# Early Swords and Sabers of the Armory at Springfield

Burton Kellerstedt

The "National Armory" at Springfield, Massachusetts, or the "Springfield Armory" as it was called after 1891, is not generally associated with swords or sabers, since it is primarily known for its long arms. However, for 120 years it also was involved with the design and manufacture of swords and sabers for the U.S. Army.

The Armory's first sword blade was made in 1808 and its last saber in 1928; it was most active in producing edged weapons during the Indian War period and during World War I. The most common Springfield Armory sword is the Model 1913 Cavalry Saber, or, as it is most often called, the "Patton" saber, in honor of its designer, Lt. General George S. Patton, Jr. More than 35,000 of these sabers were made during the World War I period.

The quality of the edged weapons made at Springfield is excellent when they are compared to commercially-made foreign or American swords and sabers of the period. The Springfield edged weapons are prized today by collectors and are relatively rare.

### The Swords Made at Springfield

The Armory's production records show that it made the following swords and sabers:

- "Horsemans sword," circa 1808-1812.
- Model 1872 Cadet Swords, from 1867 to 1920.
- Model 1860 Staff and Field Officers sword, from 1873 to 1903.
- General Officers Swords, from 1873 to 1902.
- Model 1872 Cavalry Officers Saber, from 1873 to 1902.
- Model 1872 Mounted Artillery Officers Saber, from 1883 to 1902.
- Model 1902 Officers Saber, from 1903 to 1914.
- Experimental Sabers for Mounted and Foot Troops, in 1905 and 1906.
- Experimental Cavalry Sabers, in 1911.
- Model 1913 Cavalry Swords/Sabers, from 1913 to 1918.
- Miscellaneous Fencing Swords, Sabers and Foils, from 1903 to 1924.
- Experimental Model 1925 Cavalry Saber, the last saber designed and made at the Springfield Armory, in 1928.

Copyright 1988 by Burton A. Kellerstedt. This is a preview of a monograph to be published by Mr. Kellerstedt in the near future. If anyone can add material to it, or has specimens that might be included, write him at 24 Euston St., New Britain, Conn. 06053.



This article discusses the swords and sabers produced at the Armory up to the M1902 Officers Saber. Thus it covers the early production period at the Armory and is based on a summary of material presently being prepared for a monograph on the edged weapons produced at the Springfield Armory. Additional detail is provided in the monograph, which will cover the complete period of edged weapon production.

All production figures are for the Armory's fiscal year from July 1 to June 30, instead of a calendar year. The information and descriptions used here come from the U.S. Government documents and publications quoted in this article and are also based on examination of specimens.

### Horseman's Sword, circa 1808-1812

The National Armory at Springfield, Massachusetts, began its manufacturing operations in 1795; it produced 245 muskets that year. By the year 1808 it had produced over 20,000 muskets and had also attracted many good artisans and smiths to the Springfield area.

In a letter dated October 26, 1807, Henry Dearborn of the War Department asked Benjamin Prescott and James Stubblefield of the National Armory if they could employ additional men to manufacture pistols and "horseman's swords."

On November 7, 1807, Prescott replied that pistols and swords could be made at Springfield.

A letter dated November 17, 1807, from Dearborn to Prescott directs: "You will also make some Horsemans Swords, with strong hilts, the blades as per (the) drawing herewith enclosed." Unfortunately, this drawing now cannot be located.

The monthly returns of work at the upper water shops at the Armory dated February through May, 1808, show that Joseph Lumbard Jr. drew sword blades and that Nathan M. Wood ground sword blades.

A letter dated June 24, 1808, from Henry Dearborn to Benjamin Prescott stated: "The sword received has a good temper, stands proof very well excepting the rivet which secures the blade to the hilt. This rivet is not sufficiently strong: it gave way in two or three strokes I struck on a hard oak log. The blade is considerably too heavy towards the point and about an inch too long. If the blade could be hollowed on the sides like the one Mr. Byers will deliver you, it would be much lighter & handsomer. The hilt is a very good one."

It is not known if the Armory completed any additional swords of this type. No further information has been found to show the assembly of Springfield-made swords during this period other than the one sent to Henry Dearborn.

Further references to sword blades made at the Armory are found in letters from the Commissary General's Office in Philadelphia. One dated September 10, 1812, from Callender Irvine to William Duncan, Superintendent of Military Stores, Philadelphia, says: "There are 500 sword blades, said to be of good form and temper, at the Springfield Armory. I suggest the propriety of your ordering them to this place and I will have them mounted. They are Cavalry blades."

