Weapons and Equipment *of* Early American Soldiers

NATIONAL PARK SERVICE POPULAR STUDY SERIES

HISTORY No. 2

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Weapons and Equipment *of* Early American Soldiers

UNITED STATES DEPARTMENT OF THE INTERIOR, HAROLD L. ICKES, *Secretary*

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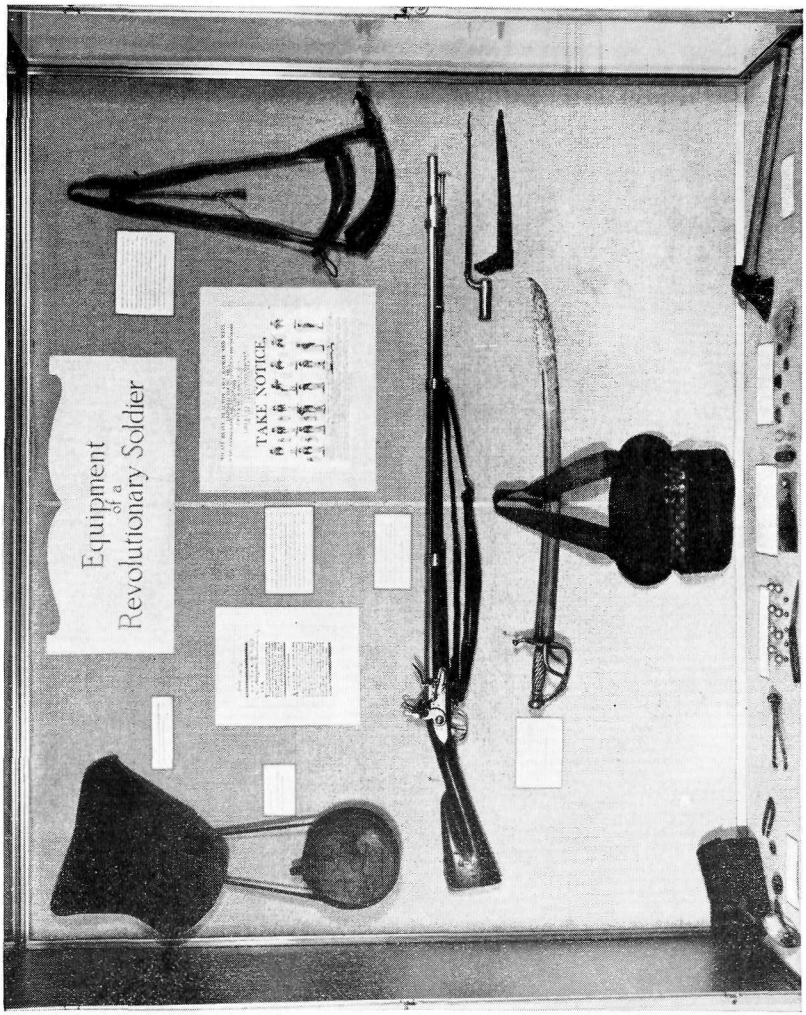

This collection of equipment of the American soldier of the Revolutionary War includes a 1763 model Charleville musket, the regulation weapon of the French Army, with which most troops of the Continental Army were equipped by 1779. Felt hat, wooden canteen, powder horns, and ax are among the other items in the case

Equipment of the Soldier During the American Revolution[1]

By Alfred F. Hopkins, Field Curator
National Park Service

HOW did the soldier of the American Revolution keep his powder dry? What kind of musket and how many bullets did he carry? What other weapons and accouterments were included in the equipment of the fighting man?

These questions, which arouse a renewed interest today because the wars in Europe have redirected public attention to military arms, are answered by an exhibit on display in the museum of Morristown National Historical Park, Morristown, N. J. The authenticated collection embraces most of the equipment with which the American soldier brought to a successful close the 7-year struggle for freedom.

An order of April 6, 1779, issued in Boston and now preserved in the Emmet Collection of the New York Public Library, describes in detail the arms and accouterments of that day. A copy of it in the Morristown exhibit reads:

To Shrimpton Hutchinson Esq.

SIR,

You are hereby ordered and directed, to compleat yourself with ARMS and Accoutrements, by the 12th Instant, upon failure thereof, you are liable to a FINE of THREE POUNDS; and for every Sixty Days after, a FINE OF SIX POUNDS, agreable to Law.

