

How The Nineteenth Century Soldier Got His Stuff

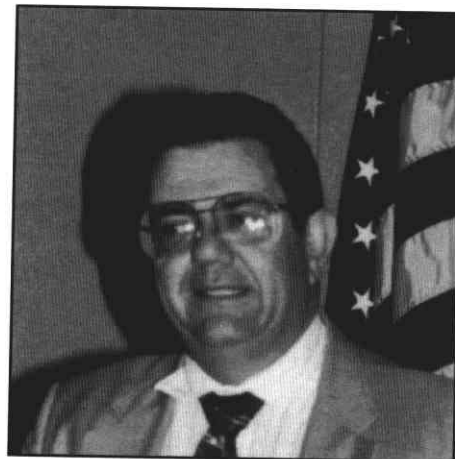
Bruce S. Bazelon

“Connoisseurship” represents an ability to pick out great artifacts from the mass of simply “good” or “mediocre” pieces. It is also a product of our own twentieth century taste. The persons who originally produced the goods certainly appreciated the quality of their work but they were in fact part of a business whose overall purpose was to make money. Creating a work of art was most important for its ability to help sell the finished product. This paper will discuss the many realities which the artisan, the merchant, and the factory owner of two centuries ago faced in his work and with which we no longer have to contend.

The seventeenth and eighteenth centuries were the era of the merchant. Companies of gentlemen adventurers and soldiers explored or conquered large portions of Africa, India, North and South America and China. These were commercial firms which, like their smaller cousins, answered to investors who expected a return on their money. Often they got none. To the European mind social status still involved the ownership of land. A successful merchant might hope to be a country squire at home or a plantation owner in the colonies; the artisan craftsman could have no such aspirations.

The economic policies which governed most nations were “mercantile”, a term which referred to owning colonies in order to enrich the mother country. Industry was systematically discouraged in the colonies, as was the importation of hard coin which could serve as capital. However, one industry was relatively common in America: ironmaking. While early iron works like those at Saugus, Massachusetts, and later innumerable iron furnaces in Pennsylvania, were frowned on by London, they none the less survived. Other industries such as cloth making and brass goods got their real start in the years after the Revolution.

Most manufacturing in both Europe and America before 1790 was conducted through trades such as gunsmithing, printing, cabinetmaking, etc. These trades in Europe were traditionally controlled by guilds or regulated through government monopolies. While the guilds did not enjoy similar power in Federalist America and government monopoly was not a factor at all, the horizon of the early nineteenth century American artisan was not without its own special perils. Foreign imports kept profits low. A



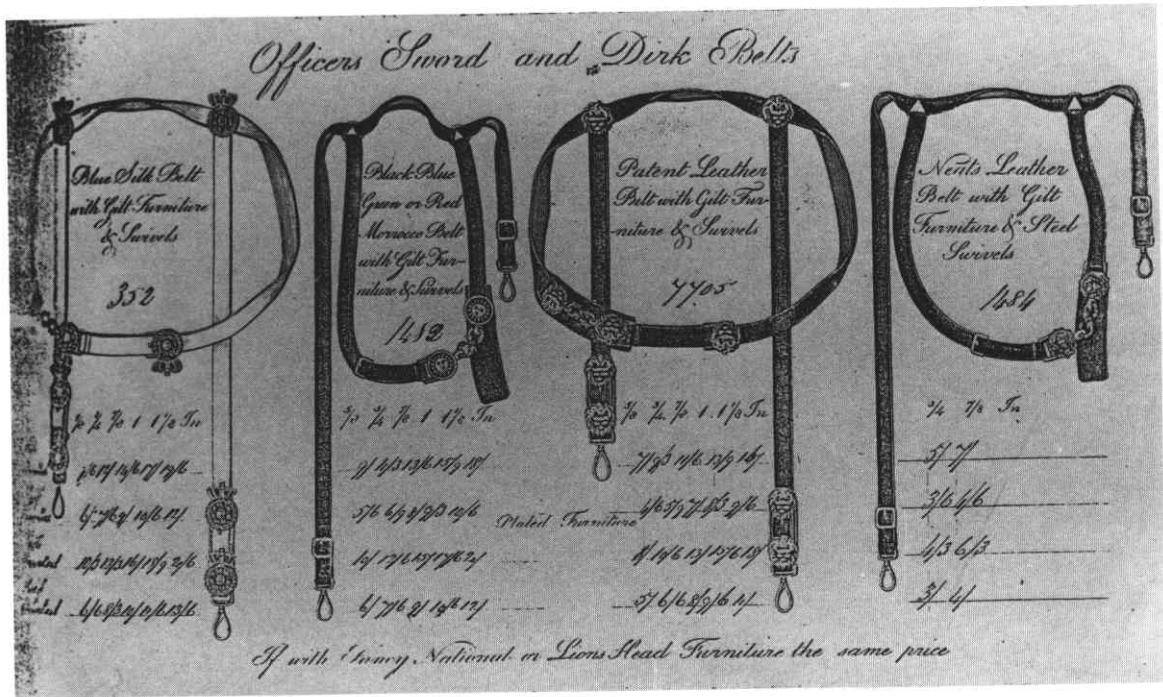
growing fear of industrialization was perceived as a threat to the craftsman’s freedom and his ability to make a living. By the second quarter of the nineteenth century this threat would become real.

The primacy of the merchant as the leading colonial citizen did not change with the Revolution. In spite of the politically wise efforts of Alexander Hamilton, many merchants still regarded themselves as a better class than the tradesmen, an attitude which helped to bring about the downfall of the Federalist party.

In this era it was the merchants, not the artisans, who got rich and lived in large houses. Tradesmen were paid little for their labor. Much of the value of the product was in the materials used and in their cost of transport.

Merchants had their own ups and downs. Trade was risky, and involved taking chances. The state of international relations in the era of Napoleon often led to situations where one country attempted to disrupt another’s trade. This all came to a head in 1807 when an embargo imposed by the United States on foreign goods was replaced by a “nonintercourse act”, which helped no one except Napoleon, who used it to make political points. The disruption of normal trade led to a certain prosperity in American-produced goods. This was jeopardized when peace returned in 1815. That peace was accompanied by the usual hard times, compounded by an attempt on the part of the British to recapture the American market by dumping all sorts of goods on our shores cheaply.

The hardware catalog shown on page 20/36, dating about 1820, was issued by an unknown English hardware house and was intended to sell its products in America



Page from unlabeled English hardware catalog showing United States as well as English sword belts. The catalog is purposely unlabeled so that the purchaser did not know the name of the manufacturer or importer. c1820.

Winterthur Museum library collections.



English secondary martial pistol marked Henry Young & Co. New York. The firm name evolutions would date the pistol to ca. 1830-33. William Guthman collection.

through a third party.¹ If they were to be transported any distance, goods such as buttons, sword blades etc. were often marked with the name of the merchant or assembler rather than that of the actual manufacturer. The holster pistol shown above was assembled in England for the great mercantile firm of Henry Young & Co in New York. When Young retired, his R.G. Dun rating mentioned that he had over \$1,000,000 coming from the business, a rather significant sum at the time. The firm itself continued through the rest of the century as Young, Smith & Co, and then as Shannon Miller & Crane, an evolution which took the rest of the century.