A similar letter from Irvine to Duncan dated September 26, 1812, comments: "The difficulty of procuring sabers of a proper kind and in a reasonable time, will render it necessary to have scabbards made for those you speak of at the Arsenal. I will take measures to have them provided as early as practicable."

Another Irvine to Duncan letter dated November 27, 1812, states: "I have instructed Mr. M.T. Wickham to select all of the sabers in store worth putting on new scabbards and mountings and have immediately put into the hands of the workmen."

The last reference found concerning early swords at Springfield is in a letter dated February 27, 1817, from the U.S. Armory Superintendent Roswell Lee to Col. Wadsworth: "... This, with the exception of a few unfinished sword blades & mountings (& some parts I have reserved for repairing muskets if wanted at the Arsenal) would clear off most of our old refuse work."

These letters and the Watershop monthly returns show that the National Armory at Springfield was in the sword business in the 1808-1812 period. To date, however, no edged weapons of that period have been found that can definitely be attributed to the Armory. It is not known if Springfield marked the blades they made. The blades could have been marked on the tang, which would be hidden after hilting. No doubt one of these horsemans' sabers will be

identified some day, to confirm that the National Armory did indeed make sabers in the 1808 period.

#### The Model 1872 Cadet Sword

The cadet sword manufactured by the National Armory in Springfield was developed there in 1867. The following two letters are the only information found on the development of this sword. OCO in the reference refers to the Office, Chief of Ordnance and OO to Ordnance Office.

### Benton to Dyer<sup>1</sup>

Springfield, Mass. July 26/67

Genl. A. B. Dyer Chief of Ordnance Washington, D.C.

Sir:

Agreeably to your instructions I send to your address a box containing a specimen sword for the use of the Corps of Cadets.

The blade, and handle with the exception of the cross piece & eagle on the knob, belong to the regulation musicians sword. The scabbard is of steel & was made by Mr. Ames.

The handle and scabbard are silver plated at your direction, but I think it would be an improvement to gold plate, or electrotype with gold the knob & cross piece of the handle & the mountings of the scabbard.

I have prepared but one specimen, or length of blade, preferring to wait until you have decided what style of ornament to adopt before making another.

Your Obt. Servt.

J. G. Benton Bvt. Col. Comg.

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### Benton to Dyer<sup>2</sup>

National Armory Springfield, Mass. 16 October 1867

Sir:

I sent to your address by yesterday's Express a box containing a sample Cadet Sword.

Agreeably to your instructions I have made it conform more nearly to the present staff sword than to the musicians sword — the one first sent to you.

<sup>1</sup>OCO Special File, 1812-1912; Construction Div, Letters Received, 1863-1870, 1-S-295, RG 156. (Per endorsement, received in 00 29 July 1867.)

<sup>2</sup>ibid., 1-S-305. (Per endorsements, received in 00 18 Oct. 1867, and answered same day. There is a pencilled note in Dyer's hand, "Ask Col. B.. to furnish Estimate of the cost of fifty swords like sample.")

Should this pattern be approved and a number be required for the Corps of Cadets, I believe that they can be made at this Armory as well and as cheaply as they can be made elsewhere. The one sent to you was made entirely by our workmen.

Your Obt. Servt. . . .

P.S. The color of the gilding may be improved by making it correspond to that on the staff sword.

Armory production records show that 353 Cadet Swords were manufactured between 1868 and 1920. Yearly production records for this model and the others discussed in this article are presented in Table 1. These figures have been extracted from a variety of sources which are summarized at the end of this article.

Most of the Springfield Cadet Swords seen have been heavily polished, making it difficult to read the blade markings; they were marked: "U.S. Armory Springfield" as shown in Figure 1. The scabbards are unmarked except for those made when Samuel W. Porter was Master Armorer from 1879 to 1894: these had "S. W. P." on the drag.



FIGURE 1. Blade marking on Springfield Armory Model 1872 Cadet Sword.

One official description of the Cadet Sword, in *Ordnance Memoranda No. 22*, printed in 1878, is given below:

#### **CADET SWORD**

(Plate XXXV., Fig. 2)

Blade.—Straight, two edges, with an arris in the middle between the edges; the blade is highly polished, but not etched; is 28.7 inches long, or 2.4 inches shorter than the staff and line officer's sword; has a thread cut on the end of the tang, to screw into the pommel.

