windermere ketchup

(mushrooms and horseradish), wolfram ketchup (beer, anchovies and mushrooms).'

"There are also ketchups made with walnuts, cucumbers, and many other items that caught some cook's imagination.

"A New Jersey man wrote to me that 'catchup is a Chinese invention and is still called in Cantonese fan-kei cheop. Fan-kei is the name for tomato, literally "foreign vine-vegetable" and cheop is juice as in chang-cheop (orange juice). The truncated word kei-cheop or catchup is obtained by dropping fan.

Soy Sauce (p. 419-20): Among Chinese soy sauces, dark/black soy sauce is thicker than thin/light because the former contains molasses.

Tofu (p. 451-52): There are said to be 7 kinds of tofu in Japan. "The best book on tofu making I know is *The Book of* Tofu, by William Shurtleff and Akiko Aoyagi. Published in paperback, it contains not only detailed instructions but also five hundred recipes." Note: This book is also listed in the bibliography.

Worcestershire Sauce (p. 483-86): Contains an extensive discussion of the history of Worcestershire sauce. "There are certain names in the world of wine and food that are inextricably linked... indelibly inscribed on the gastronomic roster is Lea and Perrins, makers of the original Worcestershire sauce, 'the original and genuine, from the recipe of a nobleman in the county,' as it reads on the label. The county in question, of course, is Worcestershire, England. The label does not reveal the name of the nobleman nor to this day will the producers of the sauce reveal it.

"The saga of the sauce dates back to the first years of the 1800s, when the governor general of Bengal returned from his post to his native England. He had in his possession a formula for a sauce that had been created in India. One that he had relished at his table and offered to his guests.

"At that time there were two chemists in the English Midlands named John Lea and William Perrins, partners in a then novel enterprise, a 'chain' of chemists shops. Their association had begun in the 1820s. Their main office was in the town of Worcester, in the shire, or county, of the same

"The governor general took the recipe to Mr. Lea and Mr. Perrins with a request that they try to reproduce it as closely as possible. The story goes that the chemists produced a concoction that was to their noses and tastes unpalatable. They stored it in the cellar and forgot it.

"Months, perhaps years, later they sampled it once more and found it not only acceptable but haunting in its flavor. Within a short while they were bottling the stuff, and it is a matter of genuine historical record that, without any kind of advertising as it is known today, in a few short years the Worcestershire sauce of Mr. Lea and Mr. Perrins was known and coveted in kitchens throughout the world...

"The incredible haste with which the fame of Worcestershire sauce spread is generally credited to the fact

that the manufacturers loaded cases of the sauce on all the ocean liners that plied in and out of English waters. The stewards of the ocean-going liners were 'encouraged' with a few shillings here, a few pounds there, to offer the sauce to the passengers."

Today Lea & Perrins sauce is made at Fair Lawn, New Jersey.

Note: This is the earliest English-language document seen (Jan. 2006) that contains the term "mussel ketchup."

About the author: A portrait photo on the inside rear dust jacket shows Craig Claiborne, who was born in Sunflower, Mississippi, and now resides in East Hampton-at the eastern end of the south shore of Long Island, Suffolk County, New York. Address: East Hampton, New York.

493. SoyaScan Notes. 1985. Chronology of Lea & Perrins Worcestershire Sauce. 13 May 1994. Compiled by William Shurtleff of Soyfoods Center.

• Summary: This chronology is a revised and expanded version of one published in an unknown UK airline magazine, found in one of the Lea & Perrins historical scrapbooks (Fair Lawn, New Jersey). We offer no guarantee of its accuracy.

1823 Jan. 1-Mr. William Perrins and Mr. John Wheeley Lea form a partnership to carry on the chemists and druggists business at 68 Broad Street, Worcester, England (located about 25 miles southwest of Birmingham). 1835-Lord Sandys, the former governor general of Bengal, gives recipe to Mr. Lea and Mr. Perrins in Worcester, England.

1837-Lea & Perrins sauce first sold commercially.

1842-636 bottles sold.

1845-Factory set up in Bank Street, Worcester.

1849–Arrangements made for exports to New York. The exclusive U.S. agent was John Duncan & Sons, a small firm which imported liquors and wines from Europe, and preserves, jams, and jellies from England.

1852-Annual sales reach 30,000 bottles.

1853-Lea & Perrins Worcestershire Sauce is awarded a medal at the New York Exhibition of the Industry of All Nations.

1897-New (present) factory built in the Midland Road, Worcester.

1902-Bottling begins in New York.

1906–The High Court of Justice in Britain decrees that no firm other Lea & Perrins be allowed to call their Worcestershire Sauce "the Original" or "the Genuine." This helps deals with upstarts and imitations.

1910-U.S. Bottlers (Duncans) move to West Street. Lea & Perrins (Inc.) of America.

1930-Lea & Perrins U.K. merge with H.P. Sauce Limited. John Duncan's Sons becomes Lea & Perrins Inc.

1931-Worcestershire Sauce manufacture begins in Australia.

1931–Lea & Perrins Inc. is incorporated into H.P. Sauce

Ltd.

1940-Bottling of Lea & Perrins moves to Tower Road, Birmingham, during World War II.

1946. manufacture begins again in Worcester. 1967-H.P. Sauce / Lea & Perrins acquired by Imperial Tobacco Co.

1985–Imperial Tobacco increases its control to 100%. Lea & Perrins International formed representing Lea & Perrins, H.P. Foods and Golden Wonder abroad.

1986 April-Hanson Trust assumes control of Imperial Foods / Lea & Perrins.

1988-Lea & Perrins is acquired by BSN Groupe of Paris, France.

Note: 1994 July-BSN Groupe changed that name to Groupe Danone.

Today, in addition to its Original Worcestershire, Lea & Perrins produces Lea & Perrins Steak Sauce, Lea & Perrins White Wine Sauce (for chicken, fish, or lighter foods), and Lea & Perrins Barbecue Sauce.

- 494. Lea & Perrins. 1985? A recipe collection from Lea & Perrins. Fair Lawn, New Jersey: Lea & Perrins. 36 p. Undated. Illust. (color). No index. 22 cm.
- Summary: A booklet of recipes that call for Lea & Perrins' Worcestershire Sauce. Printed in color on glossy paper. Contents: Happy hour snacks. Brunch. After work dinners. Weekend. Seasonal specialties. Address: 15-01 Pollitt Drive, Fair Lawn, New Jersey 07410.
- 495. Hunt, Janet. 1986. The compassionate gourmet: The best of international vegan cuisine. Wellingborough, Northamptonshire, England: Thorsons Publishers Ltd. 160 p. Illust. Index. 22 cm.
- Summary: An excellent vegan cookbook, written for animal lovers. Soy-related recipes include: Avocado tofu pâté (p. 31). Celery miso pâté (p. 36). French bean salad with tofu dressing (p. 66). Tofu curry (Thailand; p. 74). Tofu and vegetable pakora (p. 86). Tofu layered casserole (p. 96). Tomato flan with tofu (p. 104). Tofu Lemon flan (p. 137). Yogurt dessert (made with cultured soya milk, p. 140). Rhubarb fool (dessert in soya milk, p. 141). Maple pancakes (with soya flour, p. 149). Walnut tofu balls (p. 156).

At least one recipe uses Holbrook's Worcester Sauce-a Worcestershire-type sauce without animal products. Many recipes call for soy sauce or soya milk, and some for canned soy or nut "sausage." Page 9 lists a number of special ingredients including Direct Foods Protoveg (soya "meat"), Infinity Foods (distributors [in Brighton, at Sussex University]) Soya mayonnaise, Lotus Foods TVP (soya "meats" in a varieties of forms and flavors), Plamil concentrated soya milk (use diluted as a milk, undiluted as a cream), and Tomor Margarine (the author's favorite of the many vegan margarines now available in the UK). In all recipes, each ingredient is listed twice in side-by-side

columns: once in its Imperial (metric) form and once in its American form, e.g. 385 ml soya milk, 1 1/3 cup soya milk. A number of recipes call for the use of alcohol (whiskey, brandy, etc.). The author has written at least 14 other books on vegetarian or wholefood cookery. Address: England.

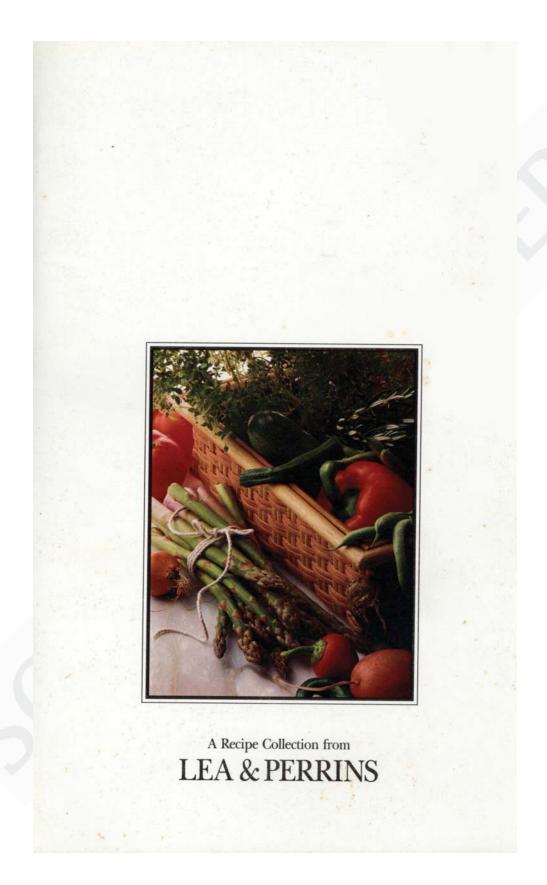
- 496. McDougall, Mary A. 1986. The McDougall healthsupporting cookbook. Vol. 2. Piscataway, New Jersey: New Century Publishers. iii + 157 p. Index. 23 cm.
- Summary: This is a vegan cookbook whose 250 original recipes are designed to support The McDougall Plan, which is a diet low in fat and sodium, high in complex carbohydrates. Since soyfoods are relatively high in fat, they are used sparingly and the recipes are marked by a symbol of a crown. Low sodium soy sauce is used in many recipes. Soy-related recipes include: Scrambled tofu (p. 2-3). Tofu salad dressing (p. 7-8). Dijon tofu dip (p. 9). Onion soup dip (with tofu, p. 9). Dilly tofu dip (p. 9-10). Miso soup (p. 39). Creamed tofu soup (p. 41). Tempeh Creole (p. 62-63). Ricetofu stuffing mix (p. 88). Tempeh and grain casserole (p. 91). Tofu loaf (p. 96-97). Baked tofu cubes (p. 97-98). Spinachtofu burgers (p. 99-100). Where's the meat loaf? (with tofu, p. 101-02). Oat burgers (with tofu, p. 102-03). TVP stuffing mix (p. 109). Okara cookies (p. 126). Tofu banana pudding (p. 132). The section titled "Update on ingredients" (p. 133-35) includes a description of: Worcestershire sauce (Sharwood's-natural and without anchovies), umeboshi plum sauce, tamari or soy sauce, okara, tempeh, kombu, and tahini. A portrait photo on the rear cover shows Mary McDougall.

Note: Not long after this book was published, New Century Publishers changed its name to New Win Publishing, Inc. and moved to Clinton, New Jersey. As of 2000 this book is published by Putnam/Penguin. Address: P.O. 14039, Santa Rosa, California 95402.

497. Goldbeck, Nikki; Goldbeck, David. 1987. The Goldbeck's guide to good food. New York, NY: New American Library. xi + 563 p. Illust. Index. 24 cm.

• Summary: The all-new version of their Supermarket Handbook, which originally sold 850,000 copies. Chapter 12 (p. 143-51), titled "Soyfoods: World Class Protein," discusses tofu, frozen tofu, tempeh, soy flour and grits, hightech soy (soy concentrates and isolates), textured soy protein products. There is also considerable information on soyfoods in other chapters throughout the book: Soy flour (p. 79). Soy nuts (p. 159, 163). Soy milk (p. 184-85). Soy yogurt (p. 190-91, 195). Soy cheese (212, 217-18). Soy protein concentrates or isolates (p. 233, 451, 483, 527). Soy oil (p. 144, 264, 288, 292-93). Meatless burgers and soy sausages (p. 394). Soy ice cream (p. 452-53, 455). Soy sauce (510-11, 515). Miso (p. 511-12, 515). Worcestershire sauce (p. 512).

