

United States Army Headgear 1855-1902

Catalog of United States Army Uniforms in the Collections of the Smithsonian Institution, II

Edgar M. Howell

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ABSTRACT

Howell, Edgar M. United States Army Headgear 1855-1902: Catalog of United States Army Uniforms in the Collections of the Smithsonian Institution, II. Smithsonian Studies in History and Technology, number 30, 109 pages, 63 figures, 1975.—This volume brings the story of the evolution of headgear in the United States Regular Army from just prior to the Civil War to the opening of the modern era. Strongly influenced by French, British, and German styles, the U.S. Army tried and found wanting in numerous ways a number of models, and it was not until the adoption of the "drab" campaign hat in the early 1880s that a truly American pattern evolved. The European influence carried on until the 1902 uniform change, and, in the case of the "overseas" cap and chapeau, even beyond.

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Preface

This volume is the second* in a projected series on Regular Army dress based on the collections of the National Museum of History and Technology of the Smithsonian Institution. Specifically it is a descriptive, critical, and documentary catalog of the headgear of the Regular Establishment from 1855 through 1902. Succeeding volumes will cover headgear from 1902 to the present and uniforms and footwear from the period of the French and Indian War to the modern era.

The rich collections of the Smithsonian Institution contain examples of most of the patterns of enlisted and officers' headgear mentioned in regulations. While this volume was not designed as a definitive history of military headgear for the period, it is essentially just that, as it illustrates, describes, and documents the specimens, furnishes official descriptions where available, and provides pertinent correspondence on specific items, contemporary criticism both official and unofficial, excerpts from uniform board proceedings, and reasons for adoption of new models.

With two exceptions all the specimens discussed in detail are from the National Collections, most of them from the comprehensive War Department Collection, supplemented by the numerous biographical collections of the museum. Unmatched in scope and rarity, the War Department Collection is discussed at length in volume 1 of this series.

The year 1902 has not been arbitrarily selected as a cut-off date; it is in fact the end of an era in headgear concept and styling. The forage cap as such disappears and, in somewhat altered form, becomes the dress/service cap in very nearly the modern style; the service or campaign hat takes over the forage or field service function to undergo only a modification of the crown. Other headgear to be added, including the protective helmets, would be completely new and essentially modern and functional.

During the months this study was in preparation, many people and institutions gave generously of their time and facilities. Foremost were the personnel of the Old Military Records Division of the National Archives, particularly Mr. Elmer Parker, Mrs. Sara Jackson, and Miss Anna Medley. Their enthusiastic and continuing interest, and their sound advice based on years of experience with archival collections made this work possible. The help and advice of my colleague here in the Division of Military History, Don Kloster, who is preparing the volumes on uniforms in this series, has been immeasurable. Thanks are also owing to the Royal Arsenal Museum (Tojhusmuseet) in Copenhagen, Denmark. And last but not least, my deep thanks are due to Mrs. Helen Finley and Mrs. Diana McGeorge for their skill and patience in typing a messy and difficult manuscript.

^{*}Volume 1, "United States Army Headgear to 1854: Catalog of United States Army Uniforms in the Collections of the Smithsonian Institution," by Edgar M. Howell and Donald E. Kloster was published as *United States National Museum Bulletin* 269 by the Smithsonian Institution Press in 1969.

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THE 1855 CAVALRY HAT

The settlement of the Oregon boundary question and the victory over Mexico added a wide stretch of territory to the Union and vastly increased the responsibilities of the Army. Following the conclusion of the War with Mexico, however, the Regular Establishment was reduced to a peacetime strength smaller than that authorized after the War of 1812. Although continued representations by General Winfield Scott, Commander-in-Chief of the Army, resulted in a small increase, it was not until Jefferson Davis, a West Point graduate and a volunteer regimental commander in the late war, became Secretary of War in 1853 that some positive relief was to be had. Under Davis' prodding that additional units were urgently needed for frontier service, the Congress on 3 March 1855 authorized four new regiments, the 1st and 2d Cavalry and the 9th and 10th Infantry ' to be added to the line establishments of two regiments of dragoons, one of mounted riflemen, eight of infantry, and four of