Stamped with the letters U.S.; date and place of manufacture, on the side near the hilt.

 $\ensuremath{\textit{Hilt}}$  (bronze).—Chased with eagles, heads, and coiled serpents, and gilded.

Shoulders for the blade and gripe.

Mortise, for the tang of the blade; M. A. in old English letters on the side.

*Gripe* (bronze).—Etched in imitation of wire, wrapped spirally, and ornamented at each end; nickel-plated.

Shoulder for the pommel and hilt.

Hole for the tang of the blade.

Pommel (bronze)—Etched with an eagle's head on each side.

*Scroll* with hole for sword-knot; hole; tapped to receive the tang of the blade, which screws into it and is sweat on with soft solder to prevent it getting loose.

Scabbard (sheet steel).

Body.-Nickel-plated; 2 holes, drilled and tapped for screws.

Ferrule and hook-tip (bronze, gilded).

Hole for screw.

Tip (bronze, gilded); hole for screw.

Mouth-piece (bronze, gilded)

Interior lining (seasoned bass-word).

For many years it was assumed by many sword collectors that the 36 Cadet Swords produced in 1868 were

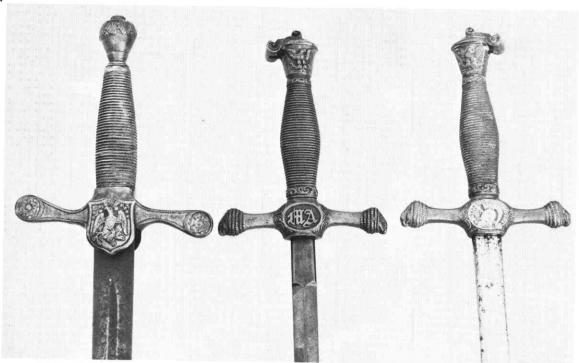


FIGURE 2. Three cadet sword models: Left: First Model, unsigned but with "J.H." and "R.H.K.W." inspector's marks. Center: Second Model, Springfield Armory. Right: Third Model signed "Horsemann." (Collection of Joseph J. Wupperfeld)

of the 1850 pattern. A few unmarked Cadet Swords of this pattern, the left sword in Figure 2, have been attributed to Springfield. The two letters dated 1867 disprove this theory, however. Based on the inspector's marks, these swords probably were made by Ames.

The Second Model Cadet Sword, Figure 2, center, was produced at Springfield and was officially adopted in 1872. It was used through 1923, when it was replaced by a similar sword, Figure 3, right, that had the seal of the Academy on it instead of the "M A." This third cadet sword was not produced by the Springfield Armory.

## Staff and Field Officers Sword, Model 1860

This sword, Figure 3, was adopted on August 28, 1860, but was not made mandatory until 1872. It was meant for all officers except Mounted Infantry, Cavalry, Light Artillery, Medical Staff Officers and Pay Masters. The description of this sword is given in the 1878 printing of *Ordnance Memoranda No. 22*:

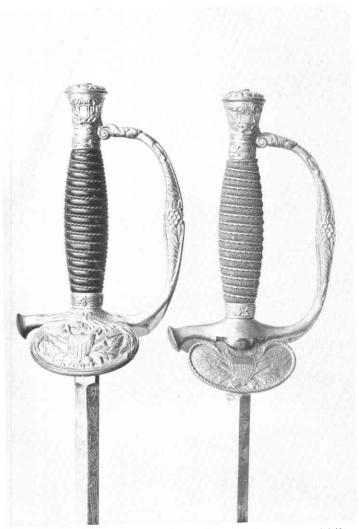


FIGURE 3. Model 1860 Staff and Field Officers Sword hilts: Left: Smooth leather grip, circa 1880s. Right: Sharkskin grip and folding guard, circa 1873.

### STAFF AND LINE OFFICER'S SWORD.

(Plate XXXIII., Fig. 2)

Blade.—Straight, two edges, with an arris in the middle between the edges; etched, gun and shield, colors, scroll, eagle; scroll on the left side.

Gun, colors, and shield, scroll, U.S., scroll, on the right-hand side of the blade.

Hilt (bronze chased and gilded).

Pommel.—An inverted frustum of a cone, with an eagle chased on one side.