Articles of Equipment,

A good *Fire-Arm*, with a Steel or Iron *Ram-Rod*, and a *Spring* to retain the same, a *Worm*, Priming *wire* and *Brush*, and a *Bayonet* fitted to your GUN, a *Scabbard* and *Belt* therefor, and a *Cutting Sword*, or a *Tomahawk* or *Hatchet*, a *Pouch* containing a *Cartridge* Box, that will hold fifteen Rounds of *Cartridges* at least, a hundred *Buck Shot*, a *Jack-Knife* and Tow for Wadding, six *Flints*, one pound powder, forty *Leaden Balls* fitted to your GUN, a *Knapsack* and *Blanket* a *Canteen* or *Wooden Bottle* sufficient to hold one *Quart*.

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[1] Reprinted from The Regional Review (National Park Service, Region One, Richmond, Va.), Vol. IV, No. 3, March 1940, pp. 19–22.

Excavations at the site of one of the soldiers' huts at Morristown uncovered many objects associated with the daily life of Washington's fighters. Pothook, forceps, knife, fork, spoon, buttons, and buckles are among the items pictured here

These prescribed articles, with the exception of the knapsack, blanket, and worm (the latter used in extracting the charge from the barrel of the musket should that become necessary), all are exhibited, bearing appropriate labels. Included in the display are—

(1) a hat of black felt, the brim rolled to form a tricorne, worn by Moe Judson, a soldier in the Revolutionary Army,

(2) a flint, steel, and tinder-horn, and

(3) two powder horns, the larger for containing the coarse powder for the barrel charge, the smaller to hold the more finely ground powder for use in the priming pan of the lock. Such horns were obtained from domestic cattle and used frequently when bullets and powder were not rolled together to form cartridges, the leaden balls and wadding then being carried in the pouch.

Musket cartridges, prepared by those skilled in their making, often were supplied to the troops from the ammunition laboratories. When they were not provided it was necessary for the soldier to "roll his own." He melted his lead and poured it into an iron mold, forming balls which numbered 12 or 16 to the pound depending on the caliber of the musket in which they were to be used. The handles of the mold formed a snipping device intended for use in cutting off the "neck" of the bullet after molding; but the soldier usually preferred to smooth the leaden pellet with his jackknife.

Into an oblong of tough paper he placed the ball, sometimes with four or six buckshot, and four or four and one-half drams of coarse, black powder which he rolled into a cylinder, twisting or tying the ends. After receiving a coating of grease for protection from dampness, the cartridges were placed in separate borings in the wooden block forming part of the cartridge pouch and covered by its flap of leather. The pouch, suspended by a shoulder belt of webbing or leather, was worn behind the right hip and usually held 24 cartridges or "rounds of ammunition." If the pouch and its contents became thoroughly wet during a rainfall or at a river ford,

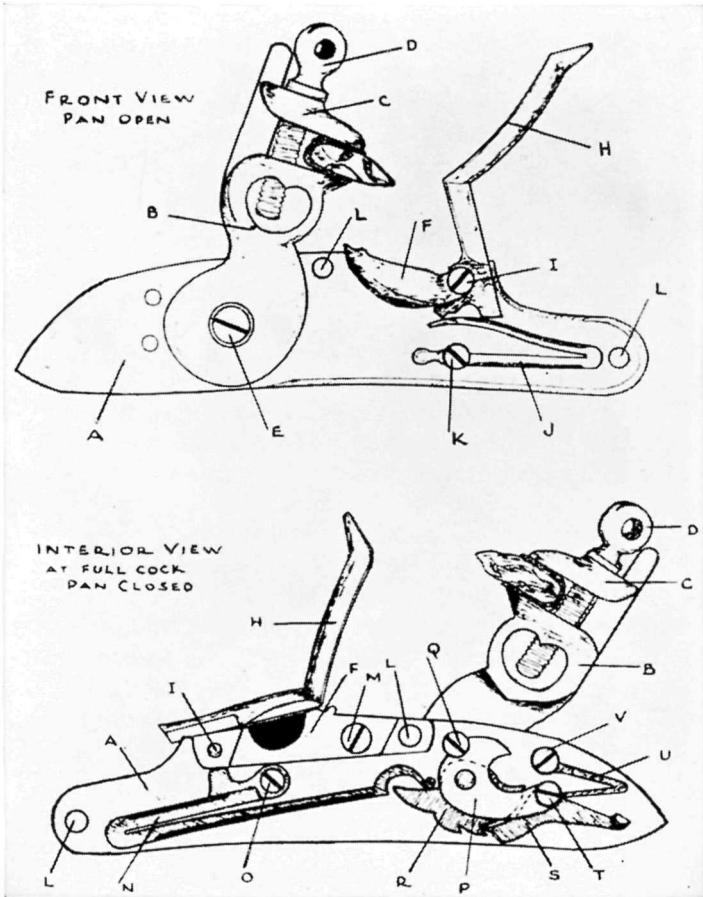
Tiny muskets and swords which conform in minute detail to the arms of the Revolutionary period are being made by National Park Service museum preparators for display in realistic historical dioramas

the soldier, except for his reliance on the bayonet, was *hors de combat* until his ammunition dried or a fresh supply of powder was obtained.

