

# Early New England Underhammers in the Style of the Ruggles Patent of 1826

Nicholas L. Chandler

*Author's Note: All guns and materials illustrated in this article are from the author's collection.*

*"He is a mechanic by nature . . . in Massachusetts and Connecticut, there is not a laborer who has not invented a machine or a tool."*

Michel Chevalier

*Society, Manners, and Politics in the United States, 1839*

With the introduction of the percussion cap into the United States, the mid-1820s marked a pivotal time in American arms making. Fordyce Ruggles, taking advantage of this technological advancement, was granted a U.S. patent for "Invention and Improvements . . . In fire arms<sup>2</sup>. . ." on November 24, 1826. The exact specifications of this patent are unknown because of the loss of records in the U.S. Patent Office fire of 1836. It is likely that this was the first US patent for an underhammer gun, and the first for any percussion firearm produced in quantity. Fordyce Ruggles took an innovative approach to arms making use of all the resources available to him, and was certainly inspired by the frontier spirit and restless optimism of the country.

Fordyce Ruggles and his brother Adin established a gun shop in Hardwick (Worcester County) Massachusetts, in December, 1825. The shop was located about two miles south of the center of Hardwick in a mill that had been previously used for grinding saw blades. Situated next to a large earthen dam that provided water power, the shop was equipped with a trip hammer, a tool necessary for forging iron and steel.

While Worcester County was long established as a gun making center, neither of the Ruggles brothers seems to have had any experience as gun makers. Like many young men in this area, they were probably engaged in the mechanical trades, possibly working with their father, a respected millwright.

The War of 1812 had ended ten years earlier, and the country was growing rapidly. Families that had lived on the east coast for decades were emigrating to the West and South, seeking the new opportunities that were opening up in those vast regions. Additionally, immigrants were arriving from Europe in unprecedented numbers. The population of the country grew nearly 35% every decade between 1820 and 1840. This growth and movement spurred the need for inexpensive and reliable firearms that could be carried to the new frontiers. The choices available to these families were: guns imported from England and Europe, guns made in this country using parts (locks and



barrels) imported from other countries, and guns custom-crafted, made entirely in this country. Imported guns and custom made guns were expensive. Even those domestic guns using foreign supplied parts went against the prevailing "buy American" attitude.

To meet the growing demand for inexpensive, reliable guns, the Ruggles brothers likely set out to create and patent a pistol that could be made with both the tools and materials available to rural mechanics. The end result was a uniquely American product that was cheaper to make than either its imported or domestic counterparts.

All of the iron and steel parts on the Ruggles' gun could be made in the typical mechanic's shop. The most difficult component of traditional guns of that period was the lock with its numerous individual pieces. By contrast, the Ruggles lock is very simple. It consists of a single block of iron, threaded at one end to serve as the breech plug. Directly behind this threaded breech plug is a channel, cut or forged to house the hammer and trigger. A trigger, hammer, main spring and trigger spring make up the entire mechanism. Only four moving parts! A top strap finishes the gun and also serves as the rear sight. The barrel was drilled and rifled from a single piece of homogeneous steel. The Ruggles lock has a total of 10 parts, compared to 20 or more for a conventional pistol lock (Figure 1).

The grip was fashioned from local woods such as maple, walnut, cherry and even apple. Unlike the stock of a conventional pistol that required complicated inletting to accommodate a lock, side plate, and barrel, the Ruggles grip has a single channel that accommodates the lock mechanism

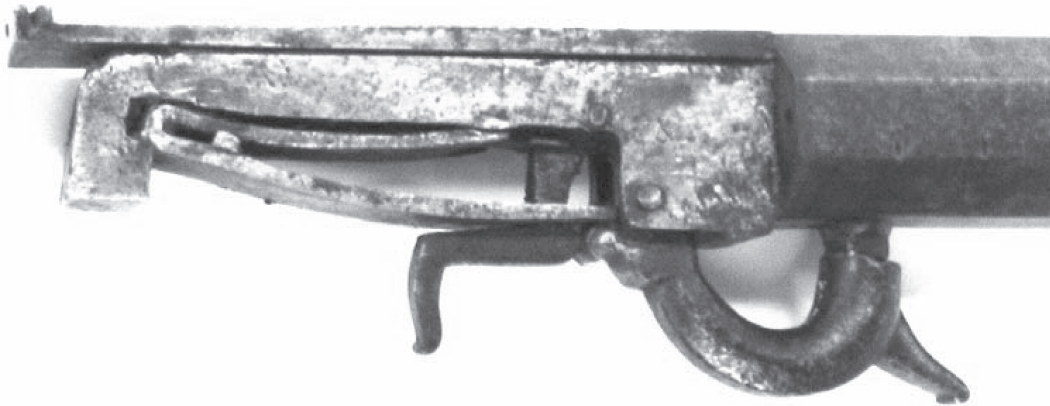


Figure 1. An early Ruggles pistol showing the underhammer mechanism with only four moving parts; hammer, trigger, mainspring, and trigger spring.

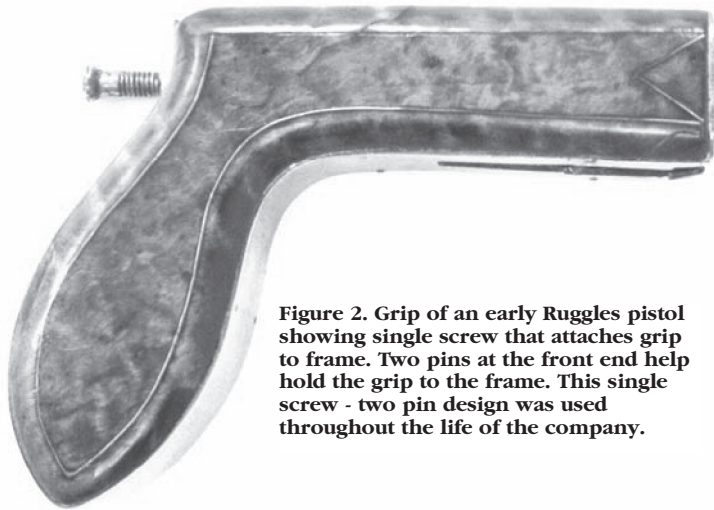


Figure 2. Grip of an early Ruggles pistol showing single screw that attaches grip to frame. Two pins at the front end help hold the grip to the frame. This single screw - two pin design was used throughout the life of the company.

with little custom fitting. The grip is bound with a strip of sheet brass or German silver for reinforcement and aesthetic reasons. Simple slots cut in the brass in the area of the trigger and hammer help fit the lock components to the gun. A single screw passes through the rear of the grip and attaches the lock to the grip. Two pins inserted in the front of the grip marry it to the rear of the barrel. No trigger guard or side plates (parts usually purchased separately by the gunsmith) are needed (Figure 2).

During the early years (1826-1833) the Ruggles shop embellished the grips with silver wire and inlays, reflect-

ing the design preferences of Worcester County. The Ruggles' shop dropped these embellishments during the later production years (1834-1838), presumably because they were time consuming and added additional cost to the finished gun.