Guard—Principal branch, chased, mortise for the sword-knot, shoulder for the lower ferrule, fixed shell, bearing an eagle and flags, chased; movable shell, plain shield, cross cannon, & c.

Button. - For the spring; cross-bar.

*Gripe*—(black walnut), with grooves, wrapped spirally with gold cord; two *ferrules*, chased.

Scabbard (sheet steel).

Body (nickel plated or browned); 4 holes, drilled and tapped for screws.

Two bands and rings (bronze, gilded, and chased); 2 screws (bronze and gilded).

Tip (bronze, gilded, and chased); tip-screw (brass and gilded). Mouth-piece (bronze and gilded); screw (bronze and gilded) Interior lining (seasoned bass-wood).

This sword is referred to in Armory production records in three different ways: at various times it is called "Staff and Line Officers Sword," "Staff and Field Officers Sword," and "Foot and Staff Officers Sword."

The National Armory first produced this sword in 1873 and made the last of them in 1903; a total of 5364 were manufactured. Yearly production figures are shown in Table I.

The 1501 swords made in 1873 differed from later versions in that the guards were hinged on the reverse side and the blades were marked "G.G.S." for inspector George G. Saunders. These swords were issued with two scabbards, one nickel plated and the other "browned." Springfield Armory M1860 swords have three different markings: "U.S.Armory Springfield, Mass.," "National Armory" and "Springfield Armory Springfield, Mass U.S.A."

Blade etching varies quite a bit from sword to sword on the early blades, but is identical on later swords of this model. Figure 4 shows a proof made from a copper plate which the Armory used to make the masks for blade etching on M1860 swords circa 1879-83. Five different styles of blade etchings are shown in Figures 5 through 9, with the approximate period of manufacture. The early blades look as though they were individually etched by hand, while later blades appear to have been etched using a printing process. The length of the etched panel varies from 12 inches to 18½ inches; the early blades had the shorter panels. All blades are of the same length, 31½ inches. The grips are covered with sharkskin, except for some swords

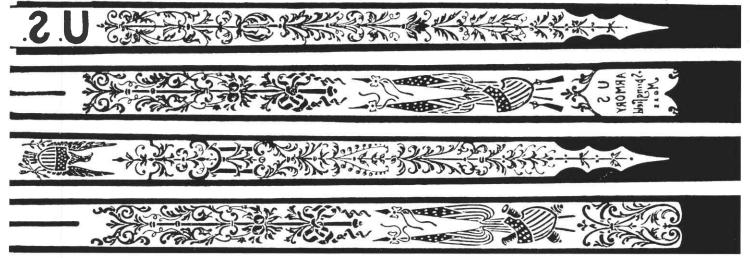


FIGURE 4. Proof made from copper plate used to produce an etching mask for the Staff and Field Officers Sword. (Collection of Peter A. DeRose)

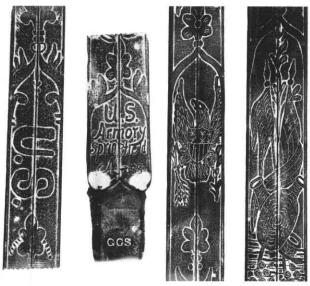


FIGURE 5. M1860 Staff and Field Officers Sword blade markings, circa 1873. (Inspected by G.G. Saunders)



FIGURE 6. M1860 S&F blade markings circa 1879.

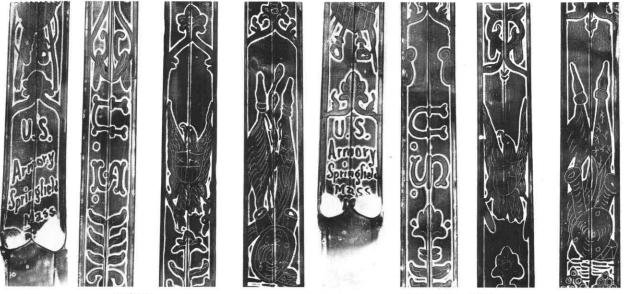


FIGURE 7. Two different M1860 S&F blade markings, circa 1880s.