The gun trade of the late eighteenth century initially came off comparatively lightly in this struggle of merchant vs. craftsman. Many artisans were well established in their communities. Because some of the materials needed to fabricate guns were available thanks to the iron industry and plentiful trees, gunsmiths could and did produce a

respectable product when it was necessary to fabricate entire arms by themselves. However, by the early nineteenth century a flood of commercial locks and the establishment of forges which specialized in making barrels assisted the local gunsmith as a cheaper way to produce a finished product.² Of less amusement for the gunsmith were the fully assembled English and Belgian arms which competed aggressively with our own products as that century wore on.

In England, which was far more industrialized in 1820 than the United States, the workers blamed the post-Napoleonic recession on the machines themselves. This culminated in the so-called Peterloo massacre, where the workers attempted to smash machines which they saw as dehumanizing and starving them.

Merritt Roe Smith's *Harpers Ferry Armory and the New Technology* has documented the clash between Pennsylvania craftsmen working in the arsenal's musket shop and the factory workers making new interchangeable parts in Hall's state-of-the-art rifle works³. This conflict between the skilled artisan and the "factory hand" signaled a growing use of workers rather than apprentices. The 1820 Manufacturers Census of the United States, while far from complete, does document the activities of a number of gunsmiths in this regard. For instance, J. Joseph Henry of Philadelphia County employed one man and one boy in that year, but he states that in

...1817 and 1818 the annual amount of goods manufactured was upwards of \$16000 in rifles alone, and employed twenty hands...at this time owing to importations and other

causes there is not enough demand for them...patterns have been taken from here and sent to England for the purpose of having rifles made to correspond to American rifles & sold at reduced prices...1817 & 1818, paid wages amounting to \$9000.

Henry's establishment in Northampton County employed another "...eight or nine workmen...", down from 12 men "...employed at barrell making" and "from ten to fourteen men at filing and forging locks" and "four men at file making and three at mounting..." in 1814 and 1815 when "the value of the manufactured articles was from thirty to fifty per cent higher than at present & very brisk sales...". Lemuel Pomeroy, answering the same questions in December, 1820, stated that he had thirty-five men and an unstated number of women to produce some 2,000 muskets annually for the government. Incidentally, his factory and machinery cost some \$35,000. He then prudently congratulated the government for the new Model 1816 musket "which combines more strength & eligance (sic) than the former standard musket...". He even liked the recent order to brown all these arms, an operation "...the soldier can perform as well as the gunsmith..."⁵

Even some smaller firms employed supplementary workers. Henry Gable of Williamsport employed two men while Henry McCormick of Owego, New York, employed 5 men at \$500, and had a raw materials cost of another \$500 to produce an annual product of \$2,500.

Interchangeability, while the linchpin of the so-called "American system" of factory manufacture, and an innovation of world-wide significance, did not help Eli Whitney. His plaintive statement in the 1820 Census of Manufactures reads "The manufacture of muskets has never been very profitable...The business was carried out at a serious loss during the late war...for the last ten years it has not yielded a profit of five percent on the capital employed⁶. Immortality is fine but it does not pay for the groceries.

The problems of cheap competition from Europe were by no means restricted to the gun trade. Items such as swords, uniforms, insignia, headgear, etc., were also routinely imported, along with huge quantities of English ceramics and cloth which for a time dominated the American market. After all, England had won the trade wars with France: why should she not get rich?

Perhaps typical of the problems faced by the American manufacturer in the face of foreign import is the pleas of Nathan Starr cited from the Census of Manufacturers in 1820. In this census Starr claimed that he had \$50,000 tied up in capitalizing his business, paid \$7,500 in annual wages, and had \$5,500 contingent expenses in order to sell swords for \$4 and \$5 each. It was a time of widespread depression and all manufacturers

struggled to sell their goods. Starr states:

During the war employed 84 men...had a ready sale for all the swords they could make...they now employ but 15 men on contract for the gen'l government and have no sale for surplusage in consequence (sic) of English & French swords of inferior quality and the refuse of their workshops flood over this country at any price that can be named for them.

This establishment had commenced making fine swords but have been obliged to abandon it and have made none of late except in a few instances where they have been ordered by the general or state governments.⁷

Mr. Mowbray believes that some of the problems were of Starr's own making and that his product just could not compete.^{7a}

Be that as it may, military goods and arms were obtained in a variety of ways. Here are a few practical examples of how the soldier got his arms and accoutrements. The first method was by *directly purchasing* the items from the manufacturer.

An invoice of Le Page, a French arms dealer, made out to Lt. George Boyd in 1814, is in the Daniel Parker papers in the Historical Society of Pennsylvania. In it Boyd is purchasing directly in France a gladiator model sword, morocco leather belt, crimson sword knot and colonel's epaulets. The quality of these pieces sold to a Lieutenant is perhaps the reason that the bill turns up in the papers of Parker, the Adjutant General of the Army. It is just as likely the pieces were purchased for Parker by Boyd.⁸ Such direct purchase was unusual, though state governments and even the federal government would sometimes turn to foreign arms producers in the years after the Revolution. The failure of Pennsylvania's Ketland contract pointed up the dangers of relying on foreign firms to provide vital arms in wartime. The Federal Government had decided to set up its armories at Springfield and Harpers Ferry and to supplement their production through a system of private purchase.

Individual officers such as Consul William Jarvis, who needed a U.S. Navy uniform in January, 1803, to attend the Christening of the heir to the Portuguese throne (diplomats not having their own until 1816), sometimes took direct action. According to Jarvis' daughter, he simply ordered his directly from London.⁹ The uniform survives and indeed its buttons are part of the US 1798 series known to have been produced for Carter, Lombard St. in London.

French-made small swords were presented to ten American officers who had been voted swords by Congress during the Revolution. They were ordered by Col. David Humphreys, Secretary of the American Legation in Paris, just after the close of the war. The specimen in

the Society of the Cincinnati's Anderson House museum in Washington, D.C., is marked "Liger a Paris".¹⁰ An example was given to Col. William Barton for his daring raid on Newport in 1777 when he captured British General Prescott, who apparently was being quite offensive. Prescott was paid back by being unceremoniously dragged from his quarters in the dead of the night. He was exchanged later for American General Charles Lee and returned to Newport where he continued to do offensive things. All the swords apparently were presented in May, 1786, an event which at least one of the recipients did not live to see. The Barton sword is now in the Rhode Island Historical Society.

An example of an eagle head navy sword was produced in England c. 1802. The sword has French grips and no blueing on the blade because, apparently, the English were not sure what devices to put on.