With this patented design, intricate, close tolerance lock parts and precise inletting of the grip to accommodate the lock, side plate, trigger guard and barrel were eliminated. The pistol parts could be made by a mechanic with a basic skill level. The result of the Ruggles patent is a new "All-American pistol," made by local labor, from local materials, at a competitive cost.

When the patent was secured, the Ruggles shop began a limited production of pistols and fowlers. Figure 3 shows an early model pistol. The brothers promoted the guns at local fairs, and news articles were written extolling the virtues of the new invention. An article published on January 2, 1828, in *The Springfield Daily Republican* highlighted the promising features of the gun, including its accuracy, a point that would be used in future advertising.

What happened next is truly bizarre! On January 29, 1828, 14 months after the patent was issued, Fordyce was test firing one of his pistols in a field near Ware Village, not far from his shop. After a while, he went to a tavern to warm himself and, ". . . a young man seated himself near him, and unobserved took the weapon (which was loaded)

from his pocket, proceeding without examination to snap it, the muzzle being less than two feet from the unfortunate owner. It exploded, and the ball, entering his breast, lodged in his body . . . and he (Fordyce) expired in consequence of the wound."<sup>3</sup>

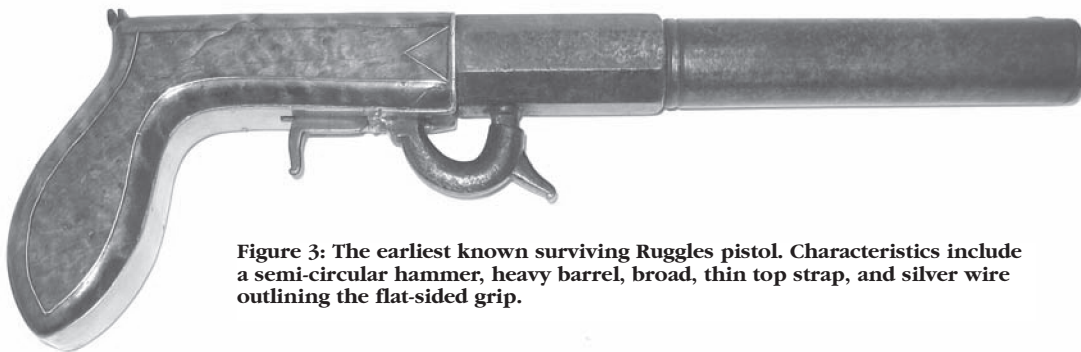


Figure 3: The earliest known surviving Ruggles pistol. Characteristics include a semi-circular hammer, heavy barrel, broad, thin top strap, and silver wire outlining the flat-sided grip.

As tragic and devastating as that accident must have been on both a personal and business level, recently discovered documents indicate that Adin was not totally daunted by this event. In the months following Fordyce's death, Adin and two other men, Samuel Pike and Daniel Billings, applied for a patent for a pistol. We do not know whether this new application changed the original specifications, or was made in the belief that because of Fordyce's death, a new patent was necessary. In any event, the application was rejected because the applicants were unable to come up with the \$30.00 fee, and because they only had one witness, rather than the two that were required.

After the rejection of his patent application, some time in 1829 Adin, his wife Cynthia, and their five children moved to Stafford, Connecticut. Samuel Pike accompanied the Ruggles family on the 30-mile move from Hardwick to Stafford. Pike had witnessed the sale of the shop in Hardwick, had been involved in the second patent application, and held the rights to make the pistols using the Ruggles patent. The pistol shown in Figure 4 below, made by Samuel Pike, marks the transition from Hardwick to Stafford. The pistol has all of the characteristics of the Hardwick guns: semicircular hammer, heavy barrel, wide, thin, flat top strap, and flat grip with wire inlays, but it has a Connecticut address. It is engraved with the name of its pre-

sumed original owner, N. (Nathaniel) Sibley, a selectman in Stafford when Ruggles and Pike arrived in 1829 (Figure 5).

Pike broke off the relationship with Ruggles sometime in 1832 and moved to Lansingburg, New York, where he worked for John Caswell, a noted New York gunmaker. He later moved to Brattleboro, VT, where he continued making guns until his death in 1862.

After settling in Stafford, Adin acquired land, built and equipped a shop, and began to produce pistols, fowlers and rifles. The guns he made in the early years at Stafford are similar to those made in Hardwick, but with a more sophisticated appearance. The barrels are slightly smaller in diameter, and the grips are also slightly smaller. The top straps are narrow and thicker with beveled edges, and the engraving on the top strap takes full advantage of the entire surface. These early guns bear the address **A. RUGGLES, STAFFORD CONN** in two lines (Figures 6 and 7).

Joseph Dean Gilbert, from Prescott, Massachusetts, also moved to Stafford in 1829 with the Ruggles and Samuel Pike. He and Pike were apparently close, and when Pike moved to New York in 1832, the two corresponded. A letter in the author's collection, written by Pike to Gilbert in November 1832, stated that Adin Ruggles had been successful in placing his pistols with an agent in New York, but the letter did not identify the agent.

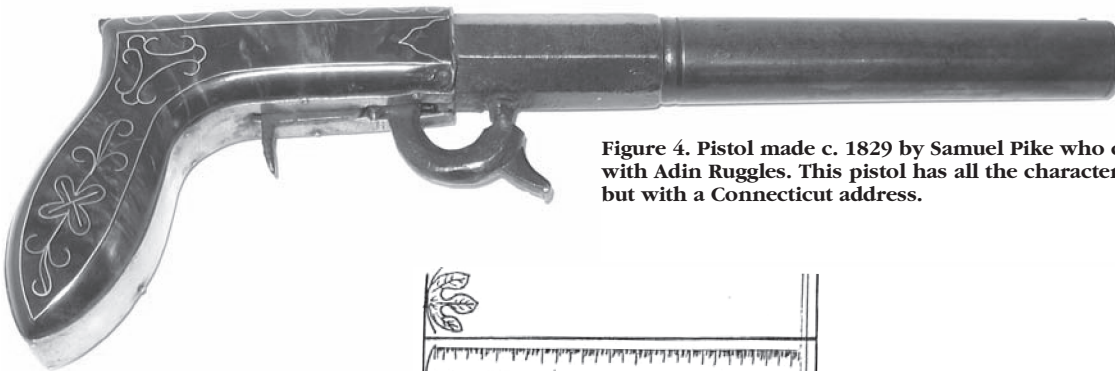


Figure 4. Pistol made c. 1829 by Samuel Pike who came from Hardwick to Stafford with Adin Ruggles. This pistol has all the characteristics of pistols made in Hardwick, but with a Connecticut address.