General Order No. 4, 26 March 1855, which assigned the officers to the new regiments, specified that the units would be uniformed like their older counterparts except that the trimmings on the cap and coat of the cavalry were to be yellow instead of orange.²

In July a board of officers of the cavalry regiments, set up to determine the horse equipment and arms to be issued them, reported among other things:

We recommend a hat instead of the present cap, to be made according to the pattern furnished, with the excep-

Edgar M. Howell, Department of National and Military History, National Museum of History and Technology, Smithsonian Institution, Washington, D.C. 20560. tions to be noticed. The hat to be looped up on the right side and fastened with an eagle, the eagle to be attached to the side of the hat. The letter of each company to be in front for the enlisted & the number of the regt. for officers. The chin strap to be fastened on the sides.

The hat for officers to be the same as for enlisted men with the exception mentioned. The hat for enlisted men to have one black feather on the left side two for company officers and three for field officers. The hat to be black. The cords to be yellow, secured so as to be easily removed. The cord for officers to be gold and for enlisted men to be worsted.⁴

The report was approved by Secretary of War Davis on 23 July 5 and three days later Brevet Major General Thomas S. Jesup, the Quartermaster General, forwarded the pattern hat furnished by the board to Major George H. Crosman, commanding the quartermaster depot at Philadelphia, and directed him to initiate procurement as soon as possible. On 3 August Crosman contracted with N. Fisher of Philadelphia for 2000 "hats for cavalry" at \$1.05 each.

General Order No. 13, 15 August 1855, prescribing the arms and accounterments of the two cavalry regiments, described the hat as follows:

For Field officers—Black, trimmed with gold cord, and according to pattern in the Quartermaster's Department; to be looped up on the right side, and fastened with an eagle, the eagle being attached to the site of the hat; three black feathers on left side; the number of the regiment to be in front. The hat will be worn instead of the cap now used by the other troops. For all other Officers—same as for field officers, except that there will be but two black feathers. For enlisted men—same as for officers, except there will be but one black feather, a worsted, instead of a gold cord, and the letter of the company substituted for the number of the regiment.⁸

Besides its black color, the only details about the hat given in the record are that it had a chin strap (as had the voltigeur hat adopted in 1847), several buttons, a hat cord with acorns, a plume, and a side eagle, the cost \$1.05 with a chin strap, the trimmings costing an additional \$.50.°

In 1857 the cost of the hat and trimmings were listed as:

Hat	\$1.22
Cord and acorns	.13
1 buckle, 1 letter, 2 buttons	.05
Plume	.15
Eagle	.05
	\$1.60 10

It should be noted that as the hat was prescribed for wear by only the two cavalry regiments in the Army, no branch of service device other than the yellow hat cord was authorized.

It is not strange that a broad-brimmed hat should have been adopted; rather it is reasonable to conjecture why such was not adopted earlier and then for two specific regiments only. With a large percentage of the Army on the frontier, the 1832-1833 dress caps and the dual purpose 1851-1854 cap were highly unsuitable.14 The 1839 forage cap was popular and reasonably serviceable, but it had the shortcomings of being pervious to water, with no waterproof cover provided, and of being issued at the rate of but one every five years.12 During the War with Mexico, although the troops had this forage cap, many officers and men alike purchased broad-brimmed felt or straw hats from the Mexicans.13 The natural answer was the Andrews or voltigeur-type hat, which, although it did not reach the troops in the field before the end of the war, was issued in the limited quantities manufactured to the 2d Dragoons in Texas in 1851.14 This was the story throughout the 1850s and, until a campaign hat was prescribed for the whole Army in 1858, both officers and enlisted men of all the arms wore broad-brimmed, slouched hats of every color and description, which they had purchased themselves, as protection against the elements, despite the fact that the issue model was provided with a cover that had a cape covering the neck.15 Even more to the point, in 1858, after a hat had been authorized for the whole Army, Secretary of War John B. Floyd, in a letter to the Chairman of the House Ways and Means Committee justifying the extra expenditure involved in adopting the hat, wrote: "The old cap was . . . utterly unsuited for the service: affording little or no protection to the soldier, exposing him unnecessarily to scorching suns, to drenching rains, and cold and sweeping winds, and adding to the unavoidable hardships of active service one which could reasonably be obviated by the use of a felt hat such as has now been adopted." Floyd went on to state that many officers and men had provided themselves with hats at their own expense.¹⁶