The John J. Low firm advertised in the Boston *Atlas* of December 11, 1840. The ad shows them obtaining from "Manufactures at Paris & Lyon, Lyon Gold & Silver laces, epaulettes, stars and straps. Paris made silk sashes, worsted do., swords, chapeau, belts, chains, buttons, Navy swords, epaulettes."¹¹ In the *Columbian Centinel* of May 4, 1825 Low has received:

"From Liverpool, 8 packages, containing swords of almost every description, holster and pocket pistols; belt plates, cap do; spurs; plume sockets, sword hooks; rings; sword and cap chains; ball buttons; stamped do of various kinds &c &c. From Havre, 6 packages containing Epaulets; wings; laces; tassels; braids; stars; rosettes; Vulture and common plumes of all colors and lengths; with a great variety of other fancy and ornamental trimmings in the military line..."

The ad also includes candlesticks, jewelry, watches, plated ware and jewelry, "All of the above are fresh and new and were imported direct from the manufacturers or agents..."¹²

Only one piece has been located from Low's extensive import trade, even though the firm still exists as Shreve, Crump & Low, a Boston jewelry firm. A bellcrown cap went to a member of the Bolton, Mass., Light Infantry in 1831.¹³ While the insignia could be imported, it is unlikely that the cap was made very far from Boston. Merchants built their trade around what they could sell, not whether they were importers or simply conveyed local goods to a customer.

Another message which seems to be evident from the Low advertisement is that metal goods were coming from England and woven items from France. There appears to be a good deal of truth in this statement. The process is not quite so simple when we remember that England was getting most of its own sword blades from Solingen, which had built a world trade in blades during this era. Solingen blades were still used in British military

weapons as late as the 1860s and 1870s. I would refer you to the introduction in John Walter's book, *The Sword and Bayonet Makers of Imperial Germany 1871-1918*, for documentation of the conflict between British sword manufacturers and the blade importers from Solingen over British government contracts as late as the 1870s and 1880s.¹⁴

Before we go too deeply into the transition from merchant to manufacturer in American arms, we do need to look at the customers, who after all chose which items to purchase: the militia and regular Army which made up the military establishment in the United States.

A painting of the New England Guards encampment done in the 1830s hangs in the Bostonian Society. In it the militia saw themselves as neat and orderly, true soldiers. In fact, the painting is of an encampment of a volunteer militia organization. The volunteer militia was made up of company-sized units consisting of persons who had enlisted to drill and undertake military duties on a regular basis.

Companies such as the Troy Citizens Corps were the ancestors of both our present national guard and our state police. However, there was a dark side: the "common militia" was a relic of the Anglo-Saxon fyrd, or armed band of free men owing service to their lord, in this case their state. This force, literally all of the free, physically able men in the state, met on training days, a few a year, mandated by law. This militia service was compulsory. It required no enlisted uniforms until it was actually taken into Federal or state service in an emergency, and it got none. The fame of the common militia rested on Bunker Hill, Saratoga and Kings Mountain in the Revolution, though perhaps not on Camden. It heaped no glory upon itself during the War of 1812 and thereafter quickly became irrelevant. Its demise was satirized by cartoons such as "The Militia Muster" and the "Nations Bulwark" during the 1820s.

The post-Revolutionary regular army was both small and popularly distrusted. The common militia was unwieldy and untrained, hence the volunteer militia became the nation's ready reserve. Within loose guidelines, these volunteer units dressed as they pleased. They were the most important customers of the military goods dealers, manufacturers and importers. While officers of the "common militia" did have uniforms, these were most often U.S. Army pattern. Their troops were armed by the United States government, but were not uniformed.

By the Militia Act of 1792, which formalized the whole militia structure, militiamen were to attend training armed with their own weapons. This system did not work because many men did not own arms. The problem was addressed by individual states through private purchases, such as Pennsylvania's 1798 musket contracts with gunsmiths Evans, Miles, Henry and others. A few states

retained arsenals where they manufactured their own arms. The situation was partially redressed in 1808 when the U.S. government agreed to supply the militia with Federal arms, cartridge boxes and ammunition. The state contracts then either ceased or were relegated to special purchases, such as rifles procured during the War of 1812.

The Federal contracting system prior to the Civil War attempted to meet as much of the need as possible for arms and accoutrements for both the Federal Army and the militia through arsenal production. Contracts were often let for additional arms and equipage.

The social customs of the volunteer militia are still with us in the form of many presentation cups, swords, shooting medals and just about anything you could engrave with someone's name. Many of these now grace tables at the better gunshows.

The styles we copied for both uniforms and arms were European in design, and as we have seen, sometimes in manufacture as well. The French were still regarded as the dominant European land power in spite of their habit of losing their wars in actuality. They were held as models for swords and uniforms, while the U.S. muskets were direct copies of the popular Charleville to which our troops were introduced during the Revolution. Certainly the French turned out a good product, which sometimes functioned quite well in the hands of France's enemies, as was often the case in their unfortunate naval affairs.

European, and especially French, fashion ruled supreme. The patterns employed in making arms, the cut of the soldier's coat, the design of the insignia on the soldiers' hats were influenced by European styles. Current fashion in turn employed classical art forms or looked to outlandish soldiers who came into prominence during the Napoleonic Wars or later colonial conflicts, such as the Hussars and the Zouaves. The same forces had an influence on decorative arts and furniture design as well. The eastern European czapka shown in Margerand's great work on French headgear was adopted by Napoleon's guard from the Polish lancers.¹⁵ It turns up on the heads of the Independent Corps of Cadets in Boston between 1816 and 1840. French design lost popularity in the United States after their defeat in 1870. By 1872 our soldiers were wearing "Swedish" spike helmets and double-breasted coats.

The Roman imperial eagle used by several English units comes from the Napoleonic standard captured at Barossa, Spain, by the 87th Regt. in 1811. It flew over the seas to be incorporated into our dragoon cap insignia in 1833.

Perhaps the most outlandish uniform of all was that of the Boston Hussars of 1810. This company was made up of rich merchants. It is reported that the horse and uni-

LAMBERT & WHITE,
No. 103 NORTH THIRD ST.,
PHILADELPHIA,
MANUFACTURERS OF

MILITARY AND FIREMAN'S
CAPS AND EQUIPMENTS,
Also, Sportsman's Articles of every description.

No. 1. No. 2.
No. 3. No. 4. No. 5.
No. 6. No. 7. No. 8. No. 9. No. 10.
No. 11. No. 12. No. 13. No. 14. No. 15.

Persons desiring Hats can order by Number, each Hat is designated by the number beneath it.

Advertisement of Lambert & White c1855 showing the various military caps being made for the soldier in Philadelphia at mid-century. Author's collection.

form cost \$1,000, no mean sum in 1810, but they were certainly gorgeous. The Hungarian irregulars who initially introduced the Hussar into European consciousness could only dream of such splendor. Some changes were, however, practical, such as the false crown introduced by Wellington's troops to give the illusion of height without the weight. On the other hand we have the bellcrown cap. Born in Russia, it somewhat resembles a black mushroom. It was adopted by the Army in 1821 and lasted until 1832, except for the U.S. Marines, who retained it a bit longer. At about this time the Army came up with fatigue caps for undress wear because no one was going to march long distances in their bellcrowns.