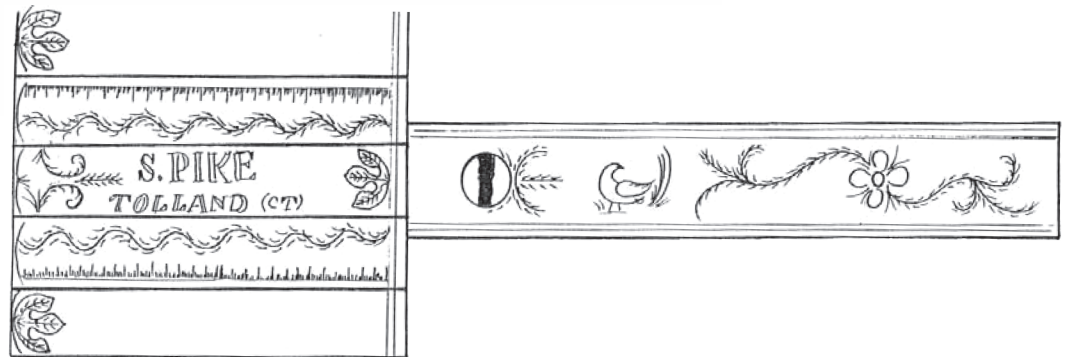
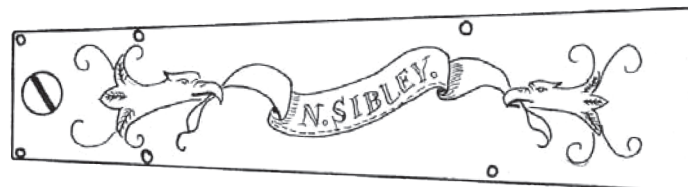


Figure 5. Engraving on Pike Pistol. Tolland is the county in which the town of Stafford is located. N. (Nathaniel) Sibley, whose name is engraved on the brass strap on the grip, is the presumed original owner of the pistol.



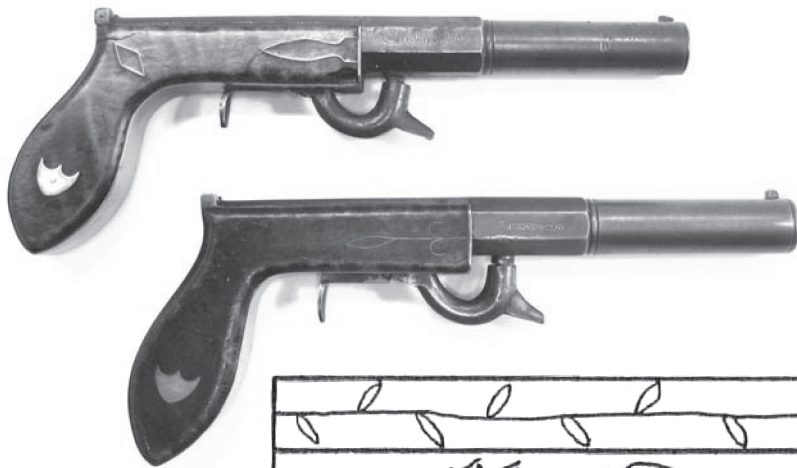


Figure 6: Examples of early pistols produced in Stafford c. 1830-1832. The grips still have flat sides, a carryover from the Hardwick design, but now the top straps are narrow and thicker, with beveled edges. The use of silver inlays on the grips is extensive. Later in this early period, the grips were rounded, but still had silver inlays.

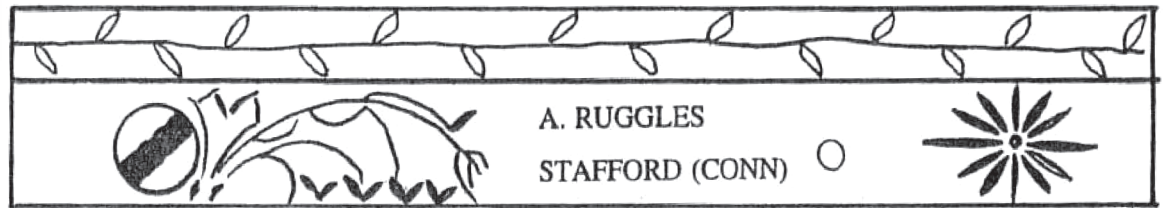


Figure 7: Example of early (1830-1832) Stafford engraving. None of these early engraving styles are known to include agent markings. A similar sun burst is seen on an early Hardwick pistol. Because this style of engraving ends around 1832 when Samuel Pike left to start out on his own, he could have been the finisher of these guns.

Events that occurred in 1833, however, pushed the move to larger production. In June, President Andrew Jackson toured the New England states. As Jackson made his way from Washington up the coast toward New York and Boston, he enjoyed tumultuous welcomes at every city and town. The city of Hartford, Connecticut, spared no expense in turning out the citizenry to greet the president. Following his welcome featuring parades, drills by the local militia and other ceremonies, Jackson retired to his hotel to rest and to greet selected citizens. Adin Ruggles was among those chosen to meet Jackson. He presented Jackson with a brace of “silver mounted rifle pistols.” Jackson is said to have been favorably impressed by the pistols, a tremendous boost to Ruggles!

The next event of importance in 1833 was the business agreement between Adin and E. Hutchings, a 21-year old just starting business as “**E. HUTCHINGS & CO. AGENTS, BALTIMORE, MD**”. The city of Baltimore was a bustling port, with ships filled with immigrants arriving daily. Many of these immigrants stopped in Baltimore only long enough to secure supplies and equipment for the trip west. The goal of the Hutchings Company seemed to be to provide “one stop shopping” for those traveling from Baltimore. Hutchings ads featured patent medicines and India rubber goods (coats, hats, saddle pads) needed by travelers, as well as “Patent Pocket Rifles” made by Ruggles.

Once again, a bizarre occurrence! On November 18, 1833, just as the prospect for business growth seemed to be turning in his direction, Adin Ruggles was accidentally shot

and killed by a workman who was test-firing a pistol out the back door of the shop.

Incredibly, the business continued after Adin’s death and enjoyed its greatest period of production output. After several years of minor changes that included changes to the grip design, decoration and barrel lengths, a standard production model emerged that was used from about 1834 until the Ruggles Pistol Factory closed in 1838. The final production model had a flat hammer, standard barrel lengths of 3”, 4”, 6”, and 8”, and grips that were proportional in size to the barrel length. Wire inlays on the grips were eliminated. We have examples of longer (10”-12”) barrels, some with special presentation engraving, and a very few with cast brass or cast iron grips, but these are extremely rare. All of these variations were undoubtedly special orders. The Ruggles Pistol Factory was now clearly engaged in turning out as many pistols as possible to meet the growing demand. Between 1834 and 1838, the shop turned out thousands of pistols, virtually all of which followed this new standard.

