The Norwich Gun Industry

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New England and, especially, Connecticut have been and remain the center of the American gun industry ever since the days of the American Revolution. Gun makers originally were attracted to Connecticut because of that state's many assets—year-round water power, a skilled industrial labor base, good ports and rail lines, and proximity to the major population centers of New York and Boston—all of these contributed to that centralization. These factors were especially prevalent at Norwich.

The City of Norwich was founded in 1659. By the time of the American Revolution, it had grown to become one of the 10 largest cities in the Colonies.[1] It was richly endowed with all of those assets desirable in a manufacturing site, not the least of which was the confluence of the Shetucket and Yantic Rivers, which merged at Norwich to form the navigable Thames River. As a large city by the standards of the day, it offered sources of capital, a diverse population of skilled workers, support industries, and easy access to the New York and Boston markets through its sheltered port and rail lines.

The first record of arms making in Norwich was a contract for 200 muskets of the Charleville pattern, placed with Nathan and Henry Cobb in 1798.[2] These muskets were delivered in 1801. There is an earlier record of a musket repair contract, placed with Nathan Cobb and John Leffingwell around 1775. At about that same period, Elijah Backus operated the Norwich Iron Works, a foundry, producing cannon and anchors for the Colonial Navy.

With the exception of those early activities, during the period prior to the 1840's, gunmaking at Norwich was largely the province of individual gunsmiths such as might be found in nearly any New England community.

By the 1840's, steamships placed both the New York City and the Boston markets less than a days run from Norwich. The Norwich and Worcester Railroad opened inland markets to the gun trade. This is really where the Norwich arms story begins.

A comprehensive presentation of the Norwich story is far beyond the reach of this brief article. The story is a fascinating one that hopefully will be fully told in the future. In the meantime, this article will present an overview of the

breadth of the Norwich arms industry during its golden years.

This presentation will focus largely on the period starting in the 1840's when conditions were exactly right for the incubation of the arms industry. This period includes names like Allen and Thurber, Smith and Wesson (and thereby Winchester), Manhattan, Christopher Brand, Thomas Bacon, Hopkins and Allen, and others. Those names have come to represent collecting specialties to many of us.

What I have chosen to call the incubation period started when Ethan Allen moved his works from Grafton, Massachusetts to Norwich, Connecticut in 1842. There he joined with his brother-in-law, Charles Thurber, to form a firm that would last for only five years. As will be seen from the descriptions below, the firm of Allen and Thurber turned out to have been the catalyst for the later growth of the Norwich gun industry.

THE EARLY YEARS

Elijah Backus (Norwich Iron Works) (c1770)

Cannon and anchors for the Connecticut Navy were made by Elijah Backus of the Norwich Iron Works around the year 1770.

Cobb, Henry, and Nathan (1798)

A stand of 200 pattern 1795 muskets was made in 1798 by Cobb, Henry, and Nathan, but very few have survived. They were marked "NORWICH" on their lockplates.

THE INCUBATION PERIOD

The incubation period was characterized by many start-up firms that strove to supply the burgeoning demand for firearms. The conditions, mentioned below, were perfect for the explosive growth of the arms industry:

- the Industrial Revolution was well underway
- the expansion westward created an arms demand
- inventiveness was at its heyday
- excellent transportation allowed for mass distribution
- the expiration of Colt's original patent in 1857 was eagerly awaited

These factors resulted not only in growth of the industry but also in the design of some truly innovative guns.

Allen and Thurber (1842–1847)

Ethan Allen, along with his brother-in-law, Charles Thurber, moved his Grafton, Massachusetts operation to Norwich in 1842 to take advantage of the vastly superior power availability and the availability of skilled workmen. This move was prophetic to the Norwich arms story as it set the stage for the start of several other firms. Among Allen's original employment roster were soon-to-be familiar names such as Thomas Bacon and Horace Smith, along with many workmen whose skills would be used by those men to found their own firms.