The section titled "Soy Yogurt" gives a nutritional analysis of cultured Soygurt, made by Cream of the Bean; per 8 oz. it contains 255 calories, 6.7 gm protein, 45.2 gm



carbohydrates, 5.3 gm fat, no cholesterol, 20 mg sodium, and 7% of the US RDA for calcium. The text reads: "Those who must avoid milk will be interested in nondairy soy yogurt. A new arrival in natural food stores, this yogurt is made from soymilk and bacterial cultures. Gelatin is added to some brands to maintain the typical yogurt consistency. There is no need, however, for the quality to be compromised by the addition of high fructose corn syrup, isolated soy protein, salt, and several thickening agents, as has been done in at least one brand we have encountered."

The section titled "Soy Cheese" states: "Cheese based on soy milk has recently added a new category of cheese products to the market. In terms of calories, protein, and overall fat content soy cheese competes quite favorably with animal cheeses... It is both lactose- and cholesterol-free and the sodium content is about average for cheese. Note, however, that soy cheese is held together with vegetable gums and will contain either the milk derivative calcium caseinate (in which case it is not dairy free) or isolated soy protein." Page 218 gives a nutritional analysis of Soya Kaas (soy cheese). Per 1 oz. it contains 78 calories, 6.7 gm protein, 5.6 gm fat, no cholesterol, and 168 mg sodium. Address: R.D. 1, Box 495, Woodstock, New York 12498 914-679-

498. Dun & Bradstreet. 1987. Report on Kikkoman Foods Inc. 5 p. Dec. 31.

• Summary: Chief executive: Shinichi Sugiyama, born 1928. Plant: 300,000 square feet in 1 story concrete block building. Location: Walworth, Wisconsin. SIC Number 20 35. Worth: \$31.49 million. Employs: 95. Trend: Up. Total assets: \$41.7 million.

History. Incorporated in Wisconsin 10 March 1972. 100% of capital stock is owned by parent company. The parent company has 21 subsidiaries in Japan and the USA including: 1. Kikkoman International Inc., San Francisco. Started in 1957, it wholesales food sauces. 2. JFC International Inc., South San Francisco. Started in 1969, it imports food products, mostly from Japan. 3. Pacific Trading (Inc.), Los Angeles. Started in 1980, it imports food products. The parent company, Kikkoman Corporation, Noda, Chiba, Japan, started in 1917. It is a manufacturer of soy sauce, plum wine, rice wine, worcestershire sauce, etc.

Yuzaburo Mogi, born 1926, married, active in Japan. Graduated from Columbia College, New York, NY.

499. Harrison, Marilyn. 1987. Lea and Perrins everyday cookbook. Cambridge, England: Martin Books, an imprint of Woodhead-Faulkner Ltd. 96 p. Illust. (color). Index. 20 cm. • Summary: A booklet of recipes that call for Lea & Perrins' Worcestershire Sauce. Contents: Introduction. Conversion tables. Sauces, marinades and dressings. Dips and savoury butters. Fish. Mat and poultry. Vegetable dishes. Snacks, savouries and quick meals. Microwave hints and tips.

Address: [England].

500. Panati, Charles. 1987. Extraordinary origins of everyday things. New York, NY: Harper & Row. xi + 463 p. Illust. Index. 24 cm. [150+* ref]

• Summary: Includes discussions of: Blender (electric kitchen appliance) (1922, Racine, Wisconsin, initially known as a "vibrator"). Plastic (1900, USA, incl. Celluloid, Bakelite, Cellophane, Acetate, Vinyl, Plexiglas, Acrylics, Melmac, Styrene, Formica, Polyester, Nylon, Tupperware {made of polyethylene}). Peanuts (1800s, USA, incl. P.T. Barnum, peanut butter, Planters Peanuts). Cracker Jack (1893, Chicago, Illinois {"Candied Popcorn and Peanuts"}). Hot dog (1500 B.C., Babylonia [today's Iraq], incl. frankfurter, American hot dogs, Nathan's franks). Hamburger (Middle Ages, Asia). Sandwich (1760, England). Melba Toast (1892, London). Worcestershire Sauce (mid-1800s, Britain). Graham Crackers (1830s, New England).

Note: This book is very well written, but some or all of the information in some of the entries (such as the blender, peanut butter and Worcestershire sauce) comes from secondary sources and is incorrect. The book would be much better (but much longer) if the sources for each statement or entry were cited.

501. Business Trend Analysts, Inc. 1988. The market for salad dressings, sauces and condiments. 2171 Jericho Turnpike, Commack, NY 11725. 260 p. Price: \$750.

• Summary: Sauces include the following table sauces: Ketchup, meat (incl. steak, worcestershire, vegetable, and seafood sauces), barbecue, Mexican (incl. chili, taco, enchilada, etc.), prepared mustard, and soy and teriyaki. Gravies, dips, and dry sauce mixes are not included. Ketchup is the largest segment, about 40% of the total. It has grown at 4.6% annually from 1982-87, but growing faster during the same time are soy and teriyaki sauce (10.3%), barbecue sauce (11.4%), and Mexican sauce (9.2%). In 1977 soy and teriyaki revenues represented 3.1% of total sauce sales, compared to 6.7% in 1987. BTA expects the market to grow at 8.9% annually reaching \$280 million in 1997. Kikkoman, the leading producer of soy sauce in the U.S. sells most of its product is the western portion of the country. In 1987 it launched a national ad campaign to expand to the rest of the country.

According to U.S. Dept. of Commerce statistics, sales of soy and teriyaki sauce (in million dollars) and market percentage have grown from \$7.7 and 1.8% in 1972, to \$25.0 and 3.1% in 1977, to \$50.1 and 4.9% in 1980, to \$98.1 and 6.0% in 1985, and to an estimated \$132.0 and 7.0% in 1988. Other estimated market shares in 1988 were ketchup 39.2%, meat 19.6%, barbecue 14.4%, Mexican 12.1%, and prepared mustard 7.8%. Thus soy and teriyaki have the smallest share.

But the growth rate for soy and teriyaki sales have been slowing, in part due to lower inflation rates. The rate was

26.6% in 1972-77, 24.2% in 1977-82, 10.3% in 1982-87, and a projected 8.9% in 1987-97. In this latter period the growth rate is higher than for any other sauce category.

In 1987 for leading U.S. soy sauce producers, sales and market share were: Kikkoman Foods Inc. \$49 million and 41% market share; La Choy Food Products (Subsidiary Beatrice/Hunt-Wesson) \$43 million and 36%; Nabisco Brands Inc. (Subsidiary RJR Nabisco), maker of Chun King, \$12 million and 10%. All others, \$16 million and 13%. Note: Chun King Frozen Foods line was sold to ConAgra, Inc. (Omaha, Nebraska) in 1987. Nabisco still owns the soy sauce and other packaged goods. the U.S. soy and teriyaki market, an estimated 41%., with 1987 sales of \$49 million.

According to Department of commerce statistics, U.S. imports of "thin" soy sauce have grown steadily from 13.3 million lb in 1978, to 15.9 in 1980, to 29.6 in 1985, and an estimated 40.0 in 1987. In 1986 roughly 38.9% of this came from Japan, followed by 26.9% from Hong Kong, 12.8% from China, 12.0% from Taiwan, and 9.3% from Others (incl. South Korea, Canada, and Philippines). These imports of 32.5 million lb in 1986 were worth \$13.9 million. Between 1980 and 1986 roughly 2,500 lb/year of soy sauce have been exported, a negligible amount. The main destinations were West Germany, Canada, and Mexico. Address: Commack, New York.

502. Thiel, Elizabeth. 1988. Soy sauce: Tamari comes to the capital. Virginian Pilot (Norfolk, Virginia). Aug. 21. p. H1, H4.

• Summary: Mark Givens, London native and chief officer of a Japanese factory in Richmond, was drawn to American because of tamari, an upscale soy sauce produced by the year-old Virginia company. The young company already produces 40% of the world's tamari, exported to 25 foreign countries and sold to major food processors such as Campbell's Soup Co. The tamari sauce has 30% more protein than soy made under such labels as Kikkoman and La Choy, which add wheat to the mixture to speed up fermentation. Tamari Lite has about 25% less sodium. The catch is the price. A bottle of tamari costs about a dollar more than a bottle of Kikkoman soy sauce. Fermentation takes as long as six months.

In 1979 San-Jirushi incorporated in California to take advantage of the booming Oriental food market in America. The American venture included a warehouse and 4-5 fulltime employees. San-J employs 25 in the Richmond plant, and there are three workers at the warehouse in California, compared to 200 in Japan. San-J bottles tamari in 55 and 5 gallon containers for use by restaurants and food processors. "Sales are up 30% this year," Givens says.

Photos show: (1) Yuji Yamamoto, vice president of production at San-J's new tamari plant in Richmond, Virginia. (2) Stephen Earle, vice president of San-J, wearing a hard-hat and protective glasses, with machinery in the

background.

Also contains a sidebar with recipes by Regina Schrambling titled "Upscale Oriental sidekick is vegetarian Worcestershire." Tamari is Mollie Katzen's "vegetarian variation on Worcestershire." Address: Staff writer.

503. Loveland Reporter-Herald (Colorado). 1988. Miso works as flavoring substitute. Dec. 28.

• Summary: "Miso, a fermented seasoning made from a legume or grain plus salt, water and a bacterial culture. Is a good flavoring substitute for meat and meat broth, says Karen Wilken, Colorado State University Cooperative Extension food science and human nutrition specialist... Miso can be used as a substitute for bouillon or meat stock in soups, gravies or stews. It also can be used like soy sauce or Worcestershire sauce in sauces, dips and dressings.

"Because it is relatively low in sodium it can serve as a seasoning in moderate salt level diets."

504. Lea and Perrins. H.P. Foods Ltd. A wholly owned subsidiary of B.S.N. Limited. 1988. The history of Lea & Perrins (Leaflet). Worcester, England. 2 p. 30 x 21 cm. Black on green.

• Summary: Lea & Perrins "Original and Genuine" Worcestershire Sauce has been at the factory on Midland Road in Worcestershire since the factory was built in 1897. Still today the unmistakable aromas rise from oak casks stored below the ground. The recipe is understood to have been brought to England in 1835 by Marcus, Lord Sandys, who had held many offices in the east [i.e. in Asia] including that of the Governor of Bengal.

"On his return from India to his native Worcestershire, Lord Sandys took the recipe to John Lea and William Perrins, chemists who owned a pharmacy in Broad Street, Worcester. At Lord Sandys' request, the chemists made up the sauce and, probably to satisfy their own curiosity and to assess the sauce's viability as a commercial proposition, prepared a quantity for themselves which they put into stone jars. When they tasted the sauce, however, they found it so unpalatable that they consigned the jars to the cellar. Some time later they re-discovered the jars and, before throwing them out, tasted the sauce again. It tasted superb! The sauce had matured.

"The reputation of the sauce originally made for Lord Sandys quickly spread and Messrs Lea & Perrins decided to obtain the recipe permanently from Lord Sandys to manufacture and sell under the now familiar Lea & Perrins name.

"To this day the recipe remains a closely-guarded secret and only a handful of people know the exact ingredients, proportions and maturing processes involved in the manufacture of Lea & Perrins Worcestershire Sauce. With Lord Sandys' permission, the sauce was first sold commercially in 1837 and in 1849 arrangements were made for its export to New York.

"By 1849 Lea & Perrins Worcestershire Sauce had rounded Cape Horn. The crew of a ship sailing up the Pacific coast to the United States deserted to join the 1849 Gold Rush, leaving only the captain and the 'supercargo', the man directly responsible for the cargo, to sell off the goods they were carrying. Itemised on the cargo list was the famous sauce, along with a selection of medicines and Lea & Perrins trusses!

"An undamaged bottle was unearthed by archaeologists investigating the town of Te Wairoa in New Zealand. The town had been destroyed by a volcano in 1886-so the sauce must have reached New Zealand before that date!...