Figure 8 shows an example of the final production model. Many of the guns from this period bear the mark of

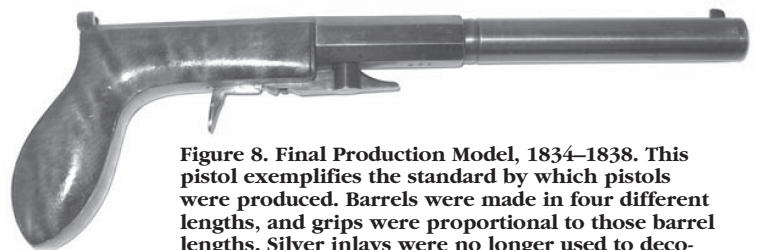


Figure 8. Final Production Model, 1834-1838. This pistol exemplifies the standard by which pistols were produced. Barrels were made in four different lengths, and grips were proportional to those barrel lengths. Silver inlays were no longer used to decorate Ruggles pistols.

**E. HUTCHINGS & CO., AGENTS, Baltimore, MD.**, in two lines as well as a federal eagle stamp, indicating that the gun was American-made.

While the standard may have been set for the final production model, it is unclear exactly how the shop was managed following Adin's death. Cynthia Ruggles and her five children, ages 1 to 16 years old, remained in Stafford, with Cynthia retaining ownership of the Ruggles Pistol Factory. One local history claims that (Robert) Warren Andrews (1814-1899), a young and highly creative worker in the Ruggles shop, took the leadership role, but there are no records to document this claim. Aaron Davis, Jr., another gunmaker working in the shop, is listed in 1837 public records as being in business with Cynthia Ruggles. Regardless of who guided the operation, the shop continued to produce guns bearing the familiar **A. RUGGLES, STAFFORD, CONN** stamp until operations ended in 1838.

Interestingly, five other makers produced guns at the Ruggles Pistol Factory after Adin's death and marked them with their own names and the Stafford address. All of these guns were made according to the Ruggles patent. We know that during this period, shop arrangements existed that allowed products to be made in the same shop but sold independently by different individuals. This may have been the situation in the Ruggles shop with Andrews Ferrey and others. Warren Andrews, doing business as Andrews Ferrey & Co., was the only one of the five to produce pistols in quantity. From the number of examples that have survived, we estimate that he produced hundreds of guns, many of which are marked with the stamp of the Baltimore agent E. Hutchings & Co.

The other four gunsmiths who made and marked guns with their own names after Adin's death were A. (Alfred)

Thresher, Chauncey Shaw and Hiram Ledoyt, A. (Aaron) Davis, Jr. and Joseph D. Gilbert. These men did not make guns in large quantities, and we have no examples with an agent's stamp. According to Adin's probate records, all of these men were employed by him at the time of his death. The following is a brief summary of the five makers in the Ruggles Pistol Factory who produced guns marked with their own names and the Stafford address.

*ANDREWS FERREY & CO., STAFFORD CONN.*

The firm of Andrews Ferrey & Co. made guns in the Ruggles shop according to the Ruggles patent. Many of the Andrews Ferrey pistols are stamped with the **E. HUTCHINGS & CO.** mark and the federal eagle. Andrews also patented a

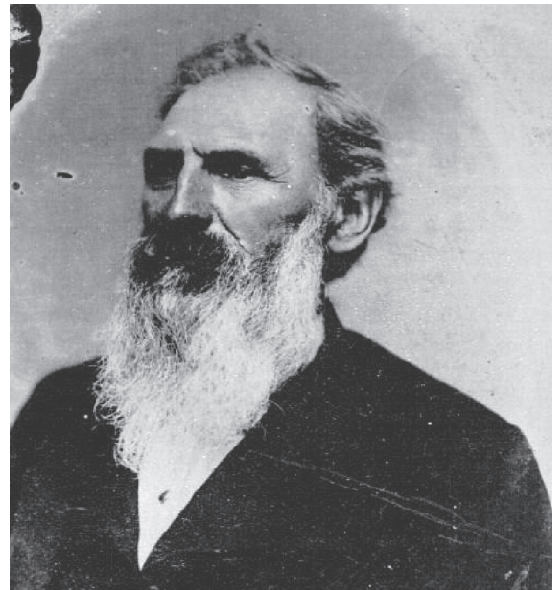


Figure 9: R. Warren Andrews, c. 1890. Following Adin's death, he made guns in the Ruggles Pistol Factory, marked and sold them under the name of Andrews Ferrey & Co. (Photo courtesy of Susan Andrews Sinclair.)

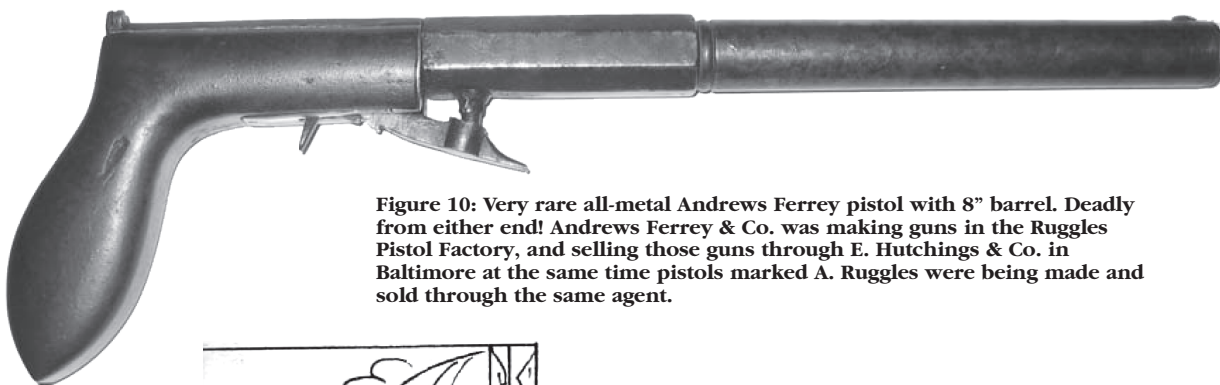


Figure 10: Very rare all-metal Andrews Ferrey pistol with 8" barrel. Deadly from either end! Andrews Ferrey & Co. was making guns in the Ruggles Pistol Factory, and selling those guns through E. Hutchings & Co. in Baltimore at the same time pistols marked A. Ruggles were being made and sold through the same agent.

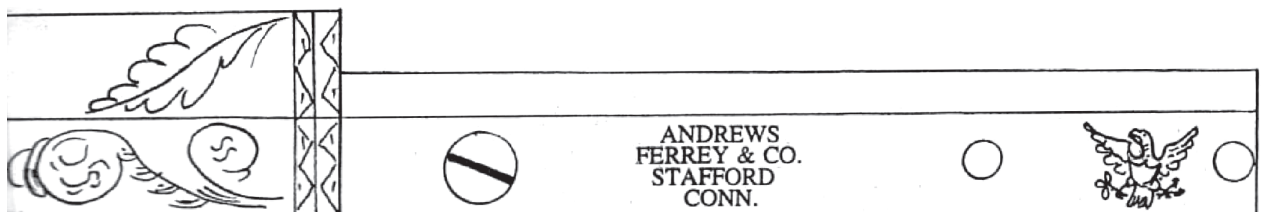


Figure 11: Engraving on Andrews Ferrey pistol. Of all the Stafford makers, Andrews Ferrey generally used less engraving.