By the second quarter of the nineteenth century society itself was turning from a craft-based system of individual manufactures into an industrial, mass production-oriented system. The individualistic craft mentality had encouraged freedom of design and construction. The factory fostered conformity and standardization output. In the

LAMBERT & WHITE,
MANUFACTURERS OF
MILITARY CAPS & EQUIPMENTS,
NO. 103 NORTH THIRD STREET,
PHILADELPHIA.

Leather, Felt, Silk, Cloth, Bearskin and the New Regulation Caps.
FATIGUE CAPS OF ALL PATTERNS.

Knapsacks, Cartridge Boxes, Epaulets, Knife, Sword and Bayonet Scabbards, Canteens, Belts, Belt Plates,	Swords, Pistol and Body Holsters, Flags, Drums, Hair, Vulture and other Plumes, Pompoms, of all kinds, Leather Stocks,	Brush and Pickers, Web Belting, Gun Slings, Tents, Tent Poles, Haversacks, &c., &c. Blind, Shade, Curtain and Pic- ture Tassels, Cords, Bindings,
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FIREMAN'S HATS,
Of New York and other Styles: Belts, Belt Plates, Spanner Cases, &c., &c.

SPORTSMAN'S ARTICLES,
Gun Cases, Shot Bags, Game Bags, &c., &c.

TRUNKS, VALISES, CARPET BAGS, MEDICAL CHESTS, SATCHELS,
U. S. Marine Work such as Caps, Passing and Fire Buckets, Tube Boxes, &c., &c.
ARMY, NAVY AND OTHER EMBROIDERY NEATLY EXECUTED.
PATENT AND BUFF LEATHER, AND BEAR SKINS, &C., &C.
All work warranted equal to sample, and at the lowest cash prices.
Military Companies by sending the measure of their members can have their Uniforms made at the shortest notice. Also every article necessary to fit out a Military Corps.

Another Lambert & White advertisement for a wide variety of equipment. Author's collection.

JOHN A. BAKER,
Military Goods
NO. 63 WALKER ST.
(NEAR BROADWAY)
NEW YORK
H. Orr & Co. N.Y.

Trade card of John B. Baker of New York. After Baker's death in 1862 the firm became Baker & McKenney and finally Ridabock & Company, each major manufacturers and dealers in military goods. State Museum of Pennsylvania.

early years of the republic, the production of weapons, insignia, uniforms and other U.S. Army military goods was governed by loose specifications. These allowed for the variation which society in general accorded its products. This tolerance tightened up gradually from the 1840s onward, until by the Civil War manufacturing was capable of the standardization which we now expect from all products, and which our forbearers did not expect.

We can now revisit the import merchant and the manufacturer. We have seen the merchant as largely successful and prosperous through the first decades of the nineteenth century and the manufacturer as small, reflecting a somewhat dubious legality through the Colonial period. Much of the actual productivity was in the hands of small artisans whose labor counted for little compared to the cost of the materials used in making the product. The real money went to the merchant importer in the eighteenth century, as it was to go to the industrialist in the nineteenth.

In the 1790s the emphasis on imports began to change slowly. Successful cotton mills were set up in Rhode Island, and the first rolling mill in the United States opened its doors in 1792 near Boston. It was owned by Paul Revere, ever a better entrepreneur than a soldier or horseman.

As an example of what the early manufacturer faced, we have only to look at brass manufacture, an important component in almost everything we like. The colonial copper mines in Connecticut had played out by the Revolution and they served only as jails to keep Tories locked up. Copper came from used boilers and ship sheathing, hence from Europe. Brass is made by adding calamine (zinc) to copper, the more zinc the whiter and harder the brass. There was a story told by E.H. Davis, Scovill's historian, about J.M.L. Scovill coming back from New Haven to Waterbury in the early days of the firm in the 1812 era. He was riding in an old boiler he managed to purchase, and which had been strapped to a wagon. The straps came loose along the terrible roads current at the time and down the hill went Scovill, boiler and all. They don't make capitalists like they used to.

Assuming that Scovill got his boiler into Waterbury without further trouble, he next had to melt it and add zinc, not an easy task because zinc came from Germany. This situation gradually improved. By mid-century, zinc had been found in Georgia, and the great copper deposits which still supply the country's needs had been located in Michigan. However, back in 1804 George Armitage, who made many of the early insignia and button patterns for the Army, complained in a letter to the Commissary of Purchases about a lack of copper fit to roll-in Philadelphia.¹⁶

The picture was changing in another way. After the Revolution a new generation of immigrants with new and useful skills came to America. They added greatly to the abilities of the artisans already here. Gunsmiths already had imported their trade from Germany and England during the course of the 18th century, and were already a vital part of the American scene by the Revolution.

Swords were another matter. Making scabbards which would hold, wrapping or checkering the grips, and etching blades were technologies which were either scarce or non-existent in America. Mr. Mowbray convinced me some time ago that the beautiful Philadelphia brass grips on swords, while following a European precedent, were not worth much if you wanted a functional weapon. Leather wrappings on these early productions have quite often come loose from the wooden grips which underlay them. We simply could not make the wire-wrapped grips which were long an important part of European sword making technology.

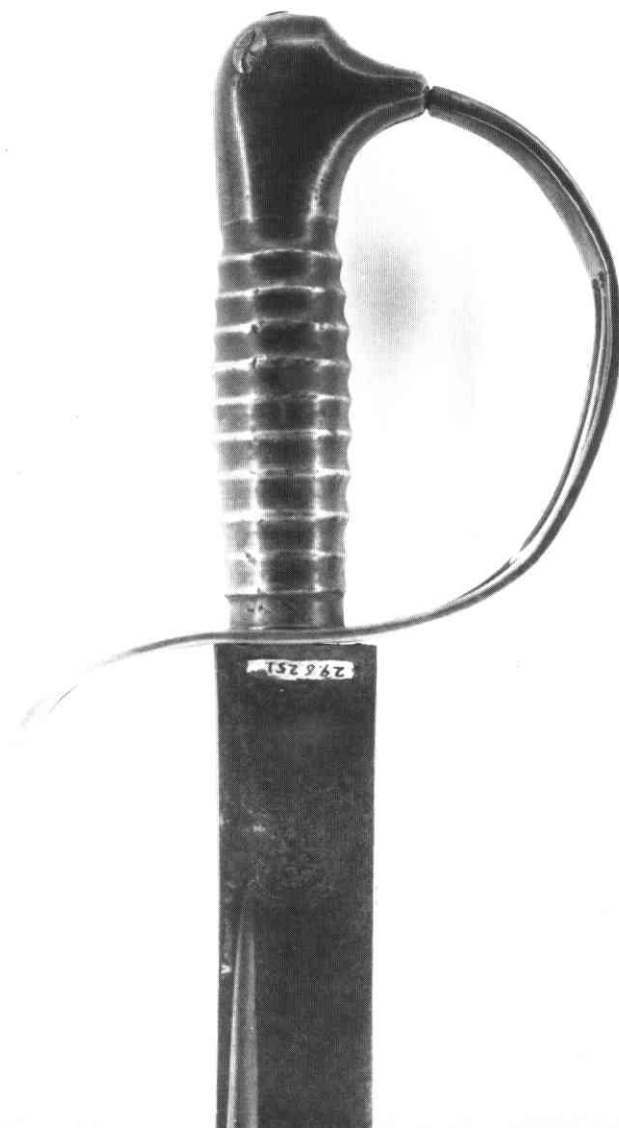
And so it went. Buttons popped off uniforms because we did not know how to make good shanks. We knew how to plate metals by mixing powdered gold or silver with mercury which volatilized in heat, leaving a beautiful finish and a workman who resembled a thermometer, but no one knew how to burnish the plating, a final step to make it look lustrous.