Among the Allen and Thurber arms produced at Norwich were an extensive line of pepperboxes from the very diminutive to the large "dragoon" sizes. They also produced a line of single-shot bar hammer pistols (see Figures 1 and 2).

Their tenure at Norwich only lasted until 1847 when they moved their plant to Worchester, Massachusetts, where it operated briefly under the Allen and Thurber name. The venture was changed to Allen and Wheelock when Thurber retired and another relative, T. P. Wheelock, joined the firm.

Bacon and Company (1850–1857), Bacon Manufacturing Company (1858–1868), Bacon Arms Company (1863–1888)

Thomas Bacon got his start as a machinist for Allen and Thurber. He and Allen apparently knew each other earlier as there is a record of a real-estate transaction between them as early as 1840.

Bacon's initial venture into independent arms making was the founding of Bacon and Company between the years

Figure 1. A selection of Norwich-made Allen and Thurber pepperboxes. They came in many variations. Ring triggers were quite common.

Figure 2. A "dragoon" size Norwich pepperbox. The appellation is purely one of popular usage, there being no real dragoon connection.

1847 and 1850. His first guns were bar hammer pistols virtually identical to those produced by Allen and Thurber. He produced a line of underhammer pepperboxes as well as ring-trigger single-shot pistols (see Figure 3). Records show that his operation was small, employing no more than 14 people.

In 1858, he ceased production and went to work for the newly started firm of Manhattan Firearms Company as

Figure 3. A grouping of typical early Bacon and Company pieces. The little bar hammer pistol is identical to those previously made by Allen and Thurber and its design was carried forward into the Manhattan Firearms production.

superintendent. The single-shot percussion pistol he had been producing became one of Manhattan's initial offerings.

His association with Manhattan was in its first year after which Bacon left and opened his second company, Bacon Manufacturing Company in 1858. His departure from Manhattan was not amicable and a nasty lawsuit resulted.

It is obvious that parts for Allen and Thurber, Bacon, Manhattan, and early Hopkins and Allen pistols were obtained from the same local foundry as certain parts from all four firms are virtually interchangeable (see Figure 4).

The Bacon Manufacturing Company produced percussion revolvers of reasonable quality which superficially resembles Colt's pistols. These pistols were based on the design that Bacon and another Manhattan employee, Joseph Gruber, had originated during their stint with Manhattan.[3] They also produced a sturdy 38-caliber rimfire "Navy," which exists in several interesting variants (see Figures 5, 6, and 7).

In 1863, his largest shareholder and landlord, Charles Converse, became dissatisfied with Bacon's stewardship and forced him out. The company continued for a few years under the Bacon name until Converse, along with a few Bacon employees, formed the Hopkins and Allen Company, using the old Bacon machinery.

Following his forced departure in 1863, Bacon formed the last of his ventures, the Bacon Arms Company. He resigned and sold his interests in 1865. The firm continued under other management until 1888. Its product line deteriorated into low-quality pistols, made in large quantities, as well as a single-barrel shotgun. The machinery was ultimately purchased by the Crescent Arms Company. (*Note:* The entire Bacon story is told in exquisite detail by ASAC member Lowell Wagner in an earlier Bulletin; see Bibliography.)

Figure 4. These three pistols represent the continuation of Bacon's common design between three different firms. On the left, a Bacon Manufacturing Company piece; in the middle, a Manhattan Firearms Company gun, and on the right, a Hopkins and Allen revolver.

Figure 5. The evolution of the Bacon Manufacturing Company line. On the left, an octagonal barrel first model; in the middle, a fluted cylinder round barrel second model, and on the right, his final third version with an improved loading lever link.

Figure 6. A very unusual cased Bacon. Probably cased in England. This nearly mint specimen carries the rare two-line "BACON MFG. CO. NORWICH, CONN. DEPOT 297 BROADWAY, N.Y." barrel marking.

Figure 7. Three of the four known variations of Thomas Bacon's "Navy" revolver. They were sturdy and well made but there is no record of martial usage.