“knife pistol” in 1837, which was a side hammer pistol with a Ruggles-style grip.

*A. THRESHER, STAFFORD-CON.*

Alfred Thresher was Adin Ruggles’ brother-in-law, having married Marcy Snow, a sister of Adin’s wife, Cynthia Snow Ruggles. He is also listed in Adin’s probate records with others who worked in the shop. Few Thresher pistols are known.

*SHAW & LEDOYT, STAFFORD CT.*

Chauncey Shaw and Hiram Ledoyt were also listed in Adin’s probate records. These pistols show slight variations in decoration and finish from the A. Ruggles factory guns. While there are apparently more surviving Shaw & Ledoyt pistols than Thresher pistols, these too were made in very small quantities.

*A. DAVIS JR, STAFFORD, CONN.*

Little is known about Aaron Davis Jr., either before joining the firm or after leaving it in 1838. Newspapers and public records show Aaron and Cynthia Ruggles doing business as Davis & Ruggles when the company failed in the 1837-1838 period. Only a few Davis pistols are known.

*J.D.G., STAFFORD, CONN.*

Joseph Dean Gilbert was originally from Prescott, Massachusetts, where Adin worked and lived before he left and moved back to Hardwick to open the pistol shop with his brother Fordyce. Dean worked at the shop in Hardwick, moved to Stafford in 1829, remaining there until after the shop closed in 1838, at which time he returned to Prescott. Only one example of a Gilbert gun is known marked as above.

OTHER CONNECTICUT MAKERS OF RUGGLES-STYLE PISTOLS

Other makers started to produce guns according to the Ruggles patent at about the same time that the standard design was adopted by the Ruggles Pistol Factory. Adin and his successors sold the patent rights to others to produce their guns as a way to generate revenue for the business. A number of makers infringed on the patent, however, producing guns without patent rights. All of these makers, including those who purchased the rights to copy the patent and those who infringed, used the new “flat” style hammer design. Adopted by the Ruggles factory c. 1834, this change in hammer style establishes the approximate time these makers started production. Including the five makers mentioned who used the Ruggles Pistol Factory, there were fourteen named makers of Ruggles-style pistols in northern

Connecticut, and nine named makers in southern Massachusetts towns during the period 1834-1838.

<i>HJ HALE</i>	<i>also noted:</i>	<i>HJ HALE</i>
<i>WARRANTED</i>		<i>BRISTOL</i>
<i>CAST-STEEL</i>		<i>CONNECTICUT</i>

Henry James Hale (1805-1889) was born in Warren, Rhode Island, and moved to Bristol, Connecticut, in the early 1830s. Family records note that he made clock cores in Bristol, but make no mention of his gun making activity. Tax records and newspaper accounts indicate that Henry J. Hale built his pistol factory in 1835, and produced guns in the factory until he left Bristol ca. 1838-39. He made Ruggles-style pistols featuring two different grip styles: the familiar pointed grip and a teardrop bulbous style most commonly associated with Hale (Figure 12). He went out of business circa 1839 and moved west, eventually settling in Indianapolis, Indiana, where he worked for the railroad. His guns are usually stamped **WAR-RANTED** and **US** in lieu of the federal eagle stamp.

*HALE & TULLER, HARTFORD, CONNECTICUT*

William Tuller (1805-1890) and Henry Hale teamed up to sell guns c. 1838. Flayderman cites a contract between Tuller and the Connecticut State Prison to make guns. Flayderman states that Hale made the guns in this partnership, and Tuller was the business manager. While that may be correct, the assembly number pattern and other subtle differences exist in the finish of Hale & Tuller guns when

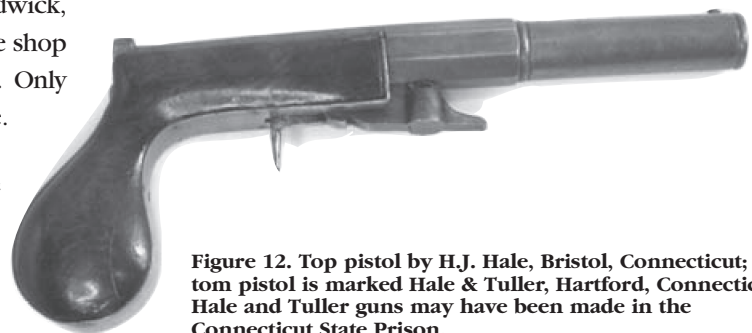
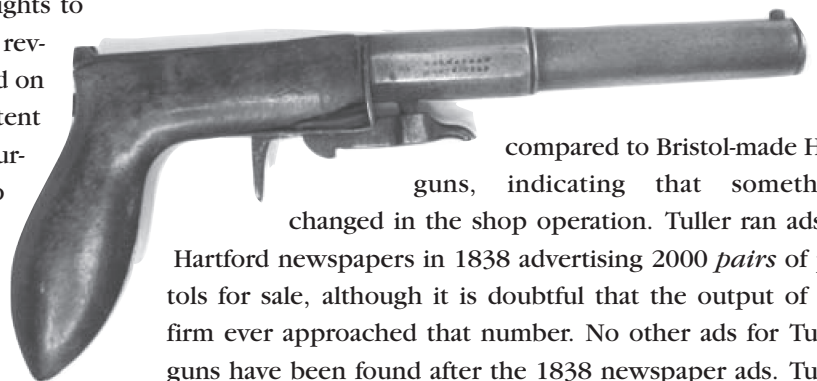


Figure 12. Top pistol by H.J. Hale, Bristol, Connecticut; bottom pistol is marked Hale & Tuller, Hartford, Connecticut. Hale and Tuller guns may have been made in the Connecticut State Prison.



compared to Bristol-made Hale guns, indicating that something changed in the shop operation. Tuller ran ads in Hartford newspapers in 1838 advertising 2000 *pairs* of pistols for sale, although it is doubtful that the output of the firm ever approached that number. No other ads for Tuller guns have been found after the 1838 newspaper ads. Tuller is best known by collectors as a ranking employee in the Colt factory in Hartford in the 1850s and ‘60s.





Figure 15. Example of bold and folky Case Willard engraving that features an acorn, arrow, stars, and a vine.

Mechanics Association in Boston in 1837. In addition to pistols, Andrus & Osborn also made buggy rifles of various designs. The cast brass parts (patchbox, butt plate) on one buggy rifle are cast with Andrus' name.

*J. SIMPSON, N BRITAIN CT*

Most standard arms books list J. Simpson as a maker of underhammer pistols, but no additional information is available, and few have been found. The simple border around the top strap of the example closely resembles that seen on Hale and Hale & Tuller pistols, suggesting that Simpson may have worked for one of those firms. Additional research is required to determine whether Simpson was an independent maker, or whether he was employed by one of the known makers in his area.