Nothing is known of the origin of the pattern hat except that it was the property of a "private individual" and was returned to him after use by the board and the Quartermaster General.17 Whoever actually designed the hat, at least two members of the board may well have influenced the pattern. Major William Hardee, the recorder, had served in the 2d Dragoons during the period in which that unit was issued the voltigeur hats and may well have suggested the buttons and chin strap, both of which had been on the voltigeur pattern. Perhaps even more to the point regarding style, in 1854, Sumner, the president of the board, then of the 1st Dragoons, reporting on a lengthy inspection trip to Europe, stated in his "Notes on Troops in Belgium and Holland" that the best head dress for a soldier he had ever seen was worn by the Belgian Chasseur à Pied. "It is a hat with a medium sized brim, turned up on the left side, worn with a cover in undress, and without the cover, and with a cockade, and small black feather in full dress. I think it is well adopted to our service, and looks remarkably well, either singly, or in large bodies."18 When Sumner returned from his trip, he brought back with him two hats he had purchased in London, not further described, and for which he was reimbursed by the government.19 These hats, of which nothing definite is known, were turned over to the Quartermaster General and forwarded to the Philadelphia quartermaster.20 As we know, however, neither of these was the pattern furnished by the board.

Whatever exactly this hat was, despite the fact that Jefferson Davis as Secretary of War; approved the model, and despite the fact that Hardee was a member and recorder of the board that recommended it, it was not the hat that has become so well known as the "Jeff Davis" or "Hardee." In 1858 when a "hat" was prescribed for the whole Army, Davis had not been Secretary of War for a year and Hardee was not a member of the board recommending the change. The 1858 board, in its

report, stated: "The hat proposed is in the opinion of the Board equally suitable for troops of all arms of the service and it is accordingly recommended for the whole Army, except for the Cavalry, as no necessity appears to exist for changing the hat of this Corps." The board then supplied detailed measurements for the model and two identical pattern hats made on request by Warnock and Co. of New York, one trimmed and one untrimmed.21 In December 1858, Jesup, in answer to a query from an officer of the 1st Cavalry, wrote that the cost of the "Cavalry Hat complete, pattern of 1855 is \$1.46" and that "the cost of the Army Hat complete, pattern of 1858, is \$3.37."22 In 1859, one cavalry officer, in submitting his requisition for hats, stated that he "would prefer those of the new pattern,"23 while another officer of the same regiment in asking for chin straps for use with the hats issued him stated that such "were issued with the old pattern hats."21

The size, shape, and appearance of this hat was long unknown, and no authenticated specimen of it was known to exist. The first hint came when this chapter was in draft with the discovery of a purported illustration of a "U.S. Cavalry Hat (Felt)" on what appeared to be an advertising broadside for military headgear found pasted to the inside cover of a copy of Horstmann's 1851 uniform catalog ²⁵ (Figure 1). Although, as can be seen, the hat is black, or certainly dark, has a flat crown, and carries the side eagle, plumes, hat cord with acorns, and the chin strap as prescribed, the absence of citation made its authenticity questionable.

A stronger hint regarding the hat was found in a block of the Quartermaster General's correspondence in the National Archives. Early in 1858 (it must be remembered that the first contract for the 1858 Army hat was not let until 30 July 1858) the Secretary of War authorized the exchange of a number of items of arms, uniforms, and equipment with the Danish government. Among the uniforms listed was one "Cavalry Hat, with Eagle and plume" with the "letter A fixed on the Hat."26 In the summer of 1970, a member of the Smithsonian museum staff located the exchanged articles in the Tojhusmuseet (Royal Arsenal Museum) in Copenhagen. Among the items was the "Cavalry Hat" with the "letter A" affixed, identical to that pictured in the advertizing broadside.27



Figure 1—"U.S. Cavalry Hat (Felt)." (See text and note 25 for source.)