FIGURE 8. Two blade marking variations on the M1860 S&F sword with the "National Armory" signature, circa 1880s.

produced in the mid-1880s: these have a smooth black leather grip with a glossy finish (Figure 3). All were wrapped with twisted gilded brass wire. The browned scabbards were discontinued in the early 1880s and only nickelled ones were produced thereafter. The scabbards are unmarked except for those made when Samual W. Porter was Master Armorer: these are marked "S.W.P." on the drag (Figure 10). There are two different designs on the scabbard bands, shown in Figure 11.

FIGURE 10. "S.W.P." inspector's mark on the scabbard drag on a M1860 S&F Officers sword.



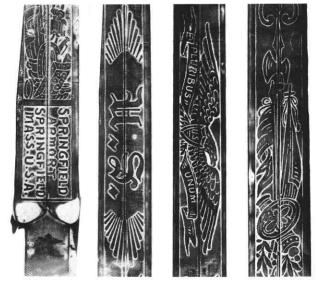


FIGURE 9. M1860 S&F blade marking circa 1892-1903.

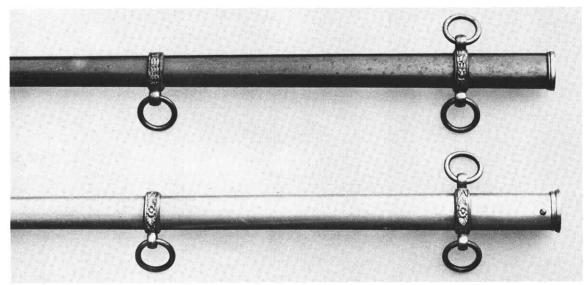


FIGURE 11. M1860 Staff and Field Officers Sword scabbard variations: Upper: Early "browned" scabbard with first type of bands, circa 1873. Lower: Later nickeled scabbard with second type bands.

The only variant of the M1860 sword discovered is the one produced in 1891 with a whistle in the guard . . . and only one of these was made at Springfield! It is shown in Figure 12. The 1892 *Report of the Chief of Ordnance* states, on page 36, "At the suggestion of Capt. H.O.S. Heistand, Eleventh Infantry, and on the recommendation of the Major General Commanding the Army, a sword with a whistle has been made for experimental purposes and issued for trial."

To date no Springfield-made Staff and Field Officers sword is known that has a person's name etched on the blade.

This model was used until it was replaced by the Model 1902 Officers Saber that was adopted in July, 1902.

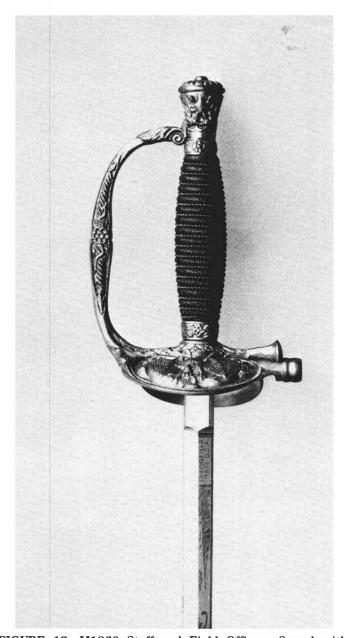


FIGURE 12. M1860 Staff and Field Officers Sword with whistle. One of these swords was produced in 1891 for "experimental purposes."

#### The General Officers Sword

The General Officers Sword is not often seen, since the records indicate that only 20 were produced from 1873 to 1902. Only two have been located by the author to date.

The General Officers Sword, Figure 13, is similar to the Model 1860 Staff and Field Officers Sword except for the silver grip and long scabbard drag like those used on the Cadet Swords. The scabbard also has stars placed between the bands which correspond to the rank of the general receiving the sword.

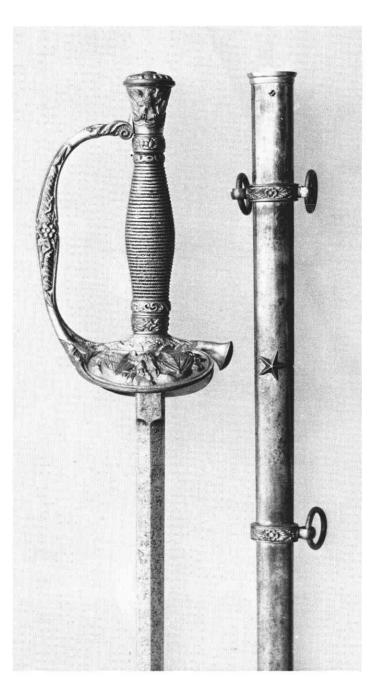


FIGURE 13. General Officers Sword made for Brig. Gen. Stephen V. Benet, Chief of Ordinance.