IDENTIFIED MASSACHUSETTS MAKERS

*GIBBS-TIFFANY & CO., STURBRIDGE, MASS.*

Enoch Gibbs (1805-1899) and Lucian Tiffany (1813-1901). Born in Sturbridge, Gibbs (Figure 18) served an apprenticeship (starting at age 16) as a horn comb maker in the town of Lancaster, MA. Lucian Tiffany, who was origi-

nally from Sturbridge and later moved to Hartford, was a mechanic all his life. The company was in business c. 1833-1838, during which time it produced thousands of pistols and some 'buggy guns,' rivaling in output the Ruggles Pistol Factory in Stafford. Gibbs-Tiffany was awarded a premium in 1836 at the Fair of the American Institute in New York for a fine specimen of pistols.

Gibbs-Tiffany pistols exhibit two different styles of federal eagle stamps. One is the typical full-wing spread eagle, and the other features an eagle with a folded wing (Figure 20). Interestingly, the assembly number pattern is different with the different eagle stamps, indicating some change in the shop operation. In addition, the engraving style used on guns with the folded wing eagle stamp is quite distinct, further suggesting changes in the shop. We know that the firm started in the village of Westville and then moved to Sturbridge. The change in the style of the eagle stamp, the internal numbers, and the finishers could have occurred at the same time as that move, and could be as a result of changes in the workforce. Cased sets are known, including some with a label from the New York agent Blunt and Syms. Gibbs, still a young man when the pistol business ended, moved back to Lancaster where he was the sheriff, an auc-

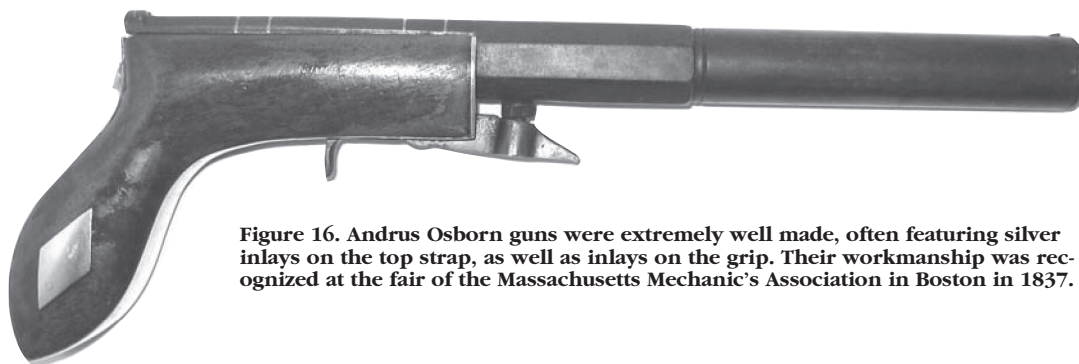


Figure 16. Andrus Osborn guns were extremely well made, often featuring silver inlays on the top strap, as well as inlays on the grip. Their workmanship was recognized at the fair of the Massachusetts Mechanic's Association in Boston in 1837.

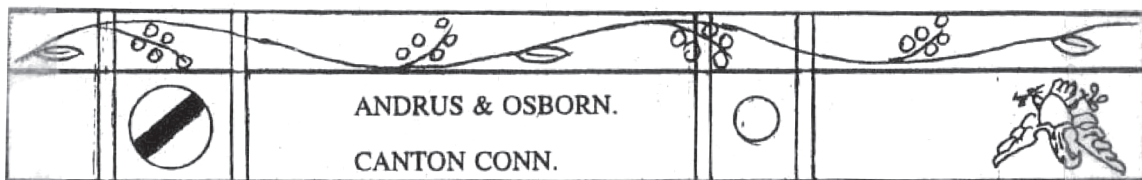


Figure 17. The Andrus-Osborn engraving is very simple, nicely complementing the silver inlays, giving an overall simple elegance.





Figure 18: Engraving of Enoch K. Gibbs at the time of his death in 1899. Apprenticing as a horn comb maker in Lancaster, MA, he returned to his home in Sturbridge ca. 1833 to start the pistol business with his partner, Lucian Tiffany. (Clinton (MA) Daily Item engraving.)

ioneer, the postmaster and a leader in the temperance movement. Lucian Tiffany moved to Hartford in 1838, and was a machinist, working for three different firms over his lifetime. He died in Hartford in 1901.

#### E. CHAMBERLAIN, STURBRIDGE, MASS.

Eliakim Chamberlain (1804–c. 1880) was a known maker and finisher of Ruggles-style guns. His guns have the federal eagle stamp and Sturbridge address. Old Sturbridge Village has in its collection the contract executed between Chamberlain and Case Willard & Co., in New Hartford, Connecticut. We know from existing documents that Chamberlain lived in New Hartford for a period of time in the mid-1830s.



Figure 19: Cased Gibbs-Tiffany pistol presented by Eusebius Hutchings of Baltimore, to Dr. Charles A. Cheever. Hutchings was originally from Portsmouth, New Hampshire, and Dr. Cheever practiced medicine in that town for his entire career. The pistols remained in the Cheever family from the time it was presented until purchased by the author in 2004. (Cased set from author's collection; photo courtesy of Skinner, Inc. Auctions.)



Figure 20. Example of engraving in use at the same time the folded wing eagle stamp was used. The folksy style of this finisher is exuberant and sophisticated. This example features vines and what appears to be a thistle plant, and is from the pistol in the Hutchings-Cheever cased set.

#### J. JENISON, SOUTHBRIDGE MASS

James Jenison (1798–1872) apprenticed with noted gunmaker Silas Allen, Jr. Jenison established his shop in Southbridge c. 1823. A master gunsmith, he produced very high-quality New England rifles and plain fowlers in addition to Ruggles-style underhammer pistols. His output of pistols was not very high, so examples of his work are prized. He died in 1872 after being struck by a horse and buggy in Cambridge, Massachusetts. He had gun making tools in his estate, indicating that he was still active in gun making or repair at the time of his death (Figures 21 and 22).

#### C. WHITTEMORE, SOUTHBRIDGE MASS

Chauncey Whittemore (1814–?) was from Sturbridge. We have a Ruggles-style pistol stamped “C. Whittemore” with engraving identical to that found on Jenison pistols. This strongly suggests that Whittemore worked for Jenison. In later life, Whittemore was a shoemaker.

#### NATH<sup>L</sup> RIDER, SOUTHBRIDGE MASS

Nathaniel Rider (1790–1848) is one of the most interesting of all the men in this study, with gun making being only part of his story. His known gun output was not high, but he did make guns in the four standard barrel lengths, which usually indicates a larger shop. He made pistols with two different grip designs: the traditional pointed butt grip and a saw-grip style that is sometimes referred to as the Southbridge-style grip (Figure 23).

With no formal education or training, Nathaniel and his brother built the machinery for the first cotton mill in Sturbridge c. 1814. Success went to his head and he started drinking heavily, threatening to plunge his family into debt. In 1823, a guardian was appointed by the town selectmen to help him get his life back on track. It seemed to have worked, and a few years later, he secured patents for bobbins and machinery for making wooden buckets. Rider moved to New York City c. 1840 where he and his sons designed, patented and built iron truss bridges. He was recognized for his bridge design and building accomplishments with gold medals awarded in this country and in England. His bridge company was featured at the 1851 Worlds Fair at the Crystal Palace in England.