Smith and Wesson (1855–1858)

The firm of Smith and Wesson was founded by Horace Smith and Daniel Wesson. They apparently became acquainted when they both worked at the Robbins and Lawrence factory, where they had been hired to try to salvage the Hunt–Jennings Volition Repeating Rifle project.[4] Improvements they developed there led them to conclude that a handgun using a similar mechanism as the rifle would be practical.

Smith had a long history at Norwich, both from his Allen and Thurber association and as an independent and well-respected gun maker. The two men set up shop in Norwich, where they built about 1,000 pistols. Wesson had patented a cartridge design which ultimately developed into the rimfire. They had originally intended to build their pistol to use the Wesson cartridge but it proved too expensive to manufacture.

The cartridge they settled on was the underpowered Volcanic cartridge, a warmed-over version of the Hunt rocket ball they had worked with at Robbins and Lawrence. The gun was not a great success and they eventually sold their interests to the New Haven Arms Company, where both men were briefly employed (see Figure 8).

With the expiration of Colt's revolver patents, Smith and Wesson moved on to form their revolver-producing second company and abandoned the Volcanic concept to New Haven Arms.

Oliver Allen (1847–1850)

Oliver Allen were manufacturers of percussion whaling guns similar to the Brand but with wooden butt stocks. They also possibly made single-shot rifles.

Christopher Brand (1848–1883)

Brand was well known as the leading manufacturer of whaling guns. Nearby New London was a major whaling port and demand for these guns lasted well into the 1880's. Brand also made a few breech-loading single-shot rifles and carbines, one of which was submitted to the Trials Board of 1870 for selection of a breech-loading military arm. He also patented a revolving rifle (see Figures 9 and 10).

Percival and Smith (1850–?)

Patented by Orville Percival and Aza Smith, the Percival and Smith Magazine Pistol was clearly one of the most bizarre American arms ever conceived. Only a few were made and it would have taken a brave or foolhardy individual to use one. The cylindrical magazines carried primers, balls, and powder that charged the chamber when rotated to the upright position. One wonders what type of obturation might be provided to insure that the powder magazine would not explode when fired.

Horace Smith (no apparent relation to the patentee) is thought to have manufactured a few specimens prior to his association with Daniel Wesson (see Figure 11).

Horace Briggs (1859–1860)

Single-shot cartridge pistols were produced by Horace Briggs. This insignificant-looking little pistol was an important link in the development of cartridge arms. It was made by Daniel Wesson and designed to use Wesson's primitive version of the rimfire cartridge. Aside from the unsuccessful use of that cartridge for the first Volcanics, it was perhaps the first pistol to use a true self-contained metallic cartridge (see Figure 11).

Horace Briggs was an alumni of the first Bacon Company. He eventually became president of the second Bacon company after Thomas Bacon was forced out.

Figure 9. Christopher Brand manufactured breech-loading rifles as well as whaling guns. The patent model is for a revolving rifle which may never have made it to the prototype stage.

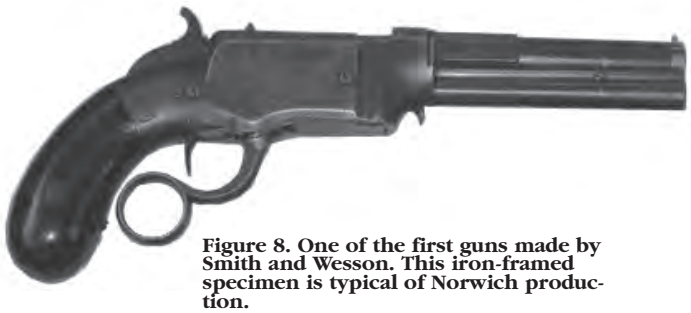


Figure 8. One of the first guns made by Smith and Wesson. This iron-framed specimen is typical of Norwich production.

Figure 10. Christopher Brand's classic whaling harpoon gun. These were made in three bore sizes and fired the explosive harpoon shown in the photo.