### 1872 Cavalry Officers Saber

In 1872 a new light cavalry saber was adopted and made mandatory for all Cavalry officers. Springfield made a "sample saber" in 1873 and three "model" sabers in 1874 which were submitted to the Board on Cavalry Equipment. The Boards recommendation from page 313 in the 1874 Annual Report of the Chief of Ordnance is:

#### CAVALRY OFFICERS SABERS.

In accordance with the request of the Chief of Ordnance, expressed in letter of December 24, 1873, the board proceeded to examine the samples of cavalry officers sabers submitted to it, and, upon consideration, decided to recommend the manufacture of the sample marked "Saber No. 1," altered as follows: to have tip of scabbard similar to that on Saber No. 2, and the weight of the hilt reduced as much as possible.

A letter was written to the Chief of Ordnance, notifying him of this action.

Two more "sample" Cavalry Officers Sabers were made in 1876 before production started. A total of 1976 were made through 1902; see Table I.

The saber is described in the *Ordnance Memoranda* No. 22:

#### CAVALRY OFFICERS SABER.

*Blade.*—Shoulder, back, edge, bevel, point, curvature, large groove, small groove; tang, riveting.

*Hilt.*—Pommel (brass), notch for the guard, back, rivet-cap, hole for the tang of the blade; gripe, wooden body (birch or maple), leather covering (calf-skin blackened), wires (brass), notch for the guard, ridges, shoulder, hole for the tang of the blade.

*Guard*.—Front branch, hook; back branch; middle branch; plate, mortise for the tang, flange, bead, lip.

*Scabbard* (sheet steel).—Body, back, front, sides, holes for the rivets; mouth-piece, rim, springs, rivet-holes; 2 rivets; 2 bands, knob, eye for the ring; 2 rings; tip, front branch, back branch

The *mountings* are of bronze metal, chased, ornamented, and gilded Blade is etched.

Scabbard is nickel-plated.

The description given in the 1878 Ordnance Memoranda indicates that blackened calf skin was to be used for the grips; however, the majority of the Springfield-made Cavalry Officers Sabers have shark skin grips; very few have blackened leather. The blades are 34 inches in length. Blade etchings vary considerably on the sabers examined: five varieties are shown in Figure 15-19. The etching panels are from 15½ to 18½ inches in length. There are three different blade markings: "U.S. Armory Springfield, Mass," "National Armory," and "Springfield Armory Springfield, Mass U.S.A." There are four different styles of "U.S." on the blades. A saber with the "National Armory" signature has a "S.W.P." inspector's mark on the reverse side of the knuckle bow, and again the scabbards produced during Samual Porter's tenure have "S.W.P." on the drags.

There is a variant of the Springfield Model 1872 cavalry saber which is about 1/8 pound heavier, and the blade is ground differently. Both models are shown in Figure 20. The blade of the variant has a broad, stopped fuller, while the standard version has an unstopped fuller. Both blades are 34 inches long and have a maximum thickness of 0.296 inches. The larger size of the complete hilt of the variant is evident in the figure.

Some Ordnance Reports refer to these sabers as "Cavalry and Field Officers Sabers." This model was produced until replaced by the Model 1902 Officers Saber.















FIGURE 15. Blade markings on "heavy" variant of M1872 Cavalry Officers Saber, circa 1876.

FIGURE 16. M1872 Cavalry Saber early blade markings, circa 1880.



FIGURE 17. Scarce "National Armory" markings on the M1872 Cavalry Saber, circa 1980s. Note "S.W.P." mark on knuckle bow.

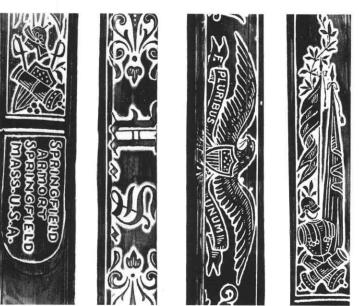


FIGURE 19. M1872 Cavalry Saber blade markings, circa 1900 to 1902.

### References

Sources of information on edged weapon production at the Springfield Armory are not plentiful. Government records have been used as much as possible and the primary sources of information include:

The Annual Reports of the Chief of Ordnance from 1868 to 1920. Quarterly Reports of the U.S. Armory at Springfield, Massachusetts. Annual Reports of the U.S. Armory.