In order to load his musket when ammunition in the form of cartridges was used, the soldier brought the hammer of the lock to half-cock and uncovered the pan by pressing the frizzen upward and forward. (See diagram on page 6.) Tearing or biting through the cartridge at its powder end, he filled the pan with powder, retaining it by closing the frizzen. Placing the butt end of the piece on the ground, he poured the remaining powder, together with the ball and paper as wadding, into the muzzle of the barrel and rammed them all well down with the rammer. Lifting the piece, he slapped it upon the stock opposite the lock in order to shake a small quantity of powder from the pan into the touchhole of the barrel. The piece then was ready to fire.

If loose powder carried in horns was used, the soldier poured down the barrel a quantity that he considered to be the correct charge, dropped in a lead ball taken from his pouch and, with a twist of tow as wadding, rammed all downward. The pan of the lock was filled from the horn, the smaller one usually containing more finely ground powder for promoting better ignition. To fire the piece the hammer was brought to full-cock and pressure applied to the trigger. The hammer, holding securely in its jaws a piece of flint, was brought down by the force of the main spring, and the flint, striking the steel of the frizzen, threw it forward, uncovering the priming powder in the pan into which a shower of sparks was sent at the same instant. The sparks ignited the priming, and fire passed through the touchhole of the barrel and to the charge inside. The bullet then went wobbling on its way from the smooth bore toward its mark.

The range of military muskets of the period was between 400 and 600 feet, depending on their origin, weight of ball, and quality and charge of powder. Because of their smooth bores they had little accuracy but were intended primarily



From United States Martial Pistols and Revolvers, *by Maj. Arcadi Gluckman, United States Army*

MECHANISM OF THE REVOLUTIONARY MUSKET

a, *lock plate;* b, *hammer;* c, *cap;* d, *hammer screw;* e, *tumbler screw;* f, *pan;* h, *frizzen;* i, *frizzen screw;* j, *frizzen spring;* k, *frizzen spring screw;* l, *side screw holes;* m, *pan screw;* n, *main spring;* o, *main spring screw;* p, *bridle;* q, *bridle screw;* r, *tumbler;* s, *sear;* t, *sear screw;* u, *sear spring;* v, *sear spring screw*

for volley-firing at a distance not exceeding 300 feet. Yet, when a ball hit its mark after being fired from a musket of .69 or .75 inch in bore (the prevailing bores of military arms of the period), it was capable, if not too well spent, of inflicting death or serious injury.

The musket shown in the illustration (see frontispiece) is the French Army regulation arm of the period, the Charleville model of 1763. It was selected for display for the reason that by the time the order quoted above was issued in 1779 virtually all the American Army was equipped with this type. Together with other French regulation muskets made at the Royal Arsenals of Maubeuge, St.-Étienne, and Tulle, which differed only slightly in design, it was the finest military arm of its day. Manufactured with greater care and having an improved type of hammer and barrel securely fastened to the stock by bands instead of "pins" through lugs, it possessed greater durability, accuracy, and range than did the British musket, or the Colonial arms modeled from it, with which the Americans entered the war. The Charleville model was somewhat lighter than the British arm and its caliber was less, having a bore of about .69 inch.

If pressed, the trained Continental soldier could load and fire his piece four times a minute, but the rate generally was slower. He took little care in aiming, aware of the inaccuracy of his weapon except for short ranges. He swung his cartridge pouch to the front for greater accessibility; and between loading he thrust his ramrod conveniently into the ground beside him. His flint, if of good quality and adjusted properly between a fold of lead or leather in the jaws of the hammer, could be used 50 or 60 times. His handicaps were fouling of the barrel from powder combustion, which necessitated swabbing with the ramrod; and fouling of the flashpan and frizzen with clogging of the touchhole, requiring the use of a small iron brush and slender wire pick that usually were hung from the shoulder of the cartridge pouch or powder horn.

Some American Military Swords[2]

THE museum at Morristown National Historical Park has displayed in its Early Federal Room a collection of swords which, while embracing but 16 specimens in all, proves to be significant and interesting to general visitors as well as to students of Americana. The collection, gifts of numerous individuals and the Washington Association of New Jersey, presents types of swords used by the military forces of the United States during the first half-century of the Republic which often are attributed in the public mind to other periods, usually a much earlier one.