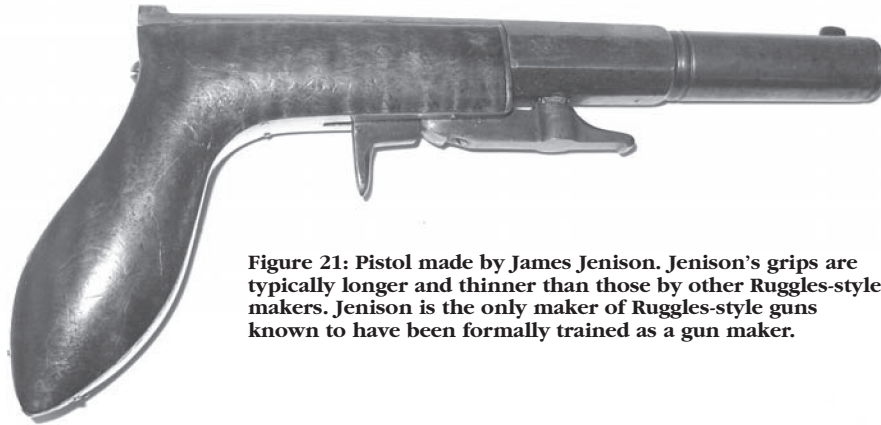


Figure 21: Pistol made by James Jenison. Jenison's grips are typically longer and thinner than those by other Ruggles-style makers. Jenison is the only maker of Ruggles-style guns known to have been formally trained as a gun maker.

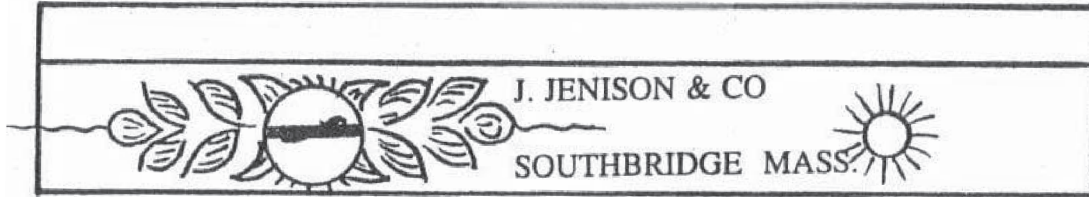


Figure 22: Engraving on Jenison top strap. Similar engraving details are found on fine New England rifles made by Jenison.

*D. BROWN, SOUTHBRIDGE MASS*

A few guns marked with the D. Brown name have survived, but details have come to light about Mr. Brown. The known Brown guns feature the Southbridge grip and are virtually identical to those made by Nathaniel Rider, suggesting that Brown may have worked for Rider.

*QUINABAUG RIFLE MG CO., SOUTHBRIDGE MASS*

The third, and probably the most prolific of the Southbridge makers, was the Quinabaug Rifle Manufacturing Company (Figures 25 and 26). Herschel Logan, who wrote

the only book on underhammer guns, suggests that the Quinabaug guns may be the work of Nathaniel Rider. The members of this company have not yet been identified, but the work is similar to Rider's. Quinabaug guns were handled by the agent E. Hutchings in Baltimore, and are often marked with his stamp.

*D.D. SACKETT, WESTFIELD, MASS*

Dudley D. Sackett (1803 -1858) made Ruggles-style pistols with two grip designs. He made the standard pointed grip, and also a bulbous grip somewhat similar to those made

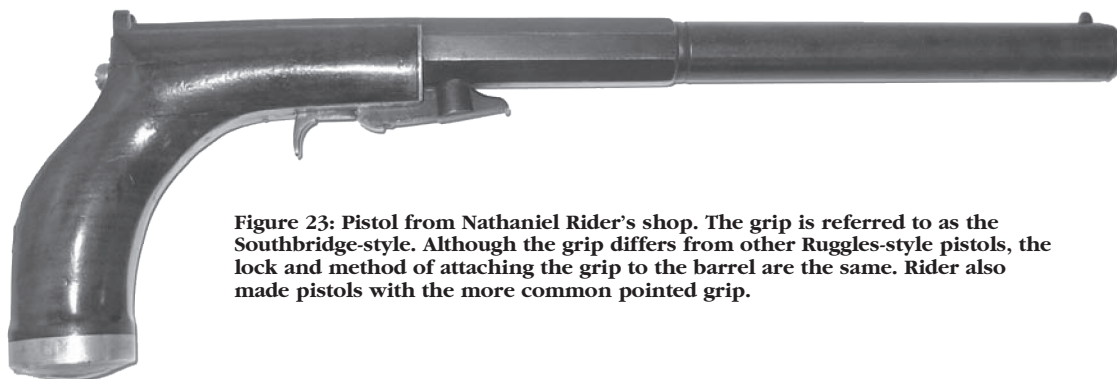


Figure 23: Pistol from Nathaniel Rider's shop. The grip is referred to as the Southbridge-style. Although the grip differs from other Ruggles-style pistols, the lock and method of attaching the grip to the barrel are the same. Rider also made pistols with the more common pointed grip.

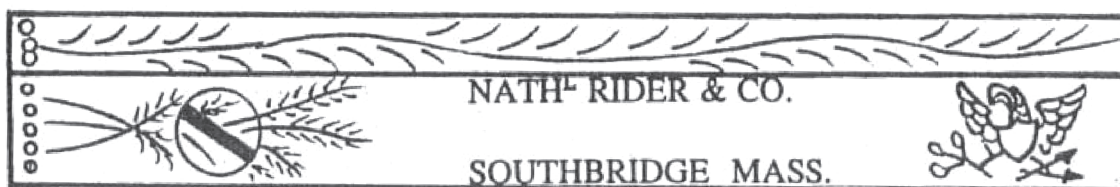


Figure 24: Typical engraving from the Rider shop. Like most makers in this study, Nathaniel Rider decorated the flat surfaces on the top strap with images of vines, leaves, and other native vegetation.

by H. J. Hale (Figure 27). Most Sackett pistols have a unique cast brass top strap, which is not engraved, but does bear the federal eagle stamp (Figure 28). Although clearly an exceptionally well-executed example of gunmaking, the barrel of one example is bored slightly off center! Like many men from Westfield, Sackett was a whip maker in his later life.

SUMMARY AND EPILOG

All of these guns were made earlier (in the 1830s) and for a shorter period (five years or less) than most realize. These pistols met the needs of a young, growing nation: they were an inexpensive, accurate and reliable gun for the western and southern settlers of the 1830s. They were very popular in their time, and constituted a large segment of the civilian arms trade.

Like most products made in small New England shops at this time, (e.g. furniture, pottery, wooden and tole ware), these pistols combined simple elegant design with functionality. And as with these other items, these pistols were embellished with distinctly regional decoration. These are quintes-

sential rural New England guns—not big city guns. Their style is country fancy, typical for the area and the period.