The hat (Figure 2) is black, of a fur or wool felted material artificially stiffened with shellac. Six and one-half inches in height, the hat measures 51/2 inches across the crown with a 3-inch-wide brim, tightly bound with a 1/4-inch black tape. The leather sweat band of a near-maroon color measures 23% inches. The crown is reinforced at the top and down the sides with a dish-like insert 13/4 inches deep of an 1/8-inch-thick hard cardboard-like material with a painted finish, apparently glued in. The 5%-inch-wide two-piece black leather chin strap, 181/4 inches long overall, is stitched to the inside of the hat 31/8 inches above the brim. (The other end had been similarly stitched but has come loose.) The brass chin strap buckle is 5/8 by 3/4 inches with rounded corners. The brim is looped up on the right side with a small general service button sewed to the brim at the point of juncture. This button apparently was intended to hold in place the side eagle, which is missing with no sign of it ever having been affixed. The cords draped about the crown are of yellow worsted, two strands twisted, 3/8 inches in diameter, basted to the crown 1 inch from the top in rear and draping 37/8 inches in front. The cord about the base of the hat, which is completely separate from the cords above, is of the same size and material and terminates in two



acorns 7_{16} inches long and 5_{8} inches across.²⁸ The letter "A" of brass is 7_{8} by 11_{4} inches, the same size as that worn on the 1851-1854 cap, and is affixed by a single wire loop, soldered to the reverse, inserted through the crown and held in place with a leather thong. The black ostrich plume on the left is held in place by a rosette made of four concentric circles of black yarn with a small general service button in the center, the whole placed 31_{8} inches to the left of center front. There is no maker's label.

Since the two cavalry regiments had already been forwarded their allotments of clothing and equipage for the fiscal year before the adoption of the hat, there was no general issue of the item until well into 1856, the units wearing the 1851–1854 cap. There were several small issues to recruiting "rendezvous," however.²⁹ The rate of issue, in view of the fact that it was the only piece of headgear for both dress and fatigue, remained the same as for the cap, that is, two the first and third years, and

one the second, fourth, and fifth years.30 Although the "eagle" used to fasten up the right side of the hat is nowhere described (since the pompon eagle on the 1851-1854 cap and the eagle looping up the brim on the hat adopted for the whole Army in 1858 are virtually identical), it seems probable that this same eagle was used with the cavalry model.31 This eagle is a rendering in metal of the Arms of the United States as depicted in Army Regulations.32 A number of these "eagles" have been examined on both the 1851-1854 caps and on the 1858 hats, and in a large majority of cases, the eagle's head faces the heraldic right (the left as viewed) despite the fact that the eagles depicted in the regulations had their heads turned to the heraldic left.

A total of 5500 of these hats were procured during its life.³³ Thus, if the two regiments were at full strength of 615 enlisted men each, at the prescribed rate of issue the supply would have lasted something less than three years.

THE 1858 ARMY HAT

The unsuitability of the 1851-1854 cap for field service and the widespread use of nonregulation slouch hats by officers and enlisted men alike, all coupled with the adoption of a hat for the Cavalry, made a change to a more practical headgear for the whole Army almost inevitable. Just what finally triggered the design and adoption of a hat for all branches is not completely clear, but the cavalry hat provided the impetus for strong requests for the adoption of the same for the other corps from senior and junior officers alike during 1857. Such experienced officers as Bvt. Lt. Col. John B. Magruder, 1st Artillery, and Lt. Col. Philip St. George Cooke, commanding the 2d Dragoons, requested the issue of cavalry hats to their units.35 Then in November 1857 Colonel E. B. Alexander, Commanding Officer of the 10th Infantry, when submitting his annual estimate for clothing and equipage, enclosed a letter to the Secretary of War suggesting that a board of officers be established to "devise and submit to the War Department a hat for foot troops," carrying the endorsement of General Scott, Commander-in-Chief of the Army. The Secretary of War approved the idea, and Special Order No. 11, War Department, 25 January 1858,

set up a board ordered among other things "to devise and report upon a hat for foot troops . . . for full dress . . . and for fatigue." The board was further ordered to recommend whether such a hat should be for foot troops only or for the whole Army.³⁶