The history of the American military sword can be said properly to have begun when Gen. George Washington, on Cambridge Common, July 3, 1775, drew from its scabbard one of the several blades he was known to have possessed, and formally took command of the heterogeneous Continental Army. Such swords as were worn by the Continental troops and militia during the Revolutionary War, principally by officers, were for the most part types occasionally carried by the gentry of the time, or which had served Colonial officers of the British Provincial forces some 20 years previously in the French and Indian Wars. Although not included in the collection here described, examples of both such types are exhibited elsewhere in the Morristown Museum, viz., in the silver-hilted colichemarde once owned by George Washington, a design of blade popular since the late seventeenth century, named after the famous Swedish swordsman, Count Konigsmark, and hallmarked as having been made in London in 1770; and in the characteristic hanger, with animal-head pommel, made by the Philadelphia swordsmith, Louis Prahl, about 1750.

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[2] Reprinted from *The Regional Review* (National Park Service, Region One, Richmond, Va.), Vol. IV, No. 1, January 1940, pp. 11–16.

Swords designed especially for the American Army, either regular or militia, did not make their appearance in any considerable number until almost the close of the eighteenth century for the good reason that there was no army and therefore no demand; because following the Revolution the armed forces were reduced to 80 men. Even as late as 1789, at the time of the inauguration of President Washington, the National Army was composed of but 800 troops. Possibly early types of swords worn by the commissioned personnel of this force are identified in one or more of the large and important collections.

During the 4 years following 1792, the American Army presumably was composed of 5,000 enlisted men with some 250 officers, then reduced somewhat until 1798 when, war with France looming, a force of more than 13,000, with 800 officers, was raised. It was in this year that the first Government contract for sabers (about 1,000), for equipping the enlisted men of the dragoon regiments, was awarded to Nathan Starr, of Middletown, Conn., a craftsman having a knowledge of edged tools who had served as an armorer during the Revolution. These sabers proved to be a good job of blacksmithing, as will be seen by reference to two specimens in the Morristown collection which, although of later manufacture than the first issue, are of the same general pattern. A single iron strip was forged to form a knuckle bow and guard, known as a "stirrup" guard, such as had been in use by light cavalry in European armies for some 10 years or more. The scabbards were of iron and had two rings by which they were suspended from a waistbelt by slings, superseding the stud on earlier types whereby the scabbard was attached within a frog of the shoulder belt.

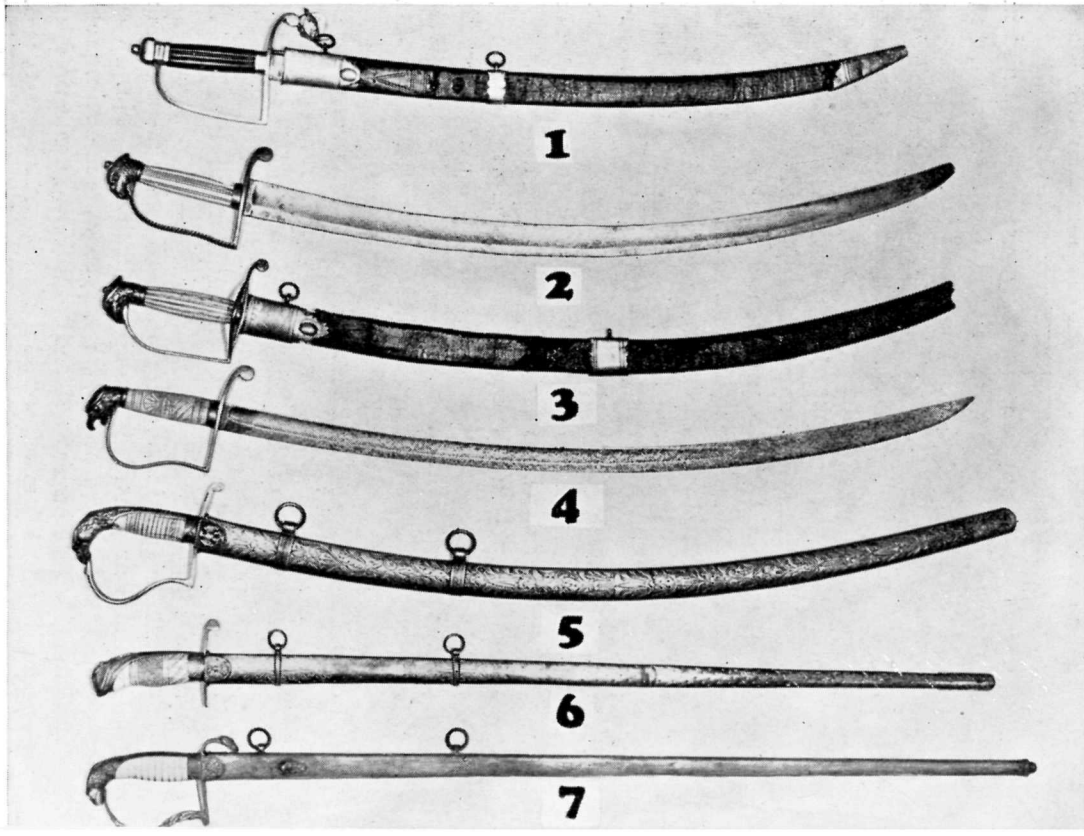
In January 1813, with his son as a partner, Nathan Starr was successful in his initial venture and later received a contract for 10,000 swords, some for the infantry, some for the dragoons, those for the latter varying only slightly in design