Of the 23 makers in this study, two had outputs in the thousands, nine were mid-size makers with outputs in the hundreds, and the remaining twelve produced an example or very small quantities. Production of the Ruggles-style guns was primarily confined to the area along the Massachusetts-Connecticut border. Equally distinctive styles of underhammer pistols can be seen in other areas of New England.

All of the makers in the study, with the exception of James Jenison, Samuel Pike, and William Tuller, were out of the gunmaking business by 1840. The financial panic of 1837 is generally believed to be the reason for the failure of most of these small gun businesses.

Recently discovered documents in the National Archives provide another possible contributing factor to the business failure. In 1836, Cynthia Ruggles petitioned the U.S. Senate to recover losses incurred by patent infringements. Her petition does not identify any specific makers, but clearly the threat of such action against makers who infringed upon the patent could have been daunting. The petition was

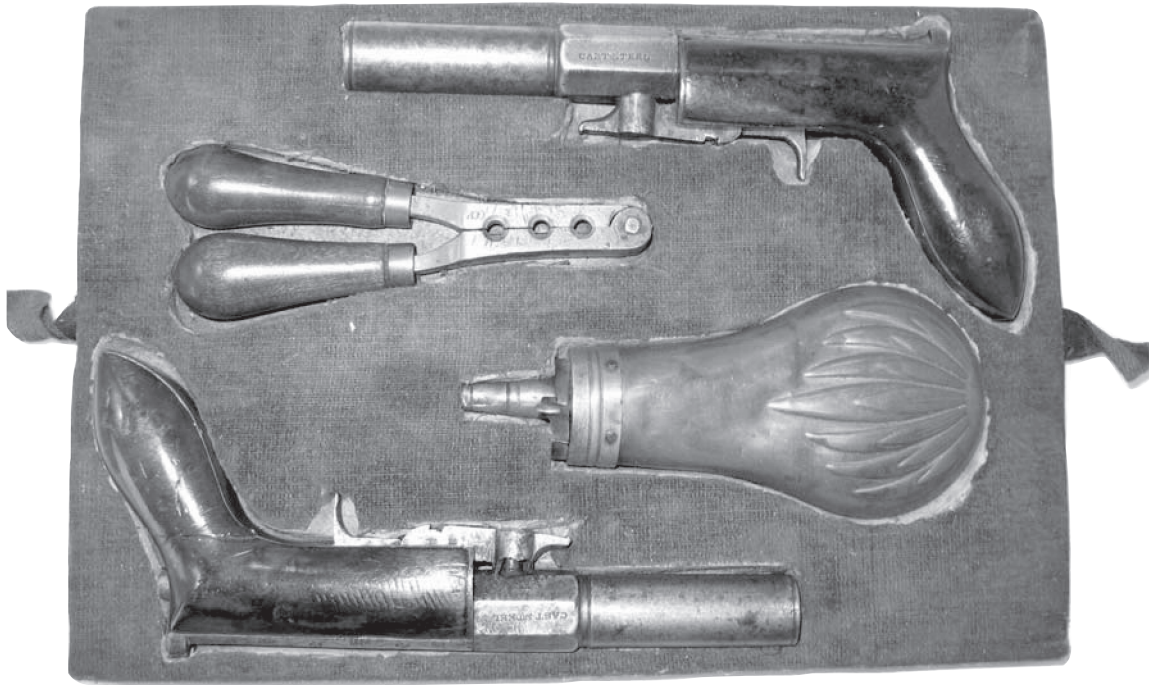


Figure 25: Cased pair of pistols made by Quinabaug Rfle Mfg Co. with 3" barrels.

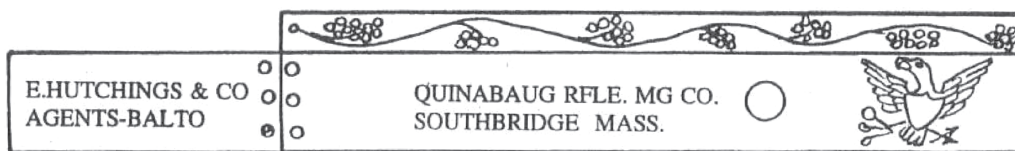


Figure 26: Engraving from cased pair of pistols with a simple vine and berry pattern, in addition to the federal eagle and E. Hutchings agent stamps.

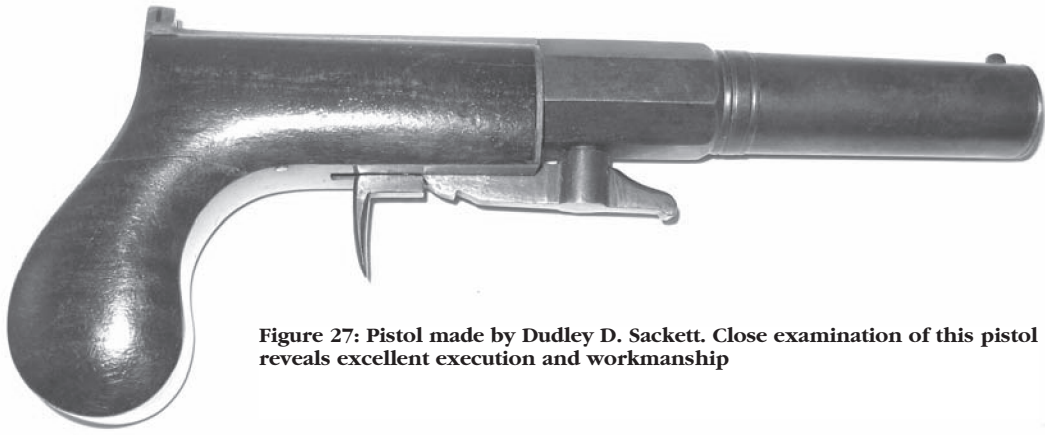


Figure 27: Pistol made by Dudley D. Sackett. Close examination of this pistol reveals excellent execution and workmanship



Figure 28: A unique feature of the Sackett pistol is a solid brass top strap. There is a lack of engraving, but like others, Sackett used the federal eagle stamp.

tabled by two separate committees and finally died in 1837. The threat of this action, combined with declining business conditions, could have forced some makers to close.

In 1838, Cynthia Ruggles, whose life weaves throughout the entire history of these guns, moved with her children to Chautauqua, NY, where the family cleared 50 acres of timber and built a house. Cynthia lived there for the remainder of her life.

#### NOTES

<sup>1</sup>Garrett, Wendell (Ed.) *The Magazine Antiques*, New York, Brandt Publications, May 2007.

<sup>2</sup>Jones, Thomas P. (Ed.) *The Franklin Journal and American Mechanic's Magazine*, Philadelphia, Judah Dobson, 1827.

<sup>3</sup>*Massachusetts Yeoman*, Worcester, February 9, 1828.

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#### ILLUSTRATIONS

Unless otherwise noted, all photographs and illustrations are by the author.