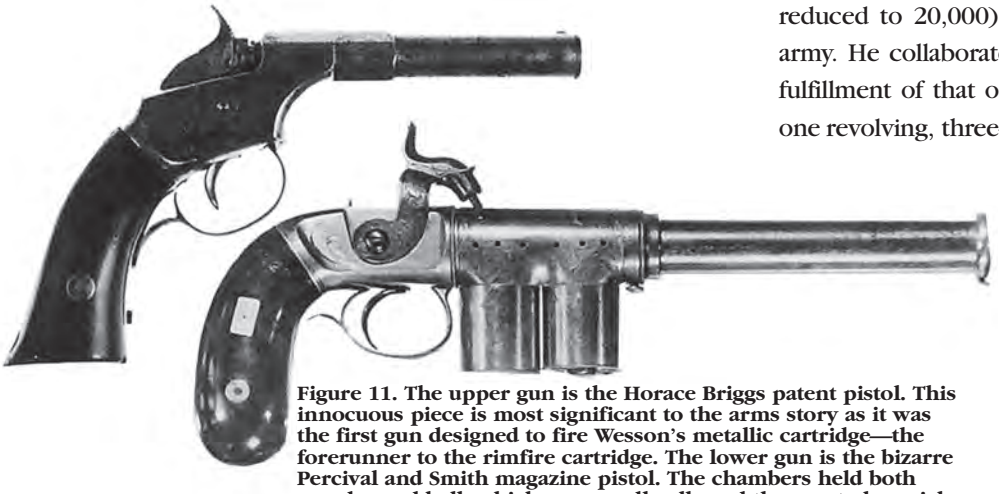


Figure 11. The upper gun is the Horace Briggs patent pistol. This innocuous piece is most significant to the arms story as it was the first gun designed to fire Wesson's metallic cartridge—the forerunner to the rimfire cartridge. The lower gun is the bizarre Percival and Smith magazine pistol. The chambers held both powder and ball, which supposedly allowed the gun to be quickly reloaded. (Taken from "The William Locke Collection" published by The Antique Armory Inc.)

Manhattan Firearms (1855–1858)

The expiration of Colt's original patent in 1857 ended Colt's monopoly on revolving cylinder guns. The founders of the Manhattan Firearms Company, in anticipation of that event, started operations in Norwich in 1855. Thomas Bacon was hired to oversee operations and brought with him his little single-shot pistol to get the operation rolling. He and another gun maker, Joseph Gruber, worked to design a percussion pistol which superficially resembled a Colt M.1849 Pocket Model, but which was much cheaper to build. The resulting gun was Manhattan's entry into the revolver market.

Bacon's tenure with Manhattan was short. In 1858, despite a non-compete agreement, he left and formed his second firm. Bacon took his revolver design with him and used it as a basis for his new company. He left Manhattan with ill will and a nasty lawsuit resulted.[5] In the end, the lawsuit was dropped and Manhattan relocated to Newark, New Jersey.

Eagle Manufacturing Company (1861–1864)

A. H. Almy's Eagleville Manufacturing Company of Mansfield, CT was originally a textile producer. Through the influence of his brother, John Almy, Assistant Quartermaster General, he was awarded a contract for 25,000 M.1861 rifle muskets (later reduced to 20,000). A manufacturing facility was set up in Norwich in conjunction with James Mowry, who had been awarded a similar arms contract. It appears that the two firms worked together in fulfillment of their orders.[6]

James D. Mowry (1861–1865)

The Mowry family ran a machine shop in Greenville, CT on the outskirts of Norwich. James Mowry was awarded a contract to supply 25,000 (later reduced to 20,000) Model 1861 Rifle Muskets to the Union army. He collaborated with Eagle Manufacturing Company in fulfillment of that order (see Figure 12). Mowry built at least one revolving, three-barreled cannon. It was field mounted and fired a one-inch rimfire cartridge (which the author once owned).