Statements of the Principal Operations at Springfield Armory Congressional documents to the Senate and House of Representatives. Ordnance Department correspondence in the National Archives, Record Group 156.

Smithsonian Institute, U.S. National Museum Bulletin No. 163 Ordnance Memoranda No. 22. 1878, G.P.O.

Manufactures at the National Armory 1872-1877. Senate Ex. Document No. 16, January 4, 1879.



FIGURE 18. M1872 Cavalry Saber blade markings, circa 1890.

### 1872 Mounted Artillery Officers Saber

The Mounted Artillery Officers Saber, Figure 21, was adopted in 1872 but, except for one sample in 1873, Springfield did not produce any until 1883 (see Table I). A total of 902 were made at the Armory; production records call this model both the "Light Artillery Officers Saber" and the "Artillery Officers Saber."

The Springfield-made Artillery sabers are hard to identify, since they were not marked except during the time when Porter was Master Armorer: these again have the "S.W.P." on the drag of the scabbard. This is a very plain saber with no embellishment other than gold on the hilt. The 32 inch blade is deeply curved, with a 25½ inch fuller starting 6 inches from the point. The hilt has a "P" shaped knuckle bow and a quillon that ends in a round disc. The grip is generally covered with sharkskin and is wrapped with twisted gilded wire. The scabbard is nickelplated steel, and its two plain bands, the plain drag and the throat are goldplated. The only variation of this model are a few with black leather grips.

(Turn page for illustrations)

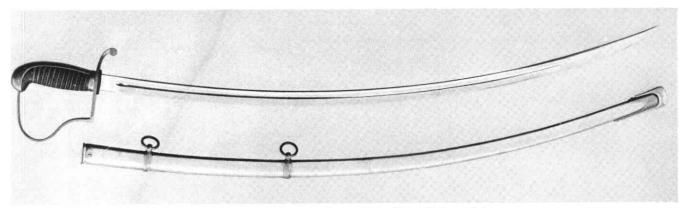


FIGURE 21. Model 1872 Mounted Artillery Officers Saber.

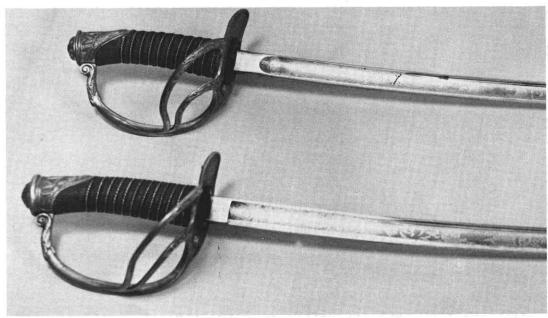


FIGURE 20. Model 1872 Cavalry Officers Saber variations: Bottom: Heavy variant hilt. Top: Standard model hilt.

TABLE I
Springfield Armory Sword & Saber Production

M-1872 Cadet Sword	M-1860 Staff & Field Officers Sword	General Officers Sword	M-1872 Cavalry Officers Saber	M-1872 Mounted Artillery Officers Saber
1868 - 36 1874 - 25 1876 - 28 1880 - 14 1882 - 50 1893 - 50 1914 - 50 1920 - 100 Total 353	1873 - 1501 1876 - 102* 1879 - 200 1880 - 5 1883 - 100 1884 - 250 1885 - 500 1886 - 2 1889 - 325 1890 - 175 1891 - 1 1892 - 1000 1893 - 3 1900 - 500 1901 - 100 1902 - 550 1903 - 50  Total 5364	1873 - 2 1875 - 2 1884 - 1 1885 - 1 1888 - 3 1890 - 2 1895 - 1 1900 - 2 1902 - 6 Total 20	1873 - 1 1874 - 3 1876 - 102* 1880 - 103 1881 - 100 1884 - 1 1886 - 154 1887 - 100 1889 - 1 1890 - 500 1900 - 301 1901 - 310 1902 - 300 Total 1976	1873 - 1 1883 - 51 1886 - 50 1889 - 50 1891 - 150 1900 - 200 1901 - 200 1902 - 200 Total 902

<sup>\*</sup>Found in different records but may be same items. One listing called them Officers Swords, the other called them Cavalry & Field Officers Sabers.