from the first lot made in 1798. Although in later years the Starrs produced some fine swords, the first made were not considered sufficiently sophisticated for use by the officers of the various branches of the service. Due to great scarcity of skilled swordsmiths in the young republic, weapons of more refinement in design and manufacture were unobtainable except by import from France, Germany, England, and Spain, principally from the first two of these countries; or parts, chiefly blades, were brought over for assembly in America. In many of these today can be seen characteristic casting, forging, and decoration.

A sword consists of blade and hilt. A tapered portion of the former, called the tang, is sufficiently long to pass completely through the guard, grip and pommel of the latter. It holds all parts of the weapon firmly in position by being welded above the pommel. The forging and tempering of blades was a high art, as was their decoration by a process of bluing, etching, and gilding. Guards and pommels were of forged steel or cast brass; grips were of hardwood, shaped or fluted, of bone, often tooled, or of leather which was covered or frequently wound spirally with wire or bands.

There had been a number of skilled swordmakers in several of the Colonies in the early days, but their art had waned. Probably only two of the swords in the Morristown collection, those made by Starr, are entirely of American manufacture. One of the earliest importations in the collection has boldly inscribed upon its blade: "Wilhelm.Tische.Peters. Sohn.In.Solingen.Fecit." It is a pity that the inscribing of blades with makers' names, and especially with dates, was not more customary, those specimens on which it was rarely done now being exceedingly helpful in determining exact sources.

In 1799, the armed forces of the Nation, were greatly increased, as they were again upon the approach of the second war with England. It was in those years at the turn of the century that the eagle's head, not as it had appeared with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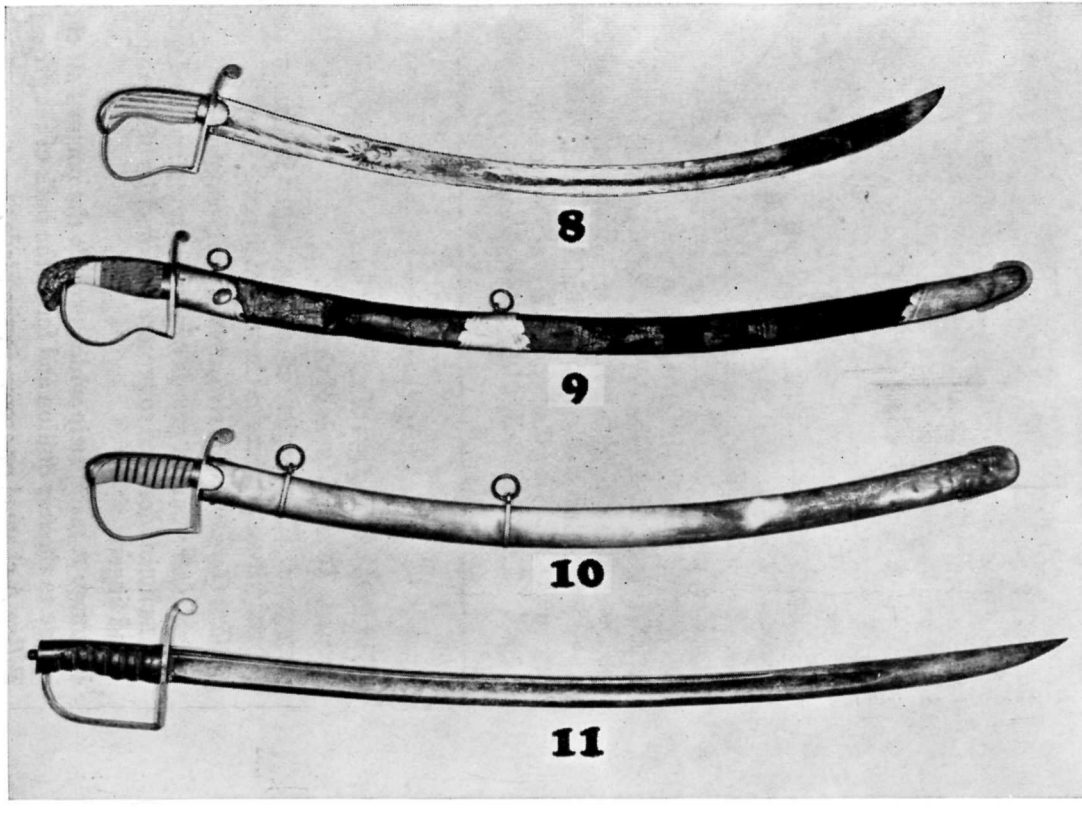
various animal heads from early times but specifically American in character, began to be found generally as the pommel of sword hilts intended for military use, while the bird in its entirety, with or without the motto *E. Pluribus Unum*, was incorporated in the decoration of blades.