"Lea & Perrins Limited was acquired by HP Sauce Limited in 1930. In 1967 Imperial Tobacco (now Imperial Group) acquired HP Sauce and the Lea & Perrins brands with it... The product is used in over 130 countries."

Photos show: (1) Seven old Lea & Perrins bottles, two of them with labels. The earliest, which has no label, dates from 1866. (2) Three present sizes of bottles, 20, 10, and 5 fl. oz. The first 3 ingredients are vinegar, molasses, and vinegar-in that order. Address: Midland Road, Worcester, WR5 1DT, England.

505. Product Name: Wizard's Stir Krazy Vegetarian Worcestershire Sauce.

Manufacturer's Name: Edward & Sons Trading Co., Inc. (Distributor).

Manufacturer's Address: 1115 Lousons Rd., P.O. Box 3150, Union, NJ 07083. Made in Hillsborough, North Carolina Phone: 201-964-8176.

Date of Introduction: 1989. July.

Ingredients: Incl. Apple cider vinegar, tamari soy sauce, deep well water, Barbados molasses, miso, honey, fresh ginger puree, salt, tamarind, cayenne pepper mash, garlic juice, honey, herbs and spices, sea salt, hickory smoke, natural seaweed extract.

Wt/Vol., Packaging, Price: 5 oz shaker bottle. Retails for \$2.29 (12/89).

How Stored: Shelf stable.

New Product-Documentation: Spot in Vegetarian Times. 1989. "The VT shopper: We asked for it..." July. p. 69. "... and we got it. When 'The Wizard' (a.k.a. John Troy) read in VT that there is no such thing as vegetarian worcestershire sauce (all commercial brands now contain anchovies), he fired up his cauldron and-voila!-he invented one. The Wizard's Stir Krazy sauce is full of spicy, authentic, worcestershire flavor. Thanks, Wiz. Distributed by Edward & Sons Trading Co. In natural food stores." A small photo shows a bottle of the new sauce.

Note 1. This is the 2nd earliest known vegetarian worcestershire sauce made in the USA; see Bonneau 1972.

Note 2. Wizard Baldour makes this sauce in Hillsborough, North Carolina.

Soya Newsletter. 1989. Sept/Dec. p. 11.

News release from Edward & Sons Trading Co. 1989. Nov. "Stir-Krazy named 'Best New Sauce of 1989."" Vegetarian Times likes this sauce "so much that they have featured it in their 'Best of 1989' awards. This is the first time the magazine has recognized new products in this way." The 5 oz shaker bottle, which "retails for \$2.29, is the perfect 'fixin' for tofu, teriyaki, and wok dishes..."

Talk with John Troy of North Carolina. 2012. March 7. The basic ingredients in John's sauce worcestershire (probably not in the exact order) were vinegar, tamari soy sauce, lemon juice concentrate (purchased frozen), filtered water, miso, honey, garlic, and ginger, spices, xanthan gum, citrus extracts (orange oil, lemon oil), spice extract (rosemary extract, used as a stabilizer-not for its flavor). It was not organic. Lea & Perrins' Worcestershire Sauce is quite similar to Japanese Ponzu sauce, which is made by simmering rice vinegar, mirin, katsuobushi flakes, and konbu seaweed. The liquid is then cooled, strained to remove the katsuobushi flakes, and finally the juice of one or more of the following citrus fruits is added: yuzu, sudachi, daidai, kabosu, or lemon. *Ponzu-joyu* is based on equal parts soy sauce (shoyu) and lemon, lime, or yuzu juice. The Japanese use bonito flakes (katsuobushi) instead of anchovies, and sometimes yuzu (a citrus fruit) instead of lemon juice.

506. Kenyon, Michael. 1989. Worcestershire Sauce. Gourmet 49(10):122, 234-41. Oct.

• Summary: Discusses (without documentation) the origin and history of Lea & Perrins' Worcestershire and the factory in Worcester where the sauce has been made since 1897. Says that in 1835 the first concoction was mixed up from Lord Sandys' recipe. Two years later, John Wheeley Lea and William Perrins, discovered the forgotten brew in their cellar, took a second sniff and taste, and found it was quite nice. Apart from minor changes and the crucial aging, the "recipe for today's Worcestershire sauce is the one brought back from India by Lord Sandys [Note: Not true; the main ingredient, soy sauce, has been replaced by HVP]. A 1928 rhyming advertisement went, "And waiter, when you bring my cheese, bring Lea & Perrins sauce back, please."

Today, world consumption is about 25 million liters/ year. The city of Worcestershire is located about 100 miles northwest of London, and 25 miles west of Stratford-on-Avon. The factory in Worcestershire makes 12 million bottles/year and more than half of all households in Britain are said to have a bottle in the pantry. It has been supplied to royalty since 1904. The factory at Worcestershire has an archives and museum. In 1988 BSN, a French-based food conglomerate, bought Lea & Perrins in both England and the USA (Fair Lawn, New Jersey).

C.W. Dyson Perrins (1964-1958), the millionaire grandson of William, the chemist, focused his energies on business-incl. the sauce business. In 1946 he founded the museum. Every summer he hunted at his castle in the Scottish Highlands, killing hundreds of birds (2,000 brace of grouse, etc.) and wild animals.

The writer's genealogical research indicates that the Lord Sandys whose name is tied by legend to Worcestershire sauce was Arthur Marcus Cecil, the third Lord Sandys (1798-1886). His grandfather's family seat was in the county of Worcestershire. The writer also believes that Lord Sandys invented the Bloody Mary–a cocktail consisting essentially of vodka and usually spiced tomato juice. The term was first used in 1947 and Worcestershire sauce is often used as an ingredient. Address: Long Island, New York.

507. Simpson, J.A.; Weiner, E.S.C. 1989. The Oxford English dictionary. 2nd ed.: Worcestershire. Oxford, England: Clarendon Press.

• Summary: The earliest entry for Worcestershire sauce is: 1843. Naval & Military Gazette [England]. 1 April, p. 208, col. 2. Advertisement for "Lea and Perrin's 'Worcestershire Sauce', prepared from a recipe of a nobleman in the country." There are also entries for 1870 (in Study Wind, Lowell 1886) and 1889 (Falling in Love, by G. Allen). Address: England.

508. Krohn, Joni. 1990. Standard Industrial Classification (SIC) Codes: SIC classification ended in about 1984; SITC (Standard International Trade Classification) is now in use (Interview). SoyaScan Notes. April 5. Conducted by William Shurtleff of Soyfoods Center.

• Summary: The Standard Industrial Classification Manual is published by the Office of Management and Budget (OMB), which also publishes the SIC codes. Another related publication is The Numerical List of Manufactured and Mineral Products, and its Alphabetic Index, both published by the Census Bureau (within the Department of Commerce); these documents expand the basic 4-digit SIC codes to 7-digits to give more detail: Our industry is most aptly characterized by 2075A = Soybean products.

0116 = Soybean farms. Any industry that starts with zero is agricultural.

2024-071 = Mellorine and similar frozen desserts, incl. those made with tofu.

2026-717 = Products which substitute for fluid milk products [probably includes soymilk].

2026-718 = Other perishable dairy product substitutes [probably includes soy yogurts & cheeses].

2035 = Pickled fruits and vegetables.

2035-234 = Other finished pickles and pickled products [incl. mixes, relishes, peppers, onions, and mushrooms; probably includes miso].

2035-351 = Other sauces, incl. Worcestershire, soy sauce, horseradish, meat, vegetable, etc.

2075 = Soybean flour, grits, meal, cake, and soy oil (unrefined).

2079 = Soybean cooking and salad oil.

2084 =Soybean fibers.

2099-955 = Tofu (Bean curd).

2099-998 = Other perishable prepared foods, sold in bulk or packages, not frozen [probably includes tempeh].

Note: in May 1984 the "Primary SIC" code assigned to tofu manufacturers by Dun & Bradstreet was either 2075 (Soybean Oil Mills), or 2099 (Food Preparation Nec.).

Examples of SITC numbers: Soya bean flour and other protein substances, textured 098.09. Soya bean flour, defatted (excl. protein concentrates) 081.31. Soya bean flour, nondefatted 223.9. Bean curd 098.09... Soya sauce 098.04. Soybean-see soya bean 098.04. Address: Dep. of Commerce, Bureau of the Census, Economic Surveys Div., Industry & Commodity Classification Branch, FOB-3, Room 2744, Washington, DC 20233;. Phone: 301-763-1935.

509. **Product Name:** Lea & Perrins Flavored Soy Sauces: Soy & Garlic, Soy & Chilli, Soy & 5 Spice, Soy & Ginger. Manufacturer's Name: Lea and Perrins Ltd. Subsidiary of H.P. Foods.

Manufacturer's Address: P.O. Box 31 Registered Office, Midland Road, Worcester WR5 1DT, England.

Date of Introduction: 1990. June.

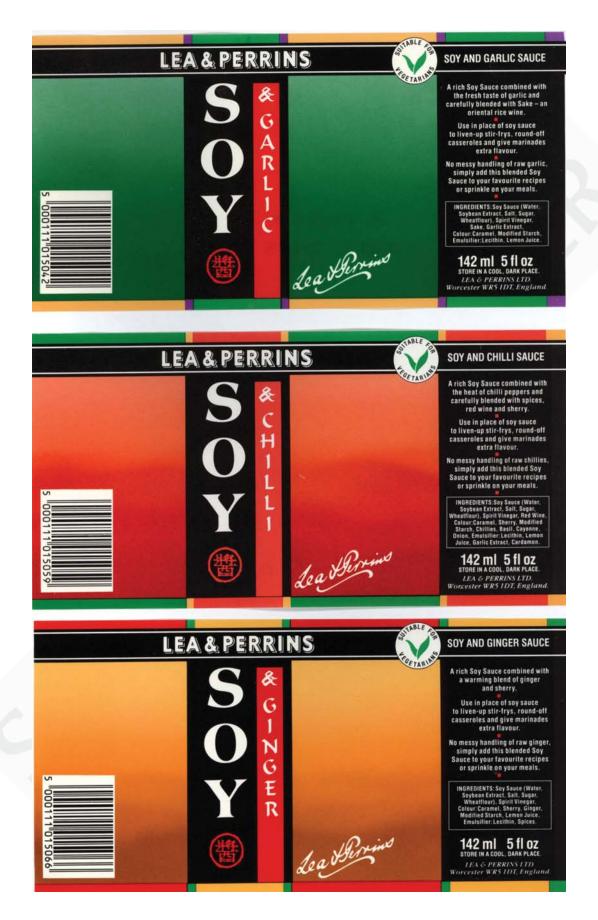
Ingredients: Garlic: Soy sauce (water, soybean extract, salt, sugar, wheatflour), spirit vinegar, sake, garlic extract, colour: caramel, modified starch, emulsifier: lecithin, lemon juice. Wt/Vol., Packaging, Price: 142 ml (5 fluid oz) bottle.

How Stored: Shelf stable.

New Product-Documentation: New Product News. 1990. Aug. 5. p. 46. "Lea & Perrins [in Great Britain] aims to lift soy sauce out of the commodity product area with the launch of a new line which will sell at almost twice the price of rival brands." Soya International. 1990. July/Sept. p. 4.

Talk with Sarah Stanley, executive secretary to the president at Lea & Perrins. 1991. Jan. 15. The company has no such product. At one time they distributed Secret of the Orient, which was a line of some packaged dry spice mixes, but they have turned those over to another individual, who is distributing them. They were not involved with this line for very long. Lea & Perrins in the USA is located at 15-01 Pollitt Dr., Fair Lawn, New Jersey 07410-2728. Phone: 201-791-1600. Try Great Britain. H.P. Foods, 45 Northampton Rd., Market Harborough, Leicestershire, England LE16 9BQ. The company's world headquarters are in France: BSN Group, 7 rue de Tehran, 75831 Paris Cedex 8, France.