We first meet George Armitage in the Philadelphia directories of 1795. He and a brother had evidently emigrated from Birmingham, England. We next find him in *Claypoole's American Daily Advertiser*, June 11, 1799, making uniform eagles for the volunteer companies:

...in silver, gilt or plated, in the manufactory of George Armitage, in Race Street...or of J Brearly no 75 north second street; likewise the eagle and anchor for the navy, in gold or gilt, with a variety of fancy eagles and ornaments...N.B. The eagle is marked GA in order that it may be known in the future; every true American ought to recollect it is adopted by General Washington.¹⁷

We used to think that Armitage actually designed U.S. insignia, but it is now either known or strongly suspected that Moritz Furst, an Austrian who emigrated to the United States thinking he would take over the U.S. Mint, actually did much of this work, in addition to executing many of our War of 1812 presentation medals. Furst created many of our standard eagle types.

Until his death in 1825, Armitage was the major contractor for U.S. insignia, but hardly the only one. William Crumpton, who settled across the Delaware in Burlington, New Jersey, also had insignia contracts, as did Robert Martin before he went bankrupt in 1805. Martin's U.S.-made buttons eventually helped to stop the government's practice of obtaining buttons from London. Martin may have been an English immigrant. Crumpton was almost



Cast brass hilt of Revolutionary War sabre probably manufactured in Philadelphia
State Museum of Pennsylvania.

certainly from Sheffield. In Waterbury, Scovill learned the business of fixing a rigid shank and the secrets of burnishing from Samuel Croft, from Birmingham, while Edward Price, the Englishman, and an unknown artisan called "the Frenchman" showed the good entrepreneurs of Attleboro, Massachusetts, how to make gilt buttons.

The most famous of all the military goods manufacturers was William H. Horstmann. He was from Hesse-Cassel, and was a third-generation passementier. Either because he was not a first son, or because he had to complete his apprenticeship as a journeyman, Horstmann had to leave Hesse-Cassel to practice a trade. He landed in Austria, where he joined a troop of dragoons for an excursion through France during the Napoleonic Wars. Horstmann liked Paris, and whatever skills he already had in lace weaving were augmented by what he learned there during a stay of several years. He now had a trade with both a military and a civilian product. In 1815 he left for



Better developed brass hilt. This saber was used by Christian Kneass in the 2nd Troop Philadelphia City Cavalry c1814, as stated on the grip.
State Museum of Pennsylvania.

Philadelphia, where, being an enterprising sort, he promptly married the daughter of Frederick Hockley, the premier lace weaver in Germantown. Now having his capital funded, Horstmann set up in business and was soon able to return to Germany (1828) to import Jacquard machines, the first in the lace industry, and claimed to be the first in the United States. His brother, George Horstmann, remained in Hesse-Cassel and would send imported lace to sell in Horstmann's establishment.¹⁸

Horstmann is important in our story as an example of how trade developed. His competitors, Henry Korn and Casper Duhrang, were also in the coach lace and military business. So was Peter Mintzer, yet another German, whose son William was an important military goods supplier in the Civil War era. But Horstmann's firm was a larger enterprise and has accordingly left us more fingerprints by which we can get to know him. He used his European connections to set up a manufacture in Philadelphia, and thus represented the next evolution beyond the merchant who simply sold finished goods. During Horstmann's lifetime the store sold all sorts of military accoutrements and weapons, but Horstmann himself made only the lace and metal cloth articles, and probably ribbons and knit goods, as befit his own skills and understanding.

Now let us take the trade a little further. Horstmann left the firm in the capable hands of his sons William J. and Sigmund Horstmann in 1845, although he lived until 1850. In their surviving machine book (1845-70), we see the sons immediately adding to the manufactures of the company by purchasing F.W. Widmann's swordmaking tools in 1848, as well as the insignia stamping capabilities of John O'Harra (1848) and William Pinchin, Armitage's successor (1862). When they were finished, the new Horstmann firm both manufactured and sold a variety of merchandise at its impressive new building at 5th and Cherry Streets in Philadelphia. They mounted imported sword blades, painted flags, decorated drums, made insignia and lace, and sold almost everything the volunteer soldier or U.S. officer wanted or needed. However, the fringe and lace departments were still the most prominent rooms shown in surviving 1850s insurance maps of the Horstmann building complex.

In the 1850 Manufacturer's Census entry for Horstmann, the firm does not even bother to list metal goods among its primary raw materials or products, or to show space for their manufacture. Small wonder that Horstmann's machine book lists only a few die purchases for hilding swords or making scabbards after purchasing Widmann in 1848, even though we would expect to see a massive retooling subsequent to the regulations of 1851. Similarly, while a steady purchase of insignia dies is

recorded during the late 1850s, there are almost none after 1861. When the chips were down, Horstmann evidently subcontracted much of the manufacture of articles which were beyond the firm's traditional undertakings in the woven metal cloth and ribbon industry. By bringing imports together with domestic manufactures, some of which the firm actually produced, Horstmann functioned as a military department store and made a fortune.¹⁹

One very interesting piece in the Horstmann scrap books at the Historical Society of Pennsylvania is an article dated 1870 from a column entitled the "World".²⁰ In it an incident is related which is meant to effect a proposed tariff reform. It seems that because of high duties after the Civil War, Horstmann had his sword blades made in Pittsburgh by some unknown manufacturer, rather than in Solingen. This actually has the ring of truth, because Horstmann blades of that era are marked with only an Old English "H", and not with the Solingen manufacturer's mark as was previously the case.