After great deliberation and much discussion, the eagle had been adopted finally in 1782 as an appropriate national emblem, and as soon thereafter as was feasible it made its official debut. New Jersey cents for 1789 show an eagle with shield on breast, and motto. Other States followed in the use of the Great Seal of the United States on their coinage and soon afterward, in whole or in part, this insignia made its appearance generally on military paraphernalia. In the United States National Museum at Washington is an unusually interesting officer's saber, undoubtedly of French manufacture, having an eagle-head pommel and blade decorated with spread eagle, motto, and the date 1783. This is without question one of the first swords to be so designed and inscribed.

Once the vogue for the eagle-head pommel was established, it remained as regulation or in popularity in the Army for half a century, especially among militia officers. In the naval service it was much shorter lived, probably from about 1832 into the 1840's. Exception is made, however, of the dirk, the short weapon with either a straight blade or one exaggeratedly curved, which was worn by officers of the Navy when in undress uniform or on boat duty. The eagle-head pommel may have appeared on these as early as the War with Tripoli and was regulation upon the midshipman's dirk as late as 1867.

The 16 swords in the Morristown collection are shown in the illustrations which accompany this article. No. 1 (see page 11) is a sword of the hanger type made in Spain, probably Toledo, between 1800 and 1825. The fluted grip is of hardwood; the pommel, strap knuckle bow, and guard are of brass, as are the scabbard fittings. The uninscribed blade has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one narrow groove or fuller. Swords of this type and source have a wide distribution in collections because they were immensely popular with American naval and merchant-marine officers during the first quarter of the nineteenth century. The one shown is unique in having the Spanish crown impressed in the leather of the scabbard. Another of these swords is in the collection of Colonial National Historical Park, Yorktown, Va.

Weapons Nos. 2 and 3 are swords exhibiting early types of eagle-head pommels. They are officer's sabers, probably militia, of 1800 to 1820, possibly a few years earlier. The blade of No. 2 is quite plain but that of No. 3 is partly blued and gilded, and decorated with sprigs, trophies, and an eagle with motto. Sword No. 4 shows an eagle-head pommel of somewhat later date, 1810 to 1825. As in the case of the two foregoing specimens, this arm has no backstrap, that extension of the pommel connecting it with the quillon at the back of the grip. No. 5 is a field or staff officer's saber of from 1830 to 1845. The blade is etched with wreaths, sprigs, and

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Language of the Sword

Hilt: Sum of the parts of the handle.

Pommel: Terminal knob of the hilt.

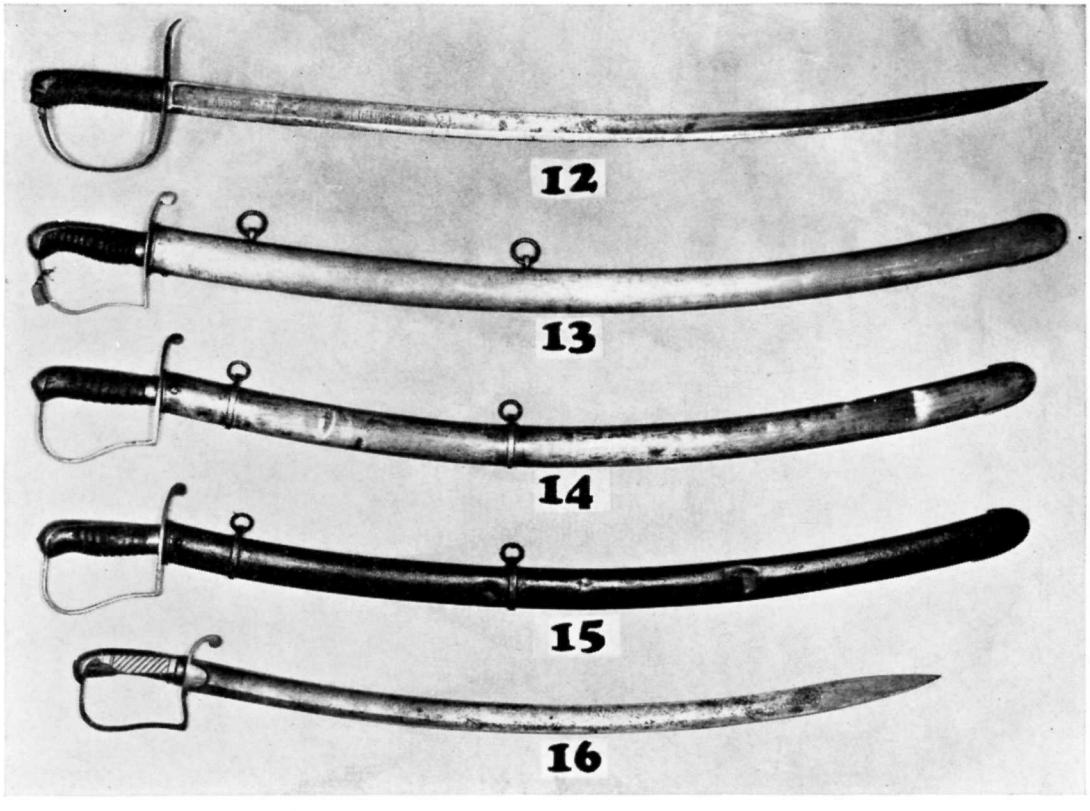
Cross guard: The crosspiece set at right angles just below the handgrip to protect the thumb and fingers.