Four Labels and letter sent by J.W. Garnett, Factory General Manager, Lea & Perrins Ltd., P.O. Box 31 Registered Office, Midland Road, Worcester WR5 1DT, England. 1991. Jan. 29. 6.5 by 3.25 inches. Paper. Garlic: Green, black, red, and white. With the green "V" vegetarian logo; "Suitable for Vegetarians." UPC indicia. "A rich soy sauce combined with the fresh taste of garlic and carefully blended with Sake-an oriental rice wine. Use in place of



soy sauce to liven-up stir-frys, round-off casseroles and give marinades extra flavour. No messy handling of raw garlic, simply add this blended Soy Sauce to your favourite recipes or sprinkle on your meals." Letter notes that this new line of soy products was launched in the UK on 25 June 1990. "We make no other products at this time that contain soy sauce under the Lea & Perrins Brand but there are some products under the HP sauce brand (namely HP Sauce, HP Fruity Sauce)."

510. Business Trend Analysts, Inc. 1990. The market for salad dressings, sauces and condiments. 2171 Jericho Turnpike, Commack, NY 11725. 275 p. Price: \$895.

• Summary: This is an update of the 1988 edition. Sauces include the following table sauces: Ketchup, meat (incl. steak, worcestershire, vegetable, and seafood sauces), barbecue, Mexican (incl. chili, taco, enchilada, etc.), prepared mustard, and soy and teriyaki. Gravies, dips, and dry sauce mixes are not included. Ketchup is the largest segment. Address: Commack, New York.

511. Moosewood Collective (The). 1990. Sundays at Moosewood Restaurant: Ethnic and regional recipes from the cooks at the legendary restaurant. New York, NY: Simon & Schuster. 734 p. Illust. Index. 24 cm. A Fireside Book. [55*

• Summary: Since it opened in 1973 in Ithaca, New York, Moosewood Restaurant has become famous for its creative semi-vegetarian cuisine (fish are included on the menu and in this book) with a healthful emphasis. The restaurant is run by a group of 18 women and men, most of whom have worked together for nearly 10 years. Major decisions are made collectively. This is the Collective's second vegetarian cookbook. Each section, corresponding to the cuisine of 17 different geographical regions (e.g. Eastern Europe, Japan) and one ethnic group (Jewish) is written by a different member of the collective. The book contains many soyrelated recipes: Tofu (20 recipes), tempeh (1), miso (1), soybeans (1), tamari roasted nuts (1), etc. The extensive "Guide to ingredients, techniques, and equipment" (p. 649-87) describes: Beans (incl. soy), chick pea flour (besan flour), dashi, Hoisin sauce, miso, seitan, soy sauce (see tamari soy sauce), light soy sauce, tempeh, tofu, vegetable oil (incl. soy oil), Worcestershire sauce ("The formula remains a wellguarded secret, but we do know that the Lea and Perrins product contains molasses, anchovies or sardines, sugar, garlic, tamarind, soy sauce, vinegar and spices"). Address: Ithaca, New York.

512. Stanley, Sarah. 1991. Documents owned by Lea & Perrins concerning their company's early history (Interview). SoyaScan Notes. Jan. 16. Conducted by William Shurtleff of Soyfoods Center.

• Summary: The company does not have a written company

history, though it does have a brief brochure "Worcestershire Chronicle." More important, it does has many very old documents going back to the 1830s. These old ledgers (recently rebound), books, and 6-10 old scrapbooks are kept in two locked glass display cases at Fair Lawn, New Jersey. None have been published. There are also some old bottles in the showcases. No one at the company really knows the history of the company. A researcher might be able to use these documents on site if he/she were qualified and very careful. "We are about to embark on a project to put all of the written materials we have in books, cataloging and organizing them. We expect it to be finished in 6-8 months. We feel that our history is very valuable. We have a young lady named Reggie Aber who has recently retired, and who has the time and the interest to work on this project. We will buy new scrapbooks, and she will organize our existing documents by product, and within each product chronologically from earliest times to the present. The result will a number of well-organized scrapbooks. Our major product is Original Worcestershire, but we also have other products. We are a big name but a small company, with only 110 employees, including office staff. The president is Mr. Dennis Newnham, an American. The company has never been located in Ridgely, Maryland, but they did have a fulfillment and coupon house there. The company was originally located in New York, but moved to Fair Lawn quite some time ago."

Update: Talk with Sarah Stanley. 1994. Jan. 6. The project was completed by Reggie Aber, but Sarah's assistant, who was handling the archives, has recently left the company and she has not yet been replaced. So there is nobody who knows the material and can answer questions concerning them. She hopes to be hiring a new person for this job in the next few weeks (the person will not be a trained archivist), and within about 3 months that person should know the material. The purpose of the project was simply to organize the company's early important documents in an archives, not to summarize them or write a company history. The company has two scrapbooks and documents organized in files by subject matter. So there would probably be a file on Worcestershire sauce, with early records. If a researcher wanted to use these archives, he or she should write the company president, Mr. Dennis Newnham, giving details and requesting permission.

Update: Talk with Sarah Stanley. 1994. May 5. Contact Jackie Fallon for help on this project. Address: Executive Secretary to the President, Lea & Perrins Inc., 15-01 Pollitt Dr., Fair Lawn, New Jersey 07410-2728. Phone: 201-791-1600.

513. SoyaFoods (ASA, Europe). 1992. BSN goes saucy [by purchasing Amoy]. 3(2):2. Spring.

• Summary: "French agrifood group, BSN (1990/91 turnover 80 billion French francs) have purchased the Hong Kong firm Amoy Industries International Ltd. (1990/91 turnover 146 million French francs), an important force in the Asian sauce market. The Hong Kong leader of the soya sauce sector was previously owned by the Pillsbury Group (GrandMet) and Hang Lung." BSN is already a major force in the sauce market with brands such as Lea & Perrins, and HP.

514. Pan, Lynn. 1994. Sons of the Yellow Emperor: A history of the Chinese diaspora. New York: Kodansha International. xx + 418 p. Illust. (16 pages of plates). Index. 22 cm. [174*

• Summary: On page xiv is a very interesting map of southern China, with a blowup of southern Kwangtung [Guangdong] province, the area around Canton the Pearl River, the South China Sea, Macao, and Hong Kong. For this area was at the heart of the Chinese diaspora-especially in the 19th and 20th centuries and especially from two small areas southeast of Canton: (1) Sam Yap (Three Districts) of Punyu, Shuntak, and Namhoi-the more affluent counties. (2) Sze Yap (Four Districts) of Hoiping, Sunwui, Toishan, and Yanping—the poorer and ruder area southwest of Sam Yap. Although the people from both areas speak Cantonese, they have difficulty understanding each other's speech. Other important languages of the diaspora were Hakka and its numerous variants (spoken in Guangdong, Fujian, etc.) and Hokkien (spoken in southern Fujian, Taiwan, and by many overseas Chinese throughout Southeast Asia). It is closely related to Teochew / Teochiu, though mutual comprehension is difficult,

In Part Four: 1960s to 1980s, Chapter 16, titled "Food" contains a history (p. 320-23) of Amoy Food Limited, now an international firm, with its headquarters in Hong Kong, owned largely by overseas Chinese. For many overseas Chinese, "perhaps no label has quite the resonance of Amoy." In 1908, T'ao-hua Ta-t'ung, the predecessor of the company, was founded in Xiamen for producing bottled soy sauce and dairy milk. Its founder was Yang Ko-fei, who soon brought in other shareholders. In 1911 clashes between the founder and other shareholders lead to a break-up of the company, with one party going it alone as T'ai-hua (Tao Fia), and the other as Ta-T'ung. Yang Ko-fei went with the latter company, who chief shareholder was Tan Kah Kee, the rubber and pineapple magnate.

It became increasingly apparent, however, that the two companies would do much better of they operated as a single unit. So in 1928, when a new rival appeared, they merged, with the smaller of the two now located in Hong Kong. Thereafter the company experienced steady growth. Eventually the branch in Hong Kong came to eclipse the parent company in Amoy. In 1937, when the Japanese invaded China and war broke out, almost the entire canning plant was moved to Hong Kong from Amoy. In 1951, when the company went public, the ownership passed mainly into the hands of overseas Chinese.

Today Amoy Foods' products are on the shelves of supermarkets and Asian markets in 37 countries. Half of Amoy Foods' shares are owned by the American food giant Pillsbury (owner of Haagen-Dazs and the Burger King hamburger chain) and the other half by Hang Lung (a Hong Kong real estate company). Amoy's line of 34 sauces include dark soy sauce (lau-ch'ou), light soy sauce (sheng-ch'ou), black bean sauce [made of fermented black soybeans], sweet and sour sauce, etc.

On the roof of the Amoy factory's main building a visitor can see a demonstration of the old-fashioned process; "here, an old man with sleeves rolled up goes from earthen vat to earthen at plunging his arm into the thick brew of black and yellow soy beans to give it a gentle, almost loving stir. He works rhythmically, with deep concentration. A Soy Master with thirty or forty years behind him, he stands in a line which goes back to the fifth century, from when dates the earliest surviving soy sauce recipe."

Companies like Amoy have helped to make Chinese foods more widely available in the West. Not so long ago, Chinese cookbooks published in England said that Worcestershire sauce was an acceptable substitute for soy sauce, because the latter was available only at delicatessens and specialty shops [Asian grocery stores] in London. Even during the last five years, the range of Chinese foods available in London's Chinatown has grown remarkably. In Chinatowns in the United States [and especially those in San Francisco {California} and New York] the selection of Chinese foods has long [perhaps always] been greater than at those in London or other places in Europe.

Page 324: The first person to make tofu in Europe was Li Shih-tseng [Li Yü-ying, Li Shizeng], a Chinese intellectual and educator. As a young student of biochemistry in France in 1900, Li was to be greatly influenced by the writings of Nietzsche and Bergson. A Francophile, Li was one of the founders of the Work and Study Program, which sent Chinese students abroad for part-time work and parttime study. One of these students, who would later become famous, was Deng Xiaoping. While establishing his tofu [beancurd] factory in France, Li drew on his knowledge of biochemistry; the factory provided jobs for many students in the Work-Study Program.

Li, a vegetarian, was a firm believer in the nutritional value of tofu and other soybean foods. His factory also made and sold soybean flour, fermented tofu, soy-bean milk, and soy-bean jam, and these foods nourished not just Chinese, but also Westerners, including American soldiers who fought in France during World War I (Lin Hai-yin 1971, p. 125). "All this was before the faddish demand for tofu by health food enthusiasts, and before it became widely known as an unbeatable source of protein. The company closed after the war, but among certain Chinese émigrés [emigrants from China] France was never to lose its reputation for beancurd.

In Europe up to the 1980s tofu kan, a particular variety of fermented beancurd [sic, pressed tofu] much demanded by eastern Chinese palates, could only be had in Paris, and the handful of émigrés in London had to send over for it."

Li was also a founder of the Université Franco-Chinoise at Lyons, a sort of accommodation and placement agency.

About the author (facing p. 418). Lynn Pan was born in Shanghai; she left as a child. She "has lived as an immigrant in North Borneo and England, and worked as a social scientist, journalist and writer in London, Geneva, Helsinki, and Hong Kong." In 1981 she returned to Shanghai for the first time, and was gripped by deep, haunting sensations of nostalgia. She had found the place where she belonged, her inheritance, and she began to write this book. She is the author of at least five other books-all listed facing the title page. Her Epilogue and Afterword at the end of this book are both very interesting.

- 515. Read, E.C.K. 1995. England's Worcestershire Sauce: Flavors of the world. Bon Appetit 40(7):32-33. July.
- Summary: Gives a brief, cute, undocumented, copycat (and probably untrue) history of Lea & Perrins' Worcestershire sauce and recipes (by Lane Crowther) for using it.

In a slim bottle at the end of the bar, the anchovy is enshrined with tamarind, vinegar, molasses, garlic, onions, soy [sauce], chili peppers, cloves, and lesser ingredients "in the elixir known as Worcestershire Sauce."

The bartender says he buys the bottles by the case, mostly to make Bloody Marys. Worcester (the sauce has always contained anchovies and tamarind) is a city (and the county seat) on the River Severn. The original sauce is said to have been made in the "early 1800s" by John Wheeley Lea and William Perrins, based on a recipe from Marcus Sandys, the British governor in Bengal, India. Their first market outside England was ocean liners. The U.S. maker of Worcestershire Sauce, "Lea & Perrins of Fair Lawn, New Jersey," was formerly John Duncan & Sons of Manhattan [New York City], an early importer of the sauce—which is now used in "such morning-after remedies as Bloody Marys and Prairie Oysters..."