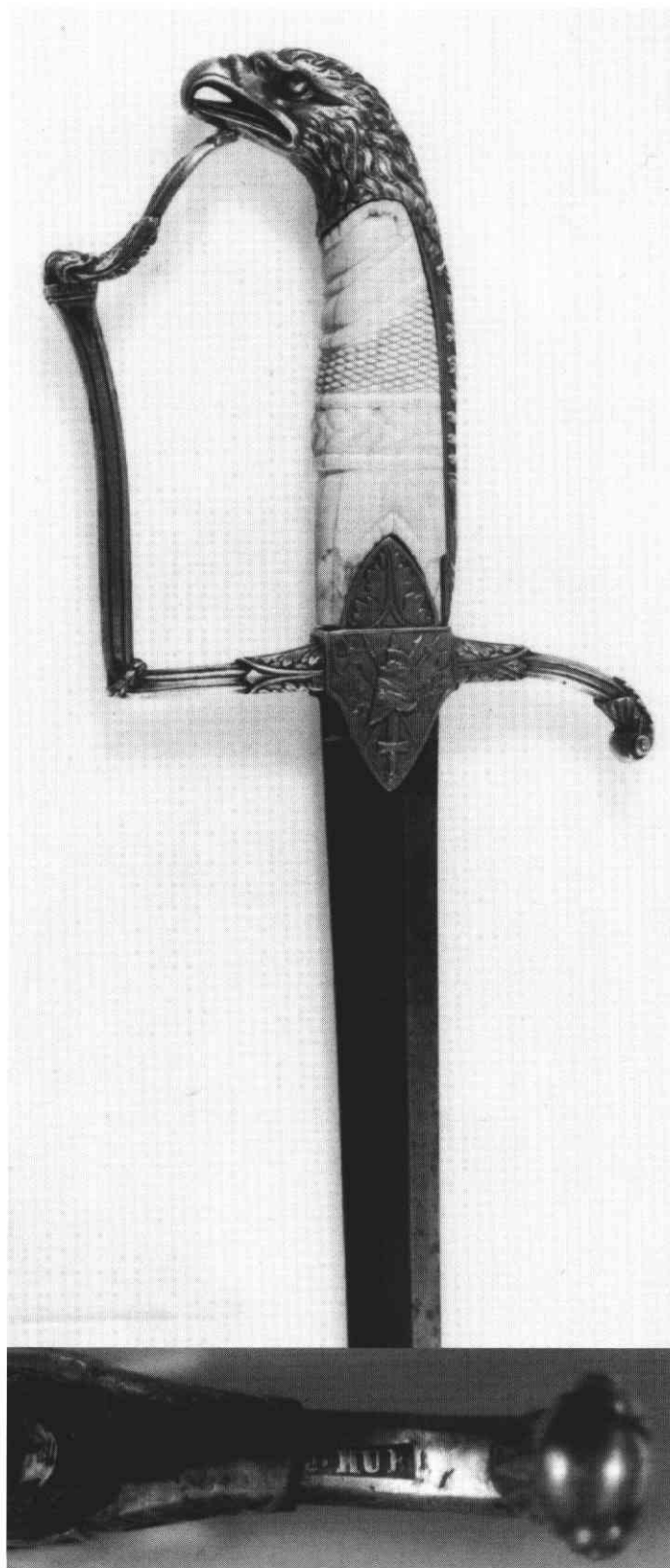
To understand Horstmann's actions we need to go back a bit and look at the development of Philadelphia's sword making capabilities. Through the nineteenth century, Philadelphia was a center of the America sword trade. We do not know where the Rose family learned how to make swords. They were Chester County farmers but, like the brass makers of Waterbury, they learned what would make them money, with or without foreign help. Their specialty was making blades only, leaving the hilding to others.

The Roses found a blade etcher named John Meer, and they were soon turning out a good enough product to have been mounted in many important 1812 era presentation swords. However, it was a cooperative enterprise with Rose supplying only the blades for others to decorate and mount.

Because the presentation broadside exists for the sword given by Gen. Gaines to Jonathan Goddard Watmough for service at Fort Eries in 1814, we learn a good deal about the early nineteenth century manufacture of presentation swords which is not readily apparent from the artifacts themselves.²¹

First, because the Watmough sword was not an official "thanks" by the government, but was privately presented, it was actually given in 1830 when there was an occasion requiring its manufacture, namely Watmough's successful campaign for Congress. Even the authorized Congressional and State presentations of swords and medals sometimes reached the recipient years after the events they commemorated.

In producing the Watmough sword, John Hub made and marked the silver hilt. What is not apparent is that Harvey Lewis designed the sword. Lewis was a famous



Sword presented to Jonathan Goddard Watmough by General Edmund Gaines for gallantry at Fort Erie in 1814. The sword was actually presented in 1830 to coincide with Watmough's campaign for Congress. The blade is signed Rose, the engraving is by John Meer and the silver hilt was made by John Hub. Nowhere does the sword say that it was actually designed by Harvey Lewis, a Philadelphia silversmith.

Hope Lodge (PHMC).



Pistol grip sword imported to the United States by A.W. Spies.

Author's collection.

Philadelphia silversmith.²² Similar to dislodging our illusions about Armitage designing our national iconography, we cannot credit Rose with the design and manufacture of great presentation swords. Rose made the blades, competently. Meer decorated those blades; a silversmith, J. Hub, made the hilt, and a designer, Lewis, whose name is usually not on the pieces anywhere, did the conceptual work. Apparently this was often the case. However, when we come to the great jewelry design houses of Fletcher & Gardiner and, later, F. Baily & Co., we can have some confidence that the name on the sword represents the designer as well as the manufacturer.

The Rose family was active primarily from the 1790s thru 1820. Their successors changed the basic competencies of the trade as practiced in Philadelphia. F.W. Widmann arrived from Germany in 1816 carrying only his tools. He could make rather showy specimens, but imported his blades from Germany. Unlike Rose, whose compe-

tencies were in the manufacture of blades, Widmann and his contemporaries never made a blade, but usually hilted Solingen products. Other Philadelphia swordmakers followed the same pattern, most especially Horstmann, whose blades were also German, and whose sword room had tools for making hilts and scabbards, but not for etching and grinding blades.²⁴

Through the first half of the nineteenth century, the manufacturer continued to compete with the importer. Large import houses dating from the 1820s continued to flourish, in some cases through the Civil War. Several of these houses merit our attention as examples of the trade and how it worked. Lewis & Tomes was a Birmingham/New York house, with Edward Lewis remaining in England and Francis Tomes arriving in New York in 1819. The firm imported all manner of military goods, including guns, swords, accoutrements, and buttons. According to the New York city directories, the firm broke up in the early 1830s, but at least one pair of post-1850 revolvers has been noted with the Lewis & Tomes mark, indicating that they still served an import trade. The successor firm in the United States was Miller & Tomes, and later Tomes, Melvain & Co., which carried the house through the Civil War. They went bankrupt in 1883.

One importer whom we meet in greater depth is Adam W. Spies. His relatives donated to the New York Historical Society a sample book of buttons which Spies had assembled in Birmingham before coming to the United States in 1827. We know that he was born in 1800, that he joined the firm of J.D. Wolfe after coming to America, and that he extensively imported arms as well as smaller articles such as buttons; in fact the arms portion of his trade soon overtook any other line of goods. He is thus known to us from having his name on items such as pistols and swords he imported.

Spies was joined in the arms import trade by many other individuals. The pistol on page 70/36, in attic condition, recently acquired by Bill Guthman, was imported by the great firm of Henry Young & Co. of New York. Dating to 1818, the Young firm was one of the largest houses of its day, becoming Young, Smith & Co., then Smith, Crane, and ultimately Shannon, Miller & Crane after 1866. Another spin-off was J. Rutsen Schuyler, the elder partner in Schuyler, Hartley & Graham, who got his start with the Young firm. The pistol itself dates about 1830-1833, if we follow the city directory sequence of the firm's evolution.