Norwich Arms Company (1863–1865)

A contract for 25,000 Model 1861 Rifle Muskets was awarded to Norwich Arms. Most were delivered late in the war. Fine specimens are not difficult to find (see Figure 12). A well-known article in *Harpers Monthly* indicates that The Norwich Arms Company had the capacity to manufacture 200 muskets per day as well as 200 Armstrong and Taylor breech-loading carbines per day. Since the Armstrong and Taylor pieces are virtually unheard of, the veracity of the Harpers article is suspect.

Hopkins and Allen Manufacturing Company (1866–1896), Hopkins and Allen Arms Company (1896–1915)

Hopkins and Allen Manufacturing Company emerged from the demise of Bacon's second company. Their initial offering was a percussion pistol identical to both Manhattan's and Bacon's offerings. The built made that pistol for a short time under the name "Dictator." The percussion period was becoming passé and the remaining inventory was converted to cartridge usage.

H&A was one of the most enigmatic gun manufacturers, building guns in staggering numbers and in a wide variety of

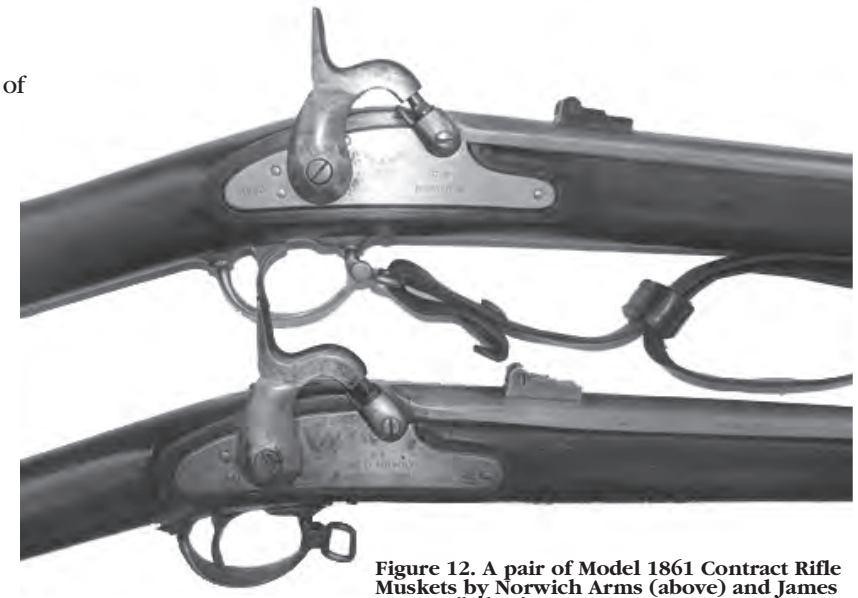


Figure 12. A pair of Model 1861 Contract Rifle Muskets by Norwich Arms (above) and James Mowry (below).

Figure 13. The Merwin, Hulbert revolvers were Hopkins and Allens top-quality offerings. This set of three 38-caliber spur trigger guns are typical of the line.

Figure 14. Hopkins and Allen made some fine guns such as the Merwin Hulbert Pocket Army (above) and their XL Navy model (below). Unfortunately, they also made a great many moderate- to low-quality arms.

qualities. Their best guns, including their XL series and the Merwin, Hulbert arms, were the equal of Colt or Remington in terms of quality. Their worst guns were cheap handguns that were probably dangerous to fire (see Figures 13, 14, and 15).

In 1896, a chaotic financial crisis caused by the collapse of their principal customer, Merwin, Hulbert, and Company, resulted in their reorganization under their new name. They continued in business until 1915.