- 516. Agar, Anne. 1995? Good taste guide cookery book: Lea and Perrins. Worcester, England: Lea & Perrins. 28 p. Illust. (color). 22 cm. *
- Summary: Recipes that call for Lea & Perrins' Worcestershire Sauce. Includes a recipe for Bloody Mary ice cream. Address: New York, NY.
- 517. Smith, Andrew F. 1996. Pure ketchup: A history of America's national condiment with recipes. Columbia, South Carolina: University of South Carolina Press. xiii + 242 p. Illust. (some color). Index. 24 cm. [200+* ref]
- Summary: Part I, "History" is related to the history of soy sauce and the first 3 chapters have the following contents: 1.

Introducing ketchup and its polyglot parentage: Introduction, origins, catchup, catsup, or ketchup?, the British. 2. The rise and demise of homemade ketchup: Introduction, mushroom, fish and seafood, and walnut ketchups, pickles, sauces and ketchups, ketchup in 18th-century America, the rise of tomato ketchup, ketchup in 19th-century Britain and America, reason's for ketchup's initial success, ketchup commonalities, homemade ketchup's high-water mark, the fall of homemade ketchup. 3. The commercialization of ketchup: Early tomato ketchup manufacturing, the rapid expansion of commercial ketchup, manufacturing ketchup at the turn of the century [around 1900], commercial nontomato ketchups, America's national condiment.

By the mid-1700s, three general types of ketchup had emerged in England: mushroom, fish, and walnut. "Mushroom ketchup was a particularly successful condiment." The earliest known recipe for mushroom ketchup appeared in 1728 in a book by Richard Bradley (p. 14). By the mid-1700s, many British cookbooks or cookery manuscripts included one or more non-tomato ketchup recipes. The base ingredient in "Harvey Sauce" was mushroom ketchup. "'Worcestershire Sauce' included both walnut and mushroom ketchups, and some receipts employed 'Canton soy' as an ingredient" (p. 17).

In 1804 James Mease (Domestic Encyclopedia, Vol. 3, p. 506) wrote: "Love Apples" make "a fine catsup." Then in 1812 Mease published the earliest known tomato ketchup recipe. It consisted of unstrained tomato pulp with spices. Since it was not sieved, it was quite thick. Vinegar was replaced by brandy. The first Anglo-American recipe for tomato sauce was published in 1804 in Great Britain by Alexander Hunter. Initially the terms "tomato sauce" and "tomato ketchup" were not highly differentiated. Ketchup tended to be thicker, contain more tomato solids, and last longer-due to its vinegar content. Address: Brooklyn, New York and Jackson, New Jersey.

- 518. Fallon, Jackie. 1997. Re: Was soy sauce ever used in Lea and Perrins' Worcestershire sauce? Letter to William Shurtleff at Soyfoods Center, April 7. 1 p. Handwritten, with signature on letterhead.
- Summary: Jackie is sorry she couldn't be of more help. She was able to clarify only two things and couldn't find any dates.

"From what I understand, the recipe hasn't changed & I don't know where (if at all) soy fits into the picture.

"I threw in a couple of new things I found with dates and sources-hope it helps. Sincerely,..."

Printed in red, across the bottom of the letterhead, "Quality Products Since 1835." Address: 15-01 Pollitt Drive, Fair Lawn, New Jersey 07410. Phone: 201-791-1600.

519. Keogh, Brian. 1997. The secret sauce: A history of Lea & Perrins. Worcestershire, England: Leaper Books. viii +

135 p. Index. Illust. 21 cm.

• Summary: The best history to date of Lea and Perrins, with many interesting dates, stories, photographs and reproductions of early documents, by a man who worked for that company as an archivist and accountant his entire working life.

Note: A letter of May 1994 from Pamela Street, Director, International Division, Lea & Perrins International Ltd. (Worcester, England) says: "I have spoken to our Archivist, Mr. Brian Keogh, who has provided the enclosed papers from our archives. I trust they are of interest to you."

Contents: Acknowledgments. Introduction. Before the sauce. John Wheeley Lea & family. William Henry Perrins & family partners. The secret recipe. Sauce making. Trade, a tribute to some diverse activities. Bottles and barnacles. Labels on the bottles. Buildings. Malvern water & Burrow Bros. Fruit juice. "By appointment"-The ultimate accolade for British companies. Workers & wages at Lea & Perrins. A factory at war 1940-1944. Edward Coles Corbett: Eccentric! Hero! Super salesman! John Duncan & the USA. Tales from Canada. Central America & the West Indies. Australia & New Zealand. A few saucy stories. Sample adverts from the 1840s to 1950s. Lea & Perrins after 1930.

Although one chapter is titled "The secret recipe (p. 27-34), soy sauce, which was long the main secret ingredient, is not mentioned.

The following is a brief early chronology gleaned from this book:

1823 Jan. 1-Mr. John Wheeley Lea, an established chemist, takes into partnership Mr. William Henry Perrins, at his chemist shop on Broad Street, Worcestershire (p. 1). They prepare a catalog for the occasion which lists over 300 items, including herbs and spices from around the world. The catalogue includes two ingredients of the sauce to beanchovies and tamarinds. Note: It also includes "India soy."

1837-Lea and Perrins Worcestershire sauce is first made commercially in Worcestershire. The secret formula is developed and first made by Mr. J.W. Lea and Mr. W.H. Perrins in the back of their chemist shop at 68 Broad Street, Worcester (p. vii). Worcester is a thriving commercial town on the River Severn, where it controls the major East-West crossing. For centuries the river had been used to carry goods between Bristol and Cardiff (in the southwest, near the ocean) to the Midlands (in the northeast) (p. 1). "Records suggest that the first three batches were brewed in fourgallon jars, then afterwards in twenty-eight casks. More staff were soon required" to meet the growing demand. "From the beginning the bottles were hand-filled and closed by a cork and sealed." Hand filling continued until 1845 (p. 63).

1840s early–The sauce starts to be "extensively exported" (p. vii).

1843-The earliest advertisement known to the author, from *The Pictorial Times* (no exact date or page is given) is displayed on pages 127-29, together with ads from 1848, 1851, 1897, 1903, 1905, 1907, 1923, and 1934.

1844-Production figures for the year show a record 1,326 dozen 12 oz and 1,314 dozen 6 oz bottles; this totals 31,680 bottles made and bottled in the back of the shop at 68 Broad Street. All bottles are still hand-filled. They soon rented a warehouse on the Quay, then another on Bank St. (p.

1849-The name "John Duncan & Son" first appears on the label of the sauce. However Duncan was not the product's first agent in New York! That honor goes to "Messrs. Innes & Co." whose name appeared on the product's label at an earlier date.

1850-The Great Western is the first railway to arrive in Worcester; mechanical transport begins (p. 2).

1866 Jan. 1-Lea and Perrins have sold their three chemists shops and are now free to concentrate on making and selling their sauce-which is increasingly popular worldwide (p. 65).

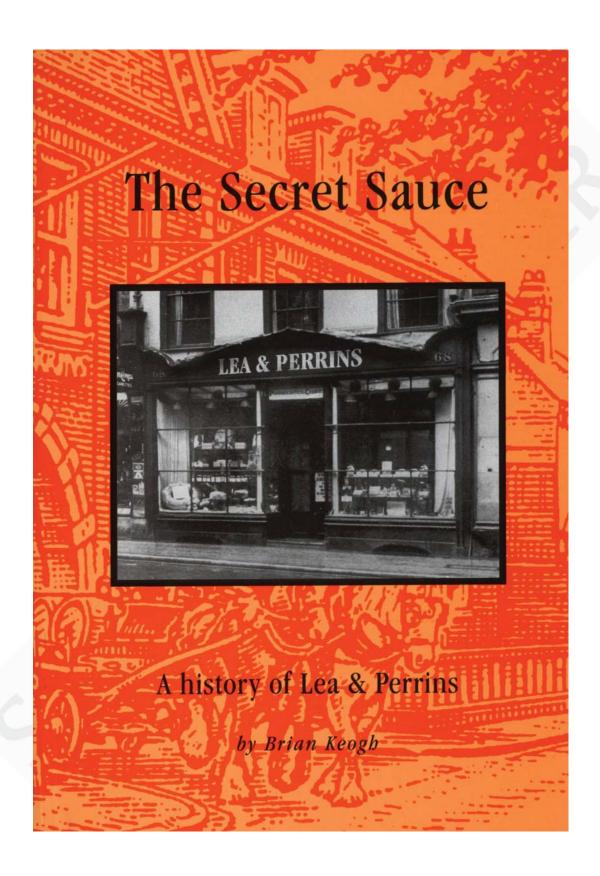
The section titled "The Sandy's family" (p. 29-30) debunks the myth of an early and oft-repeated connection between "Lord Sandys" and the invention / discovery of Worcestershire sauce. It states: "... no Lord Sandys (either as Sandys of Hill) was ever a governor of Bengal, or as available records show, ever in India. The identity of the nobleman thus remains an intriguing mystery."

Photos show: (1) Four colorful orange labels (from top left to right): 1. Early 1850s. 2. 1876 Banknote type border started. 3. From 1905 with white signature. 4. Modern label (p. 60). (2) Sample of a Chinese label (p. 61).

Talk with Brian Keogh. 2006. Feb. 23. He is now writing a fictional book about ponies and horses. He is donating his documents and artifacts related to Lea & Perrins to the company so they do not get lost, but nobody there is much interested in the history. Address: 9 Redfern Ave., Worcester WR5 1PZ, England.

520. Fallon, Sally; Enig, Mary G. 1999. Nourishing traditions: The cookbook that challenges politically correct nutrition and the diet dictocrats. 2nd ed. Washington, DC: New Trends Publishing Inc. xvi + 668 p. Illust. by Marion Dearth. Subject index. Recipe index. Menu index. 26 cm. [200* ref]

• Summary: Contains over 700 recipes. Contents: Preface. Introduction: Politically correct nutrition, fats, carbohydrates, proteins, milk & milk products, vitamins, minerals, enzymes, salt, spices & additives, beverages, about food allergies and special diets, parting words, guide to food selection (nourishing traditional foods, compromise foods { such as tofu}, newfangled foods {such as soy protein isolates and commercial soy milk}), a word on equipment, kitchen tips & hints, references (188). Mastering the basics. Great beginnings. The main course. A catalog of vegetables. Luncheon and supper foods. Grains & legumes. Snacks and finger foods. Desserts. Beverages. Feeding babies. Tonics



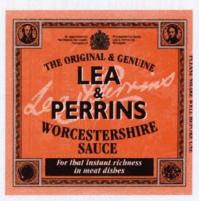


1. Early 1850s.

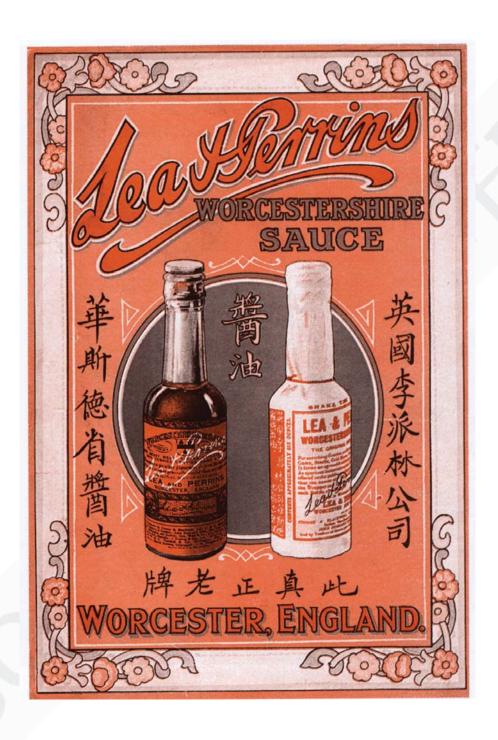




3. From 1905 with white signature.



4. Modern label.



and superfoods. Appendixes (A-F). About the authors.