Quillons (kee-yŏn'): The two arms of the crossguard.

Knuckle bows: Curved guards of various types and modes of attachment designed to protect the knuckles of the thumb and fingers.

Backstrap: A metal strip which extends the pommel all the way to the rear quillon and forms the back of the grip.

Fuller: A channel or groove in the blade.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trophies of arms. The scabbard is of tooled brass. In this number, as in all the subsequent specimens, the backstrap is shown.

Specimen No. 6 is a militia officer's sword, staff or infantry, of 1830 to 1845. For a pommel it has a prone eagle, an unusual type. The blade is blued and gilded and decorated with sprigs and trophies. Its scabbard is of tooled brass. No. 7 is a militia officer's sword, infantry, 1840. It shows an eagle-head pommel, and the quillon terminates in an eagle head. The blade is blued and gilded and the mountings and scabbard have been silvered. This sword was worn by Lieut. Peter Wortendyke, of the Bergen County (New Jersey) Rangers, whose commission is in the Morristown collections.

Weapon No. 8 (see page 13) is a field officer's saber, infantry, 1812, worn by Maj. Gabriel Wisner, New York State Militia. The broad blade has one shallow fuller and is etched with trophies, wreaths, and a spread eagle. No. 9 is a dragoon officer's saber of 1810 to 1815. The broad blade, with shallow fuller, is blued and decorated in gilt with trophies and other designs. No. 10 is a type of saber worn by officers of dragoons and light artillery, United States Army, 1800 to 1825. This specimen, having a brass scabbard, probably was worn by an officer of artillery. The blade, blued and gilded, is decorated with trophies and a spread eagle with motto. No. 11 is a dragoon officer's saber of 1792 to 1810; it is possible that it is a few years older as the stirrup guard is of the earliest type. The blade is decorated with sprigs and trophies and, within a medallion, a spread eagle with 11 stars above.

Weapon No. 12 (see page 15) is a dragoon officer's saber of about 1790. The pommel is a lion or dog head, and the knuckle bow and guard are pierced, the only guard in the collection not distinctly of the stirrup pattern. On each side of the blade is inscribed "American Light Horse," together with a spread eagle surrounded by rays and 13 stars. This is the sword referred to on page 10 as having been made by Wilhelm

Tische Peters Sohn in Solingen. No. 13 is a dragoon trooper's saber of 1810 to 1825. Although an import, probably from Germany, an inscription on the blade indicates that it was sold by Christopher and John D. Wolf, Merchants, at 87 Maiden Lane, New York City.

One other sword in the Morristown collection, although not displayed in the group described, is marked as having been sold by these same merchants. No. 14 is a dragoon trooper's saber, United States Army, 1820 to 1842, and is one of the Starr weapons referred to above. The blade is fullered and stamped "US—N Starr," and bears the initials of the inspector who tested it at the factory. With this saber the stirrup guard passed, the brass half-basket guard of the French Army type being adopted for use of the cavalry.

Specimen No. 15 is a dragoon trooper's saber, United States Army, and is probably one of the contract of 1813. The blade is flat, without fullers, and is stamped "N Starr," together with inspector's initials. No. 16 is an officer's saber, probably militia, of 1810 to 1815. The blade, etched and gilded, is decorated with a shield bearing stars and stripes. This type of saber, varying in length, was used by both foot and mounted troops in the War of 1812.

While this small collection does not embrace all types and designs used during the period, it serves nevertheless as an interesting and instructive index to the military picture of the time.