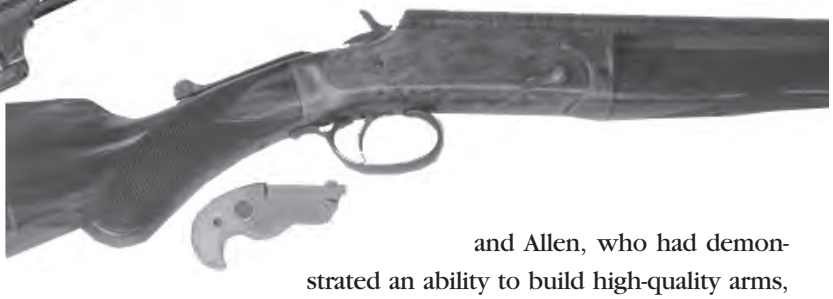
Continental Arms Company (1865–1866)

The Continental Arms Company principally manufactured a sleek 22-caliber five-shot pepperbox. There may have been a tie-in with Bacon, who manufactured a similar pepperbox (see Figure 16).

THE MARKET EXPLOITATION PERIOD

This period saw firms focus on the mass production of low-cost (and low-quality) arms. Even firms such as Hopkins

Figure 15 (Below). A study in extremes. Above, an 8-gauge Hopkins and Allen goose gun; below, their tiny vest pocket derringer.



and Allen, who had demonstrated an ability to build high-quality arms, pandered to the market by manufacturing cheap, dangerous handguns.

Hood Firearms Company (1874–1878)

This firm was limited to "suicide specials" with names like "Little John," "Robin Hood," "Alaska," etc. Some slightly better quality pieces were marked with the Hood name. They produced about 2,500 pistols per month and employed 65 workmen. For an example of a Hood-marked specimen, see Figure 17.

T. E. Ryan (1890–1894)

Thomas Ryan manufactured a large variety of cheap revolvers using names such as "Retriever" and "Napoleon." Many carried the Ryan name and had the initials "TER" on the grips (see Figure 17).

Davenport Firearms Company (1888–1906)

Mostly known as a maker of inexpensive shotguns, Davenport Firearms did make a single-shot lever-action boy's rifle in 22 and 32 calibers called the "Brownie," which was of high quality (see Figure 18).

Figure 16. Two Norwich 22-caliber derringers, the upper by Bacon, the lower by Continental Arms.

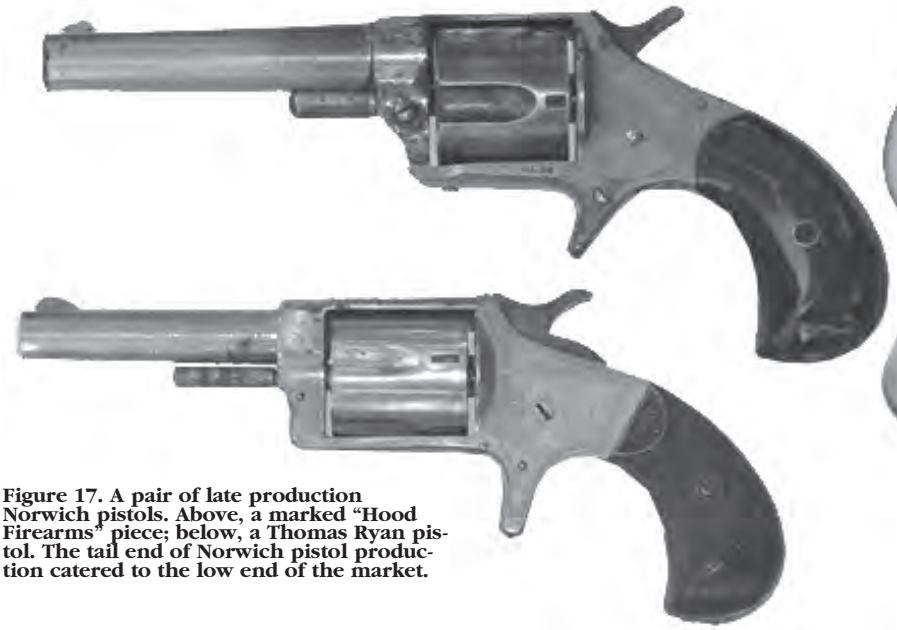


Figure 17. A pair of late production Norwich pistols. Above, a marked "Hood Firearms" piece; below, a Thomas Ryan pistol. The tail end of Norwich pistol production catered to the low end of the market.