Another important veteran of the old importing houses was Marcellus Hartley. A biography of Hartley by J.W.H. was issued on Hartley's death in 1903.²³ Hartley began with Tomes, and managed its sporting goods department in St. Louis, Tomes apparently having a connection with

another importing firm, Henry Folsom, of that city. Folsom began with H.E. Dimick & Co., also in the arms trade. His R.G. Dun rating of Dec 13, 1879, states

...formerly imported the bulk of his goods, but for some time now has imported little...He came to St Louis as agent for Tomes of N.Y. (entry April 27 1860) & continued as such until a year past when he commenced on his own account...

Hartley stayed with Tomes until 1854, when he joined J. Rutsen Schuyler and Malcolm Graham in founding Schuyler, Hartley & Graham.

During the Civil War, Hartley used his talents to serve as Stanton's agent in Europe, competing for the purchase of arms with the Confederacy. He seems to have been commissioned Brigadier General to give him the necessary authority to negotiate. He also states that he made nothing on these transactions. He does not say what he made when the Europeans needed all their guns back in 1870. Suffice it to mention that Hartley could afford to found the Union Metallic Cartridge Co., and to buy the Remington Arms Co. When he died, Hartley was a very influential figure on Wall Street, meriting an obituary of several pages in the *New York Times*.

All this tells us several things about the merchants of New York in the arms trade. First, it seems that they knew each other and worked together when it was to their benefit. Second, younger generations of talented businessmen served apprenticeships in one of the houses and then perhaps went off on their own. It also helped to have a relative in the business. This mentoring function is not unique to New York. Horstmann served a similar role in Philadelphia for Evans & Hassall, as both members of the latter firm started out at Horstman, and for Henry V. Allien, who managed Horstmann's New York branch. Most importantly, the history of these firms shows a shift of emphasis away from import to a system of internal fabrication and distribution as the American economy strengthened. After all, merchants were merchants first and importers second.

Finally, we now need to turn to the system of internal distribution. Large merchants had to distribute their goods. They could simply sell them as packages upon arrival, or they could develop long-term business relationships with customer firms located in other cities and towns. In some cases they went so far as to set up a branch house in other locations, as did the Folsoms, Benjamin Kittredge, and others by the 1840s and 1850s. This practice became very common later in the century, when most large military goods dealers had branch stores. Stokes Kirk of Philadelphia had some 37 branches located all over the United States. They handled most of the government surplus Krag rifles, directly supplying the Alaska trade with them.²⁴

Like the merchants, manufacturers also needed to distribute their wares. Some prominent artisans had a national correspondence with their customers. Scraps of this activity have survived. Henry Cressman, a Philadelphia cap maker, wrote to such diverse customers as the State of Virginia, and to the First Light Infantry of Providence in the 1830s.²⁵ Cressman was doing a national business in manufacturing the somewhat hard-to-make bellcrown caps of the 1820s and early 1830s. He was displaced when an easier form of cap was adopted in the middle 1830s, and makers such as John B. Baker of Boston took over his trade.

Henry Storms and his sons Christian S. and Henry J. Storms represented another aspect of business. His R.G. Dun rating shows him as "always a politician" and therefore not a good business man. However, his politics did get him the post of Commissary General of New York state. His sons continued to run the business, presumably supplying what their father then approved.²⁶

Ethics in the last century were different than those of today. It was a normal part of business for makers to be members of militia companies. Often the West Point tailor continued his trade amongst the cadets he got to know while on post. Regular army officers tended to stick to houses which had a reputation for supplying them, regardless of where they were stationed. A series of letters from John Earle & Co. of Boston dating from the 1850s survive, which indicate that officers such as John B. McClellan, G.W. Slocum, Winfield Scott Hancock, and other well-known Civil War personalities were ordering from the Earle firm in Boston even though they were stationed all over the United States.²⁷

Another firm who traded with the regular Army was Charles St. John of New York, whose 1830s caps enjoyed a wide distribution. John Smith Fraser, whose brother appears to have been a well respected cadet at West Point, certainly started his tailoring business on that post and then moved to New York.²⁸ He also made the standard samples for the U.S. Army engineer clothing of the 1840s. The Dingeess, also of New York, made regular Army accoutrements on contact during much of the first half of the nineteenth century. They also made leather equipment for the militia when not otherwise occupied by Federal contracts.

Anson Mills has a unique story. Born into a poor family in Indiana, he learned the weaving trade as a child. Unlike almost any other artisan, he attended West Point. During his subsequent Army career he worked on his own with the Russell Manufacturing Company of Middletown, Connecticut, to devise a belt with cartridge loops integrally woven into the belt itself. Continuing his Army career and leaving the subsequent business of the Mills Woven

Cartridge Belt Company to his brother-in-law, T.C. Orndorff, who received a small percentage for his efforts, Mills proceeded to become what was believed at the time to be the richest officer in the U S Army.²⁹

As a final point, we may note that the trade managed to make money not only by supplying the troops but also by redistributing used merchandise. As far back as the 1830s, Cressman negotiated to take in trade old hats which he could then resell. Some dealers clearly specialized in buying old muskets and shipping them to other countries, though none as successfully as Marcellus Hartley, who may have purchased arms for the Union as a public service, but made a fortune selling them back to Europe five years later for the next unpleasantness.

However, there were such quantities of surplus after the Civil War that beginning in the 1880s a whole new class of dealer arose, specializing only in buying used goods and reselling them. Francis Bannerman, a Scottish ship chandler from Brooklyn, was perhaps the most successful of these. He was far from alone. The Stokes Kirk firm of Philadelphia was also hugely successful. Other companies are far less famous. They join more than 3,000 individuals and companies identified in the military goods manufacturing, dealing, and importing business from the Revolution to World War I.

FOOTNOTES

¹ Undated and unmarked hardware catalog in Winterthur Museum library collections.

² Brown, M.L.: *Firearms in Colonial America* (D.C.: Smithsonian Press, 1980), pp. 244, 272.

³ Smith, Merritt Roe: *Harpers Ferry Armory and the New Technology* (Ithaca: Cornell University Press, 1977). See chapters on the Hall rifle works, pp. 184-251.

⁴ *1820 Manufacturers Census of the United States*. Pennsylvania. Philadelphia County. Entry 659.

⁵ *Ibid.* Northampton County. Bushkill Township Entry 1060, J. Joseph & William Henry. Massachusetts. Berkshire County. Pittsfield Entry 120, Lemuel Pomeroy.

⁶ *Ibid.* Connecticut. New Haven Entry 63, Eli Whitney.

⁷ *Ibid.* Connecticut. Middletown. Entry 213, Nathan Starr.

^{7a} Interview noted in the bibliography.

⁸ Daniel Parker Papers. Manuscripts Library. Historical Society of Pennsylvania.

⁹ Cutts, Mary Pepperell Sparhawk: *The Life and Times of Hon. William Jarvis of Wethersfield, Vermont*. (New York: Hurd and Houghton, 1869), pp. 160-161.