Sticks and Swords[3]

SINCE the faint light of dawning fell across the first page of history, man often has found an advantage in carrying a stick in his hand. In the beginning he discovered, after due deliberation, that by grasping a staff he could increase his reach and lend force to a blow for the better protection of his cave, or for the procurement of food. Thereafter he seldom ventured forth without one. Throughout the ages youth played at manhood with stick in hand; man shook it as a weapon or as a symbol of authority; old age leaned upon it for support.

During the seventeenth and eighteenth centuries in all civilized countries, the walking stick was not only useful but likewise fashionable, and those persons who were entitled to wear swords, by virtue of rank or position, carried a cane also. Half again as long as the canes now used, they lent dignity and poise in the walk and served as probes to possible pitfalls and to puddles in the ill-paved streets of the time. Although walking stick and cane now are synonymous, the latter name applied originally only to staffs of bamboo or other tropical, treelike grasses brought back by travelers to far countries.

The fashion of wearing small swords passed, on the part of civilians, at the turning of the nineteenth century; but the walking stick, although losing its aristocratic slimness and lightness due to the influence of the French Revolution, remained in vogue. The sword-knot, made usually of gold or silver lace with pendant tassel, remained on the walking stick in the form of a leather thong with tassel. Those little tasseled cords found today on most umbrellas are in memorial to the vanished sword-knot.

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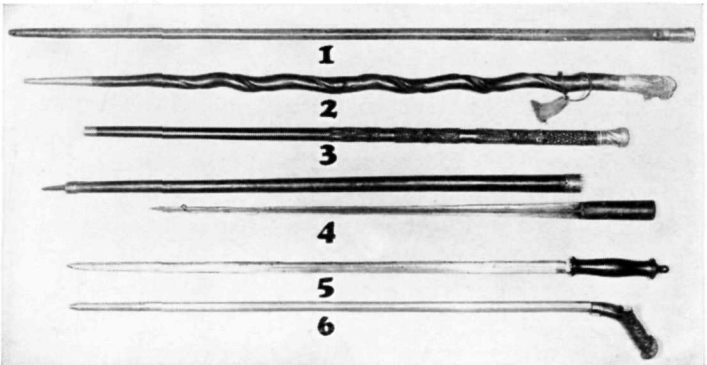
[3]Reprinted from *The Regional Review* (National Park Service, Region One, Richmond, Va.), Vol. II, No. 4, April 1939, pp. 10-11.

The walking sticks possessed by the museum of Morristown National Historical Park were originally gifts from individuals to the Washington Association of New Jersey, which in 1933 presented them to the Federal Government. The long, slender cane at the top in the illustration on page 20 is of Malacca wood, gold-capped, and engraved with the initials of the owner, and has a gold-bushed opening for cord and tassel. It once belonged to Joseph Barrel, who attended a reception given in honor of General Washington in Boston in 1789. It is likely that he carried the cane on that occasion. No. 2 in the photograph is a walking stick with silver-mounted buckhorn handle, presented by Gen. Nathanael Greene, in 1784, to his friend and companion-in-arms Capt. Jonathan Nicholas. No. 3 is a carved and silver-mounted stick made of wood taken from the famous Charter Oak in which, upon a memorable occasion, the liberal charter of Connecticut was hidden.

With the passing of the sword from civilian dress, there came into use the sword cane—a blade, often of fine temper and handsome decoration, concealed within a cane, the handle formed by the upper portion. Men who had served in the Army, or who were skilled in the use of the sword, considered such weapons excellent for defense. In the early years of the nineteenth century the lighting of city streets was far from adequate and robbers frequently lurked in shadows to waylay belated pedestrians. Many a miscreant was surprised at finding himself transfixed by a keen blade in the hand of some skilled swordsman. No 4 is a cane of this type, the triangular blade engraved with floral designs and a trophy of arms in French technique. When the blade is in the cane, the joint of handle with sheath is concealed by a band of decorative brass. Although it has an American flag incorporated in its engraved decoration, it is probably of French manufacture. It was found concealed in the walls of the old Norton Claggett homestead at Wardenville, W. Va.



The owner of the cane at the bottom of the photograph did not rely upon cold steel for self-defense. With buckhorn handle and brass-covered ferrule, the shaft is an octagonal steel barrel, bored to take one buckshot or more and having at the breech, near the handle, a nipple upon which to place a percussion cap which could be struck by a small cock or hammer concealed in the handle and released when the trigger was pulled. To load the piece, the ferrule was unscrewed from the muzzle and powder and ball rammed into the barrel by means of a steel ramrod. A copper detonating cap was placed on the nipple and the weapon was ready to fire. Such arms were made about the middle of the nineteenth century, and apart from being a possible means of self-protection, were used often in bagging small game.

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