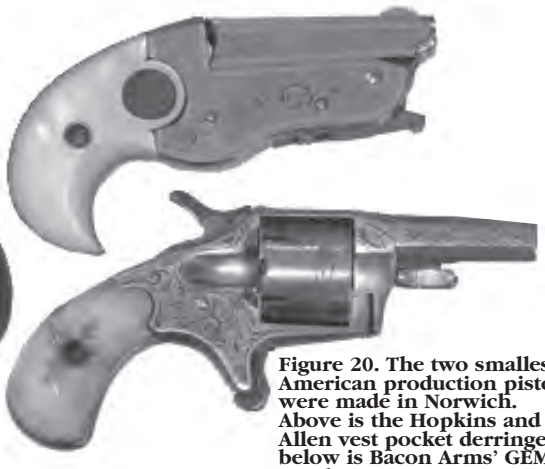


Figure 20. The two smallest American production pistols were made in Norwich. Above is the Hopkins and Allen vest pocket derringer; below is Bacon Arms' GEM revolver.

A brochure indicates that they sold Hopkins and Allen pistols and Colt New Line revolvers, which they curiously advertised as "Hood Firearms Co.'s new COLT'S MODEL pistols."

Osgood Gun Works (1878–1881)

Osgood manufactured their unique "Duplex" 22-caliber rimfire revolver with a central barrel that fired a single 32-caliber rimfire cartridge, another of Norwich's oddities.

Figure 18. Davenport's "Brownie" boy's rifle, made in both 22 and 32 calibers, was one of the best built boy's rifles of the day.

Crescent Firearms Company (1889–1930)

Crescent Firearms purchased the assets of Bacon Arms Company. Their single-barrel shotgun was a copy of the late Bacon shotgun. They produced inexpensive single- and double-barreled shotguns under a variety of names until about 1930.

Norwich Lock Company (1873–1882)

Norwich Lock Company was probably a retailer but possibly supplied parts to other gun manufacturers of the period.

Figure 19. Thames Arms Company produced a pistol that bore a superficial resemblance to a Smith and Wesson. This one, found in an original S&W box, may reveal a shady marketing ploy of the period.

Thames Arms Company (1907–1909)

Thames Arms built a revolver superficially resembling the Smith and Wesson line. These guns are sometimes found in S&W boxes, probably a result of storekeepers foisting off inferior merchandise on unsuspecting customers (see Figure 19).

Thayer, Robinson, and Cary (1907)

Thayer produced a few single-shot pistols.

Tobin Arms Company (1903–1921)

Tobin Arms was the manufacturer of the "Simplex" shotgun. They also made a single-shot "Boy Scout" rifle.

N. R. Davis and Company (1916–1928)

N. R. Davis and Company made inexpensive, single-barreled shotguns.

Although Norwich may not be remembered primarily as a gun-making city as are Hartford, Bridgeport, and Springfield, it was the home of well over 20 firms during a 70-year period and certainly deserves our serious attention.

Figure 21. This map of Norwich shows the location of the principal arms firms in the city. Most of the original buildings still stand. A local group called the "Guns of Norwich Society" conducts tours of the sites. (Taken from *The Norwich Bulletin.*)

In recent years, Norwich has begun to recognize its heritage. A group of enthusiasts known as the "Guns of Norwich Historical Society" has been formed. They recently engineered the purchase of the Charles Carder collection of Hopkins and Allen firearms, which hopefully will be displayed in the city. They also conduct nostalgic walking tours of the old factory sites, many of which are still in use (see Figure 21).

NOTES

[1]History of Norwich, Connecticut.

[2]United States Martial Flintlocks, p. 63.

[3]Man-at-Arms, 31 Caliber Manhattan Revolvers, Volume 21, No. 2.

[4]Evolution of the Winchester, pps. 1–11, History of Smith and Wesson, pps. 16–36.

[5]Manhattan Firearms, pps. 207–233.

[6]*The Norwich Arms Gazette,* Vol. 1, No. 5.

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