¹⁰ Brown, John Brewer: *Sword and Firearm Collection of the Society of the Cincinnati*. (D.C.: Society of the Cincinnati, 1965), pp. 49-56.

¹¹ *The Atlas* (Boston), November 11, 1840.

¹² *Columbian Centenal*, May 4, 1825, p. 4, col. 3.

¹³ The cap is accompanied by an 1830 bill to Ensign Joel Sawyer of the Bolton Light Infantry. The cap is also labeled to the Low Firm. The piece was in the Bolton Historical Society but has been stolen. Bolton, Massachusetts.

¹⁴ Walker, John: *The Sword and Bayonet Makers of Imperial Germany*. (Sussex: Lyon Press, 1966). See Introduction, "Solingen and its Rise" (unpaginated).

¹⁵ Margerand, J.: "Les Coiffures de l'Armee Francaise". *Revue Mensuelle Illustree* (1909-1924), vol. 2, p. 63.

¹⁶ Armitage to Tench Cox. US Army Quartermaster General Consolidated Correspondence File RG92 USNA. May 13, 1805.

¹⁷ *Claypoole's American Daily Advertiser* (Philadelphia), June 11, 1799. p. 3, col. 4.

¹⁸ *One Hundred Years 1816-1916 the Chronicles of an Old Business House in the City of Philadelphia*. William H. Horstmann Company (Philadelphia: J. B. Lippincott, 1916).

¹⁹ Machinist Book (1842-1875). Horstmann/Lippincott papers. Historical Society of Pennsylvania.

²⁰ Scrapbooks, Horstmann/Lippincott Papers. Historical Society of Pennsylvania (unpaginated).

²¹ Broadside describing presentation of the sword by Gen. Gaines to Johnathan Goddard Watmough in 1830. Witmough papers, Historical Society of Pennsylvania.

²² *Op. cit.* Entry for Horstmann's purchase of Widmann's presses and tools, 1848.

²³ J.W.H.: *Marcellus Hartley A Brief Memoir*. (Privately printed, 1903), pp. 51, 52, 56.

²⁴ R. Graham Dun paper. Baker Library, Harvard University School of Business Administration. New York vol. 316 p. 166, P200 N/275. Entry 12/13/1879 states that Charles Folsom had formerly imported the bulk of his goods but (recently has imported) little or none. "Deals mainly in American Goods, which he buys in the market..."

²⁵ Letters of Henry Cressman. Virginia State Library Reports—Superintendent of the Armory and Commandant of the Public Guard. Box 2 (1836-46). Cressman to Bolling 6 Feb. 1838, 29 Oct. 1836-1846. Letter of Blair Bolling 6 Feb. 1838. Cressman to Bolling 7/12/1828. (Providence) Cressman to William Brown 11/8/1832. Baker to William Brown 11/8/1832. Brown letter 11/8/1832. William Cressman to Brown 7/24/1835, William Cressman 8/18/1836. Among S.K. Brown Collection. John Hay Library, Brown University.

²⁶ *Ibid.* New York, vol. 316 a p. 147 11/22/33.

²⁷ Earle, John. Papers in the New-York Historical Society consist of a small number of letters to well-known officers dated from the late 1840s and 1850s.

²⁸ Samples for Engineer insignia submitted as standard samples by Fraser in the mid-1840s. Other "inclusions" have disappeared. The samples are with RG-77 in the National Archives.

²⁹ Mills, Anson: *My Story* (D.C.: Byron Adams, 1921), pp. 24, 310-327.

BIBLIOGRAPHY

Published Materials

- Brown, M.L.: *Firearms in Colonial America* (D.C.: Smithsonian Press, 1980) 450PP.
- Brown, John Brewer: *Sword and Firearms Collections of the Society of the Cincinnati* (D.C.: Society of the Cincinnati, 1965) 120PP.
- Cutts, Mary Pepperell Sparhawk: *The Life and Times of Hon. William Jarvis of Weathersfield, Vermont* (New York: Hurd and Houghton, 1869)
- J.W.H.: *Marcellus Hartley A Brief Memoir* (Privately Printed, 1903) 363PP.
- Mills,, Anson: *My Story* (D.C.: B. Adams, 1921) 431PP.
- One Hundred Years 1816-1916 the Chronicles of an Old Business House in the City of Philadelphia William H Horstmann Company* (Philadelphia: J.B. Lippincott, 1916) 54PP.
- Rock, Howard B: *Artisans of the New Republic* (New York: New York University, 1984) 340PP.
- Smith, Merritt Roe: *Harpers Ferry Armory and the New Technology* (Ithaca: Cornell University Press, 1977) 363PP.
- Walker, John: *The Sword and Bayonet Makers of Imperial Germany* (Sussex: Lyon Press, 1966).

MANUSCRIPTS

- Returns. Fourth Census of the United States. 1820. Manufacturers Census. Pennsylvania, Connecticut.
- Daniel Parker Papers. Historical Society of Pennsylvania. LePage Invoice, 1814.
- United States National Archives RG 92 Special Inventory #225 US Army Quartermaster General Consolidated Correspondence File, Letters Received 1794-1890. RG-77, Engineer Department Papers.
- Horstmann/Lippincott Papers. Historical Society of Pennsylvania.
- Watmough Papers, Historical Society of Pennsylvania. Includes the few surviving Horstmann business records. Cites are the Machine Book

(c1842-1875) and scrap book (c1840-1890).

R. Graham Dun Papers. Harvard University School of Business Administration. Baker Library. Includes manuscript of ledgers of business entries ca 1840-1885 organized nationally by county.

Watmough Papers. Historical Society of Pennsylvania. Includes broadside and other material on Jonathan Goddard Watmough's service and sword presentation by MG. Gaines in 1830.

Newspapers

- Claypoole's American Daily Advertiser* (Philadelphia) June 11, 1799.
- The Atlas* (Boston) November 11, 1840.
- Columbian Centenal* (Boston) May 4, 1825.

Interviews

Interview with Mr. Edward H. Davis, Scovill historian, 1971. Mr. Davis spent his entire career with Scovill and died a few years after this interview, well into his nineties. He saved Scovill's manuscript records which are now at the Baker Library, Harvard University School of Business Administration.

Interview with Dr. Phillip Bishop. Division of Industrial History. National Museum of American History. Dr. Bishop was an authority on the brass industry and wrote several manuscripts on the brass trade based upon the Scovill papers, among other sources.

Interviews with E. Andrew Mowbray, Publisher of *Man at Arms* Magazine and author of such works as the *American Eagle Pommel Sword*. Specifically, Mr. Mowbray commented on the quality of Starr's later work, putting Starr's claims of unfair competition in the 1820 census into context. We also discussed the ca 1802 Naval officer's sword which was imported from Britain and how grips of that quality were beyond what the English could make at the time and the lack of any bluing or device on the blade probably reflected British uncertainty as to proper devices for an American naval sword.



Adam W. Spies put together this card as part of his samples just before he moved to New York c 1828
New-York Historical Society collection.