Some of the basic recommendations in this book fly in the face of modern nutritional science: Eat more meat. Eat dairy products made from raw milk; pasteurization harms the milk. The worst fats are trans fatty acids, produced by hydrogenation; cholesterol and saturated fats do not cause heart disease. Consume plenty of enzymes. Meat should be eaten raw, rare, or braised in stock. Moreover, the authors propose a conspiracy in which doctors, researchers, nutritionists, and spokesmen of various government agencies are giving bad nutritional advice to the American public (p. 2). The authors wish, sentimentally, for the return of the small American farm. Moreover, they do not examine some the non-dietary issues related to a diet based on meat and dairy products: What is its impact on the environment? How would it affect the ability of the Earth to feed more than 6 billion people? What right do humans have to kill animals?

However the authors also make a number of recommendations that many people would agree with: Eat more natural, traditional, fresh, and unrefined foods instead of refined and processed foods. Avoid sugar and hydrogenated fats. This book is strongly influenced by the observations of Dr. Weston Price, a dentist, whose important book Nutrition and physical degeneration: A comparison of primitive and modern diets and their effects, was published in 1939.

Concerning soyfoods, the authors favor the use of small amounts of fermented soyfoods (such as traditionally fermented soy sauce and miso) but are strongly opposed to the use of non-fermented soyfoods such as tofu and soymilk.

Soy-related recipes and information: Commercial soy formulas are low in saturated fats and devoid of cholesterol (p. 6). Today most of the fats in the American diet are polyunsaturated and derived from vegetable oils such as soy (p. 10). The cheapest oils, such as soy oil, are often hydrogenated; this creates trans fatty acids (p. 14-15). Cows lose valuable Activator X when fed high-protein soy-based feeds. Lecithin is found in butter (soy, the main source of lecithin worldwide, is not mentioned). Mother's milk is high in cholesterol because it is essential for growth and development (p. 16-17).

Omega-6 (bad) and omega-3 (good) fatty acids in soybean oil (p. 19). Fermented soy foods contain compounds that resemble vitamin B-12 but they are not absorbed by humans (p. 28). Isolated protein powders made from soy are usually obtained by a high-temperature process that over-denatures the proteins to such an extent that they become essentially useless, while increasing nitrates and other carcinogens. These isolated soy proteins can cause osteoporosis (p. 29).

Beef should not be fed soy meal for protein, but rather animal parts (p. 31). Avoid farm raised fish [aquaculture] that have been fed soy meal (p. 32). Cultured soybean products from Asia, such as natto and miso, are a good source of

food enzymes if they are eaten unheated (p. 47). The natural glutamic acid in soy sauce and miso gives these foods their rich, meat-like taste (p. 49). Many processed foods contain MSG or hydrolyzed protein, "especially soy-based concoctions" (p. 50).

Heavily yeasted foods, such as soy sauce and Worcestershire sauce, often exacerbate the symptoms of chronic yeast [candida] infection (p. 56). Beans cause digestive problems because they contain two complex sugars, farrinose [sic, raffinose] and stachyose (p. 60). The macrobiotic diet and soybeans: Use only as fermented products like miso, natto, and tempeh. Problems with tofu, soy milk, and phytoestrogens in soy (p. 62). The sickening effect of soy on ruminants (p. 87). In Japan, a typical meal contains miso, soy sauce, and pickles, all fermented products. In Indonesia, they eat tempeh (p. 94).

Ode to naturally brewed tamari soy sauce and teriyaki sauce (p. 147). Soy products increase the body's need for vitamin B-12 (p. 164). Soy in Chinese history. Miso soup. Tofu in fish stock and soy sauce broth (p. 201). Macrobiotic diets (p. 343). Soy foods block zinc absorption (p. 348). Eat natural salmon; farm-raised salmon are fed inappropriate soy meal (p. 418). Problems with soy flour and modern soy products: phytates, antinutrients, omega-3 fatty acids, disagreeable taste, phytoestrogens, phytic acid, enzyme inhibitors (p. 477, 495).

Soybeans are low in two essential amino acids (p. 496). Textured soy protein contains three antinutrients: Phytic acid, trypsin inhibitors, and isoflavones (p. 502). Person fed soybean milk as an infant had a spleen filled with ceroid (p. 546). Infants should not be fed soy-based formulas which contain phytic acid and estrogen compounds (p. 599, 603-

Note: The first edition was apparently published in 1995 by ProMotion Publishing (San Diego, California). Address: California. Phone: (877) 707-1776.

521. Troy, John. 2000. Update on Wizard's Cauldron and work with miso (Interview). SoyaScan Notes. June 26. Conducted by William Shurtleff of Soyfoods Center.

• Summary: John's original organization was the Lindenself Foundation, a nonprofit organization involved with Eastern spirituality. The linden tree symbolized the heart. Out of this grew Linden's Elfworks, then Elf Works, Ltd., whose first product was a candy bar named Wizard Baldour's Power Pac introduced in 1976, and containing ginseng. Elf Works, Ltd. was created outside of the nonprofit corporation, and it existed only briefly (1981-1984).

In about 1980, John was first introduced to miso by Joel Dee of Edward & Sons who was introducing his Miso Cup, a dehydrated miso soup. Troy's next product was Wizard Baldour's Hot Stuff (in Regular or Blazing intensities); it was the company's first big success. It contained miso from the day it was launched. Troy first bought this miso

from Erewhon (a fairly dark salty rice/red miso), but when Erewhon filed for Chapter 11 bankruptcy in Nov. 1981, Troy started buying his miso from Barry Evans of American Miso Co. It was John Belleme and Barry Evans who really got Troy interested in and involved with miso-before American Miso Co. had any miso for sale, but after their miso plant had been constructed. Troy can't remember how, where, or when he met Barry Evans. Belleme told him about going to Japan and apprenticing with Mr. Onozaki. Later Barry Evans introduced Troy to John Fogg in Charlotte. Troy later worked closely with Fogg; "at first I thought he was arrogant and fussy, but he ended up being a tremendous influence in my life, and taught me so much about marketing... To this day I still draw on the wisdom of John Fogg."

Troy now makes almost 100 different products for the natural food trade. Most of these contain miso and/or soy sauce. All of his business is private labeling, so he develops and manufactures products, which other companies market. Across the street from his office is a modern, high speed blending, bottling, labeling plant, with plenty of cold storage. He manufactures and bottles every product he develops. His company, The Wizard's Cauldron, Ltd., run small by a small team of leaders, now does about \$2 million a year in annual sales. His products are now almost totally organic-200 ingredients. John has just a handful of customers. The biggest is Whole Foods Markets; he makes all the salad dressings and sauces sold under the Whole Foods label. Second biggest is Joel Dee of Edward & Sons. Troy makes four brands for Joel Dee: Premier Japan, The Wizard's, Troy's, and Rain Forest Organic. Joel's company owns the "Wizard" brand, which Troy gave him in 1987 as part of his "recovery plan" after American Natural Foods went down the tubes. Joel said, "You make it, I'll sell it." At about the same time, they also both developed the Premier Japan brand and line, which is still doing extremely well. In about July 1989 John developed "The Wizard's Worcestershire Sauce," a vegetarian sauce, for Joel Dee. It is now selling better than Hot Stuff. Ponzu is the Japanese equivalent of Worcestershire sauce; they use bonito instead of anchovies. But ponzu originated first, so "Worcestershire sauce is a Western 'knock-off' of ponzu." The Ginger Tamari is still a wonderful product that is doing very well.

Troy's third largest customer is Albert's Organics, America's largest organic produce distributor, for whom he makes a line of fresh, refrigerated organic dressings. Albert's Organics recently merged with UNFI (United Natural Foods, Inc., the collection of distributors that was Stow Mills, Cornucopia, Rainbow, Mountain People's Warehouse, etc.). UNFI is now a big publicly-owned company. Troy's favorite product developed for Albert's is Mellie's Miso Mustard Dressing, launched in 1998 with a mild miso from American Miso Co. Albert's daughter is named Mellie.

John is now developing a line of dressings under the Moosewood Restaurant brand for the people who own that

restaurant. John's favorite is the Miso Ginger Salad Dressing. A few days ago he closed a deal with Robert Tepper (formerly of The Farm, in Summertown, Tennessee) to market his Simply Delicious brand of dressings. Robert now has his own company named Sunrise Management, which is a brand management company; Simply Delicious will be the first brand he owns. Robert worked for Natural Nectar, then Blue Sky, then Annie's (which he left in early 2000 to start his own company).

John's main work is still developing new products and naming his creations—the work he enjoys most of all things. "It's really fun." Blessed are those who find a way to do what they love most in life. Address: The Wizard's Cauldron, 8411 Hwy. NC 86 N, Cedar Grove, North Carolina 27231. Phone: 919-732-5294.

522. Evans, K. Lee; Rankin, Chris. 2000. Giant book of tofu cooking. New York, NY: Sterling Publishing Co., Inc. 256 p. Illust. (color photos). Index. 28 cm.

• Summary: A beautiful vegetarian cookbook, with many color photos on glossy paper, excellent use of standard terminology (except for "freeze-dried tofu"), and 350 healthful, delicious recipes. Contents: Introduction. Tofu basics and techniques: Getting started (buying tofu {soft tofu, form tofu, extra-firm tofu, silken tofu, marinated tofu, smoked tofu, freeze-dried tofu, fermented tofu}, storing tofu, preparing tofu for your recipes {draining and blotting, pressing, freezing and thawing, blending, cubing and dicing, crumbling, shredding / grating, marinating, boiling slightly sour tofu, frying, deep-frying}), other soy products (edamame, meat alternatives, miso, soy cheese, soy flour, soy ice cream, soy milk, soy sauce, soy sprouts, soy "yogurt," soynut butter, soynuts, tempeh, textured soy protein, whole dry soybeans), tofu and a healthier you (introduction, protein, heart disease, cancer, menopause, osteoporosis, our planet), simple ingredient substitutions (eggs, milk, cheese, butter, salt, sugar {honey, molasses, maple syrup, rice syrup, barley malt syrup}). Ingredient glossary: Incl. arrowroot, balsamic vinegar, bamboo shoots, barley malt syrup, fermented Chinese black beans, filé powder, galangal, garam masala, garbanzo beans, Hoisin sauce, liquid smoke, mirin, miso, nutritional yeast, phylo or filo, pickled ginger, quinoa, rice noodles, rice papers, rice syrup, sake, shoyu, tahini, toasted sesame oil, vegetarian gelatin, vegetarian Worcestershire sauce ("Just like the original, it is made of soy, vinegar, and spices, but without the anchovies"), wakame, wheat germ. Breakfast. Appetizers. Soups. Salads. Lunch and dinner. Dressings, sauces, and spreads. Desserts. Metric conversion chart. Acknowledgments.

523. Hosking, Richard. 2000. At the Japanese table. New York: Oxford University Press. x + 70 p. Illust. (some color). Index. 20 cm. Series: Images of Asia. [19 ref]

• Summary: Contents: Acknowledgements (thanks to Dr.

Naomichi Ishige). The Japanese and food. Food: the raw and the cooked. Seasonal foods and drinks. Appearance, texture, and flavour. The dining room and kitchen. Meals and menus.

Briefly mentions: Soy sauce (p. 2, 12, 20), bean curd (2), tamari (p. 20), Japanese Worcester sauce (p. 20), other soy bean products (p. 20-21), tofu (p. 21, 25), yuba (p. 21, 36), deep-fried tofu-aburaage, agedofu (p. 21), miso (p. 21), green vegetable soybeans (p. 21), teriyaki sauce (p. 28), miso soup (p. 35).

524. **Product Name:** The Wizard's Organic Vegetarian Worcestershire Sauce (Regular, Wheat Free).

Manufacturer's Name: Edward & Sons Trading Co., Inc. Manufacturer's Address: P.O. Box 1326, Carpinteria, CA 93014. Made in North Carolina.

Date of Introduction: 2003. March.

Ingredients: Apple cider vinegar*, tamari* (water, wheat, soybeans, salt), molasses*, filtered well water, wheat syrup*,

salt, tamarind*, ginger root*, lemon juice concentrate, garlic*, spices*, xanthan gum, shiitake mushrooms*, citrus extracts*, spice extract*, natural smoke flavor.

Wt/Vol., Packaging, Price: 5 oz, 10 oz, and 8.5 oz bottle. How Stored: Shelf stable.

New Product–Documentation: Sell sheet (8½ by 11 inch, color) sent by Patricia Smith from Natural Products Expo West (Anaheim, California). 2003. March. Shows the bottles of three products. Regular (5 oz, 10 oz), and Wheat Free. On the rear is listed the ingredients and nutrition facts for each product.

525. Lea & Perrins. 2005. About us: Lea & Perrins heritage (Website printout-part). www.leaperrins.com/ about/heritage. php. Printed Dec. 15.

• Summary: Lea & Perrins Worcestershire sauce began to be produced commercially in 1837. There follows a timeline / chronology (undocumented) with 2 entries in the 1700s, 11



entries in the 1800s and 11 entries in the 20th century. Here are a few samples, starting with the earliest ones:

1791-John Wheeley Lea is born. He was is of one of three sons and four daughters and was raised in a farming family. As a young man he chose to become a chemist."

1793-William Henry Perrins was born... He chose to become a chemist.

1823-Lea & Perrins decide to form a partnership. They have a catalogue prepared and ready for the opening on 1 Jan. 1823 of their shop on Broad Street, Worcester, England. The shop soon becomes successful.

1825–Lea & Perrins open a branch shop in Kidderminster, a town about 20 miles north of Worcester.

1834-They open a shop in Cheltenham, about 25 miles south of Worcester.

1837–Commercial production of Lea & Perrins Worcestershire Sauce begins...

1839-John Duncan, a New York entrepreneur, orders a small quantity of Lea & Perrins Worcestershire sauce. Within a few years, Duncan was importing large shipments to keep up with demand.

1867-William Henry Perrins dies.

1874-John Wheeley Lea dies.

526. Hartley, Paul. 2005. The Lea and Perrins Worcestershire Sauce cookbook. London: Absolute Press. 80 p. Illust. (color). 22 cm.

• Summary: A colorful book of 50 recipes that call for Lea & Perrins' Worcestershire Sauce. Contains many interesting (but undated) full-page color posters (courtesy of Lea & Perrins; several appear at the front of this book). A number of interesting historical sidebars, scattered throughout the book, contain vignettees from Lea & Perrin's history. The section titled "A splash of history" (p. 75-79) contains a brief chronology of Lea & Perrins and their Worcestershire sauce. For example:

"Late 1930s-In a show of great business acumen, Lea & Perrins managed to get cases of their sauce onto all ocean liners that came in and out of British waters. A fee was paid to the on-board stewards, who served the sauce in the dining rooms. Passengers tried the sauce, and, intrigued, would then... buy a bottle to take home. It didn't take long for word to get around, and Lea & Perrins' fame grew quickly."

1839-A New York entrepreneur named John Duncan ordered a small quantity of Lea & Perrins Worcestershire Sauce. "He liked the sauce a lot and saw its potential." Within a few years Duncan began to import large amounts to keep up with the demand. Address: Food writer, England.

527. Bittman, Mark. 2007. How to cook everything vegetarian: simple meatless recipes for great food. Hoboken, New Jersey: John Wiley & Sons, Inc. xii + 996 p. Illust. Index. 24 cm.

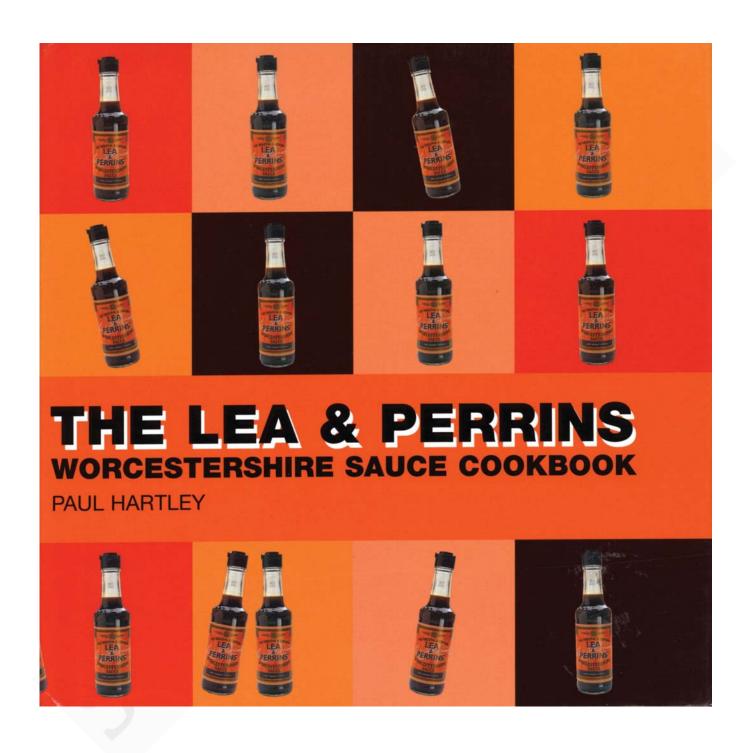
• Summary: The chapter titled "Tofu, vegetable burgers,



and other high-protein foods" (p. 637-78) has this contents: Introduction. The umami factor (savory-ness). The basics of tofu: The tofu lexicon (regular tofu, silken tofu, pressed or extra-firm tofu, smoked tofu, fried tofu, baked tofu, fermented or pickled tofu, tofu skins {dried bean stick, yuba, bean curd sheets or skins}). Buying and storing tofu. Preparing tofu (freezing, squeezing, puréeing,...); then come a wealth of recipes.

The index contains 129 entries for tofu, 32 for miso, 26 for tempeh, 25 for soy sauce, 24 for edamame, 23 for seitan, 11 for soybeans, 7 for black beans (fermented [soy nuggets]), 4 for teriyaki sauce, 6 for tofu skins (yuba and dried yuba sticks), 3 for milk substitutes, 2 each for meatballs (vegetarian), and 1 each for bean sprouts (soy), black soybeans, meatless meat sauce, soybean oil, soy flour, soy milk, soy nuts, soy pasta, soy protein isolate, textured vegetable protein, tofu noodles, and Worcestershire sauce (hold the anchovies).

There are also recipes for adzuki beans [sic], tahini, vegan cookery-and much more. Address: New York Times



food writer.

vegetarians.

528. Fiore, Toni. 2008. Totally vegetarian: easy, fast, comforting food for every kind of vegetarian. Philadelphia, Pennsylvania: Da Capo / Life Long. xi + 273 p. + 16 pages of unnumbered plates. Illust. (some color). Index. 24 cm. • Summary: A mostly vegan cookbook; each recipe that calls for milk as an ingredient gives soy milk as an alternative. Rarely, if ever, have we seen such a dazzling and delicious variety of vegetarian soy recipes and information in one book. One purpose of this book is to demystify the world of vegetarian cookery and vegetarianism-especially for non-

The Introduction tells the story of the author's gradual transition from typical meat eater (living in Europe, to animal rights activist in Maine, to vegetarian). She advises: Buy locally, eat seasonally, buy organic, use your intuition (and imagination).

The chapter "Stocking the pantry" contains basic information (p. 39-42, 45-46) about sea vegetables, seitan, and soy products, including edamame, miso, tempeh, textured vegetable protein (TVP), tofu, and soy sauce (Light Chinese soy sauce, shoyu, and tamari), and Worcestershire sauce (vegetarian; without anchovies)

Soy related: Golden tofu bites (with one 14-ounce package firm tofu, frozen, then thawed... p. 50). Red pepper tofu dip (p. 67). Vegetarian Caesar salad (with "silken soft tofu, p. 76). Edamame and apple salad (p. 81; kids love edamame). Boiled edamame pods. Curried lima bean and rice salad with tempeh (p. 92). Tofu lime dressing (with silken tofu, p. 102). Spinach and tofu soup (p. 108). Miso soup. Hot and sour soup (with firm tofu, p. 109). Roasted pumpkin bisque (with soy milk, p. 114). Corn bread (with soy milk, p. 130).

One chapter is titled "Tofu" (p. 145-53): Seared tofu. Tofu sour cream. Baked tofu meatballs. Tofu with parsley sauce. Tofu kebabs with tamari-ginger sauce. Tofu pot pie.

The next chapter is "Tempeh and seitan" (p. 155-69): Best braised tempeh (with sweet and spicy marinade, p. 197). Tamari tempeh. Barbequed tempeh. Jamaican jerk tempeh. Malaysian curried tempeh. Greek stuffed cabbage (with lemon cream sauce and tempeh). Tempeh and cabbage. Moroccan stew. Tempeh cacciatore. Tempeh fajitas. Tempeh marsala. Homemade seitan (from bulk vital wheat gluten). Penne with onions and vegetarian bacon (p. 175). Spaghetti tofunese (p. 176). Tofu ravioli with butter and sage (p. 181-82). Bechamel (with soy milk, p. 184). Tofu lasagna (p. 185-86). Vegetable lasagna (with tofu filling, p. 187). No-egg salad sandwiches (with tofu). Mock fish salad sandwiches (with tempeh). Mock Maryland crab cakes (with tofu, p. 196). Tempeh club sandwiches (p. 197). Cornhusker's reubens (with tempeh, p. 198). New York hot dogs and onions (with vegetarian hot dogs, p. 199). Soysage-pepper sandwiches (with Italian-style vegetarian sausage links, p.

200). Eggplant meatballs (with tofu, p. 214). Stuffed sugar pumpkins (with tempeh, p. 215). Fluffy mashed potatoes (with soy milk, p. 219). Spinach tortillas with potatoes (and seitan, p. 228). Pfannkuchen (with soy milk, p. 239). Rye bread French toast (with soy milk, p. 240). Loaded bagel (with tofu cream cheese, p. 243). Tofu cannoli (p. 250). Tofu coconut cream pie (p. 251). Basmati rice pudding (with soy milk, p. 252). Banana chocolate chip cake (with soy milk, p. 256).

About the author: "A vegetarian for over 20 years, Fiore is a self-taught chef who first embraced Mediterranean culinary techniques and philosophy while growing up in Italy." But she spent the first six years of her life in Germany. Address: Portland, Maine. Host of the national public television show Delicious TV's Totally Vegetarian.

529. Troy, John. 2012. Update on life and work since the year 2000 (Interview). SoyaScan Notes. March 7. Conducted by William Shurtleff of Soyinfo Center.

• Summary: John is now age 72, retired, and still married to Carol. They live on 20 acres of land in Cedar Grove, North Carolina, in a home that he has been building for the last 16 years or so. His ancestors came from North Carolina, and when he was growing up he spent a lot of time hiking in the Great Smoky Mountains.

In 2006 John sold his sauce manufacturing and bottling company for \$7 million to an investment company named Dogwood Equity. He was making and bottling about 500 different products (SKUs) at the time, most for other people / companies. Everyone he asked said he would be less happy after he sold it than he was at the time, but he sold it anyway. Dogwood changed the name from The Wizard's Cauldron Ltd. to a name that was not as good, diversified into the wrong products, and generally messed things up. It was an "asset purchase" and they bought the rights to make the products. Many of the companies who were John's customers are no longer with Dogwood.

Why did John name his company "Wizard's Cauldron"? His wife, Carol, threw the I Ching (using special coins) and got Hexagram #50, the Cauldron. Then she threw it again and got the same hexagram. So "Cauldron" became a key word in his company's name.

His original company was named American Natural Foods. Pure and Simple (owned in part by Jimmy Silver) was his distributor and had a large inventory of his products. When Pure and Simple went down the tubes (bankrupt), John's company did too.

John is now very much involved with travel and spiritual practice. He also has a radio program, "Conversations with Avant-Garde Sages," on WCOM 103.5 FM in Chapel Hill, North Carolina, or Cyber Satsang via live streaming audio (www.thewizardllc.com). Every Tuesday, Eastern Time from noon until 1 pm. He has hosted people such as Norio Kushi (who has written a book).

Where does creativity and everything else come from? "It all emerges out of silence." "The 'I' thought is the big mistake and the problem." John once asked Doug Greene, who founded Natural Foods Merchandiser, what he felt was the secret to his life and work. John said: "I just went with what wanted to happen."

John has written one book titled "Wisdom's Soft Whisper" and another titled "The Human Gospel of Ramana Maharshi." Address: 5134 Boone Village Trail, Cedar Grove, North Carolina 27231.

530. Spots: Worcestershire sauce, or Worcester sauce. 2012. • Summary: (1) View using the "Google Ngram Viewer" of the relative frequency of appearance in books digitized by Google, from 1800 to 2000 of the four case-sensitive terms "Worcestershire sauce" (the most frequent), "Worcester sauce," "Worcestershire Sauce," and "worcestershire sauce" (never widely used).

Note the rapid rise and fall of the word "Worcestershire sauce" with peaks in about 1917, 1950, and 1985.

- 531. SoyaScan Notes. 2012. Commercial soyfoods products wish list (Overview). Compiled by William Shurtleff of Soyinfo Center.
- Summary: 1. Organic, non-GE soy protein isolates (2002/03). 2. A very low calorie soy beverage for weight loss in hospitals. Must be able to be used as a sole source of nutrition. 3. More smoked tofu in America.
- 4. Meatless pepperoni, sausage shaped, for use atop a meatless pizza. 5. Natural shoyu brewed in America, ideally as part of a joint venture with a Japanese shoyu company. 6. A vegetarian Worcestershire sauce, with no anchovies (John Troy developed "The Wizard's Worcestershire Sauce" for Joel Dee's Premier Japan line in about 1995; it was vegetarian).
- 7. A low-calorie, low-fat tofu. Fat and calorie content should be at least 30% lower than that made from whole soybeans. The easiest way to make this product would be to run soymilk made from whole soybeans through a decanting centrifuge (like a cream separator) to remove the desired amount of fat, just like the dairy industry does to make lowfat or non-fat milk. There is a big potential market for such a product since 1% fat milk has now passed low-fat milk (2%) as the best-seller in American supermarkets (11 Sept. 1991). 8. Bland soymilk base (11 July 1997). Presently no company (including International ProSoya Corp. of Canada, Pacific Foods of Oregon, and Ted Nordquist dba TAN Industries, Inc. etc.) offers this product.
- 9. A soy-based kefir made from authentic kefir grains/ cultures plus FOS (fructooligosaccharides), a dietary fiber derived from chicory roots. FOS feeds and increases the level of "good guy bifidobacteria by up to five times in the gastrointestinal tract, and boosts the body's absorption of calcium and other minerals by up to 50 percent." See article

in Ag Innovation News (April 1999, p. 3, 14).

- 532. SoyaScan Notes. 2012. Chronology of Kikkoman Corporation. Compiled by William Shurtleff of Soyinfo
- Summary: This chronology is based largely on the excellent chronologies near the back of Kikkoman annual reports, dates in "Kikkoman Today & Tomorrow" (1972, p. 1), and dates in Fruin (1983). "Ideally situated close to soybean-growing regions as well as the Edo River, which provided a convenient transportation route for consumers in or near Edo, or present-day Tokyo, Noda has been wellknown for its soy sauce (shoyu) production since the Edo period. Noda is located about 30 miles northeast of Tokyo in Chiba prefecture.

"Kikkoman Soy Sauce first went on the market in 1661 when the Takanashi and Mogi families constructed breweries and started the brewing of soy sauce."

1914-When World War I started, excessive competition arose between Japan's many shoyu producers because of the wartime economy, causing a very confused market situation.

1917 Dec.-With these conditions as a background, eight Mogi and Takanashi family companies, the leading shoyu producers in the Noda area, merged to form Noda Shoyu Co., Ltd., a company with capital of ¥7 million and the predecessor of Kikkoman Corporation.

1925 April-Noda Shoyu Co., Ltd. absorbs Noda Shoyu Jozo Co., Ltd., Manjo Mirin Co., Ltd., and Nippon Shoyu Co., Ltd., through a merger. 1926-Kikkoman No. 7 shoyu brewing plant constructed.

1930 August-The Takasago soy sauce production plant (formerly the Kansai Plant) is constructed near Osaka and completed in 1931.

1936-Kikkoman Worcestershire Sauce plant completed. 1939-With the start of World War II, government controls on the price of soy sauce are established.

1946-Kikkoman stock first becomes available to the

1949-Export of Kikkoman soy sauce is reestablished after the war.

1950-Wartime soy sauce controls end and free competition resumes.

1957 June-Kikkoman International Inc. (KII) is established in San Francisco, California, in the United States. 1958-The first KII branch is established in Los Angeles. 1960-The second KII branch is established in New

York.

1961 July-Kikko Food Corporation is established (later renamed Kikko Food Industries Co., Ltd.). In July 1991, the company becomes Nippon Del Monte Corporation.

1961-Seishin Pharmaceutical Co., Ltd. established. 1962 February-Tone Beverage Co., Ltd., is established. In February 1963, the company becomes Tone Coca-Cola Bottling Co., Ltd.

1962 October-Katsunuma Yoshu Co., Ltd., is established in Japan. In March 1964, the company becomes Mann's Wine Co., Ltd. 1963-Japan Calpak Co., Ltd. established.

1964 October-Noda Shoyu Co., Ltd., is renamed Kikkoman Shoyu Co., Ltd.

1965-The third KII branch is established in Chicago, Illinois.

1966–Sales of Higeta brand products assumed by Kikkoman.

1968-Bottling of Kikkoman Soy Sauce for the American market begins at the Leslie Foods plant in Oakland, California.

1969 June-Kikkoman invests in and merges with Japan Food corporation, the biggest distributor of Oriental food in the United States. In June 1978 the company becomes JFC International Inc.

1970 March-Kikkoman invests in and merges with Pacific Trading Co., Ltd., a sister company of Japan Food Corporation.

1972 March-Kikkoman Foods, Inc. (KFI), is established in Walworth, Wisconsin (USA) for the purpose of manufacturing soy sauce and teriyaki sauce. Shipping is scheduled to start in early 1973.

1972 August–Kikkoman + Daitokai (Europe) GmbH is established in Düsseldorf, in Germany.

1974 February-Kikkoman Restaurant, Inc. is established.

1979 March-Kikkoman Trading Europe GmbH is established in Neuss, in Germany.

1980 October-Kikkoman Shoyu Co., Ltd. is renamed Kikkoman Corporation—the company's present name.

1983 January-Kikkoman Ajinomingei Co., Ltd., is established.

1983 June-Kikkoman (S) Pte. Ltd., a production facility, is established in Singapore.

1983 October-Kikkoman Business Development Inc. is established.

1986 August-New shoyu production facilities come on stream at Kikkoman's Chitose Plant, in Hokkaido.

1990 January-Kikkoman buys perpetual marketing rights for the Del Monte brand in the Asian-Pacific region, excluding the Philippines.

1990 February–A joint venture company, President Kikkoman Inc. is established to produce soy sauce in Tainan, in Taiwan.

1996 April–Kikkoman establishes Kikkoman Foods Europe B.V., Europe's first soy sauce manufacturer, located in Hoogezand-Sappemeer, in the Netherlands.

1996 May-Production of Shochu a clear Japanese spirit, commences at a new facility of the Ojima Plant.

1997 March-Kikkoman holds a ground-breaking ceremony for its second U.S. soy sauce production plant, in Folsom, California, in the United States.

1997 October-Kikkoman Foods Europe B.V. begins operations at its plant [in Hoogezand-Sappemeer, the Netherlands].

1998 October-The second shoyu manufacturing plant of Kikkoman Foods, Inc., in Folsom, California, begins shipments.

1999 July-Kikkoman opens its new headquarters in Noda, Chiba prefecture, to commemorate the Company's 80th anniversary.

1999 October-Kikkoman Institute for International Food Culture is opened at the Company's new headquarters.

1999 November-Kikkoman announces a joint venture with its partner in Taiwan [Uni-President Enterprises, Taiwan's largest food manufacturer] to build a soy sauce plant in China [In Kunshan, near Shanghai].

2000 May-Kunshan President Kikkoman Biotechnology Co., Ltd. (a joint-venture company) is established.

2000 Aug.-Construction starts on a soy sauce plant in China. The first shipments are slated for spring 2002.

2002 May-The China plant Kunshan President Kikkoman Biotechnology Co., Ltd., holds its grand opening. 2003 May-Kikkoman Foods, Inc. (with its plant at Walworth, Wisconsin) holds its 30th anniversary ceremony. 2004 March-Kikkoman invests in Higeta Shoyu Co., Ltd. and Kibun Food Chemifa Co., Ltd. (The latter makes

2006 June-Kibun Food Chemifa Co., Ltd. becomes a consolidated subsidiary of Kikkoman.

soymilk).

2007-Kikkoman celebrates its 50th anniversary in the U.S.

2008-Kikkoman rolls out its new corporate brand logo and slogan globally.

2009 Oct.-Kikkoman shifts to a holding company structure.

533. SoyaScan Questions. 2012. Questions about the history of Worcestershire sauce. Compiled by William Shurtleff of Sovinfo Center.

• Summary: The history of this sauce has never been well documented and there are some interesting unanswered questions and contradictions in the history as it is popularly presented.

To answer these questions it would be best to travel to Worcester, England, and to spend at least 1-2 weeks there.

Have any local newspapers or magazines (near Worcester) been digitized so that they can be searched electronically for information on this subject. If yes, which ones and for what years? Ideally we would start by searching publications dating back to the 1830s.

In what year and month did Lea and Perrins first sell their Worcestershire sauce (about 1837)?

Did they make and sell the first seasoning named "Worcestershire sauce"?

What was the name and address of the second company

to make "Worcestershire sauce?"

If the Worcestershire sauce made in Worcester used soy sauce as a major ingredient, when did it start to be used? From the very first batch?

In what foreign country (Japan, China) was Lea and Perrins soy sauce made? By which company? Did the same company (and only one company) make this soy sauce up until World War II?

How was this soy sauce transported to Worcestershire? Was it first transported by boat? Up the River Severn?

When did the transportation switch from boat to train / rail? Were any photos ever taken of the soy sauce being unloaded from the vehicle in which it was transported. Or were any news stories ever published of the arrival of a shipment of unknown goods from East Asia?

Try to locate the company John Duncan's Sons or John Duncan & Sons (or their archives) of New York. Do they have any records showing when they first imported Worcestershire sauce? Do they have any early labels or records showing ingredients?

Which organizations or individuals in Worcestershire know the most about or are most interested in the history of Lea and Perrins and / or of Worcestershire sauce? From Web: (1) Worcestershire Historical Society, Tettenhall, Wolverhampton. (2) Worcester and District Industrial Archaeology / local History Society, Redditch, Worcestershire. (3) Worcestershire Local History Forum, Trinity Street, Worcestershire. Has this story ever been told in any histories of Worcester or Worcestershire? Have any articles ever been published on this subject? (See a local Worcester library). When did soy sauce switch from being shipped in wooden kegs / casks to more modern containers such as barrels or drums?

Did Lea & Perrins ever make its own fermented soy sauce? If so, starting when? Where? How did they learn the process? How long was it fermented.

What year and month (during World War II) did Lea and Perrins stop using fermented soy sauce from Asia and start using HVP? But note that about April 1978, when Craig Claiborne of *The New York Times* visited the plant in Fair Lawn, New Jersey, he was told that "soy" (probably referring to the soybean hydrolysate in HVP) was one of the ingredients, and that the mixture was fermented. He noted a pleasant smell around the 35 giant wooden curing vats-each holding a total of 6,0000 gallons. No one would tell him how long the base for the sauces is aged, but he estimated a minimum of two years.

How long has Lea & Perrin's sauce been fermented at different points in its history? Is it fermented now? In New Jersey? If so, for how long? If not, when did fermentation stop?

An asterisk (*) at the end of the record means that

SOYFOODS CENTER does not own that document. A plus after eng (eng+) means that SOYFOODS CENTER has done a partial or complete translation into English of that document.

An asterisk in a listing of number of references [23* ref] means that most of these references are not about soybeans or soyfoods.

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