The board, made up of Lt. Col. J. E. Johnston, lst Cavalry, Lt. Col. G. W. Lay, 6th Infantry, Capt. DeLancey F. Jones, 4th Infantry, 1st Lt. A. P. Hill, 1st Artillery, and 1st Lt. Roger Jones, Regiment of Mounted Riflemen, met as ordered and on 9 February submitted its report together with two sample hats, which had been procured at its instance from Warnock & Co. of New York City. The board found the proposed hat to be "equally suitable for troops of all arms of the service" and recommended it for the "whole Army, except for the Cavalry as no necessity appears to exist for changing the hat of [that] Corps." ""

The board described the proposed hat as:

black felt, according to pattern

Crown—6½ inches high, front and sides, oval head ½ inch

curve

Tip—55% inches long by 53% wide

Brim-3 inches wide

Crown of hat quite full just above the band to secure a hold upon the head. .

The report went on to describe at length the hat's trimmings for both officers and enlisted men.³⁸

Although the board's recommendation was approved in principle by the Secretary of War, some minor exception was taken to the pattern hats submitted and Bvt. Col. C. A. May, 2d Dragoons, Superintendent of the Mounted Recruiting Service stationed in New York, was requested by the Adjutant General, Col. Samuel Cooper, to secure additional patterns from Warnock incorporating a change or changes unstated, and send one to Philadelphia and two to Washington. 60

General Orders No. 3, dated 24 March 1858, stated:

For Officers: Of best black felt. The dimensions of me dium size to be as follows:

Width of brim, 3¼ inches, Height of crown, 6¼ inches, Oval of tip, ½ inch, Taper of crown, ¾ inch, Curve of head, ¾ inch,

The binding to be ½ inch deep, of best black ribbed silk. For Enlisted Men: Of black felt, same shape and size as for officers, with double row of stitching, instead of binding, around the edge. To agree in quality with the pattern deposited in the clothing arsenal.

Trimmings

For General Officers.—Gold cord, with acorn-shaped ends. The brim of the hat looped up on the right side, and fastened with an eagle attached to the side of the hat; three black ostrich feathers on the left side; a gold embroidered wreath in front, on black velvet ground, encircling the letters U.S. in silver, old English characters.

For Officers of the Adjutant General's, Inspector General's, Quartermaster's, Subsistence, Medical and Pay Departments, and the Judge Advocate, above the rank of Captain: The same as for General Officers, except the cord, which will be of black silk and gold.

For the same Departments, below the rank of Field Officers: The same as for Field Officers, except that there will be but two feathers.

For Officers of the Corps of Engineers: The same as for the General Staff, except the ornament in front, which will be a gold embroidered wreath of laurel and palm, encircling a silver turreted castle on black velvet ground.

For Officers of the Topographical Engineers: The same as for the General Staff, except the ornament in front, which will be a gold embroidered wreath of oak leaves, encircling a gold embroidered shield, on black velvet ground.

For Officers of the Ordnance Department: The same as for the General Staff, except the ornament in front, which will be a gold embroidered shell and flame, on black velvet ground.

For Officers of Dragoons: The same as for the General Staff, except the ornament in front, which will be two gold embroidered sabres crossed, edges upward, on black velvet ground, with the number of the regiment in silver in the upper angle.

For Officers of Cavalry: The same as for the Dragoons, except that the sabres will be reversed, with the number of the regiment in the lower angle.

For Officers of Mounted Riflemen: The same as for the General Staff, except the ornament in front, which will be a gold embroidered trumpet, perpendicular, on black velvet ground.

For Officers of Artillery: The same as for the General Staff, except the ornament in front, which will be gold embroidered cross-cannon, on black velvet ground, with the number of the regiment in silver at the intersection of the cross-cannon: The brim of the hat to be looped up on the left side, and the feathers worn on the right side.

For Officers of Infantry: The same as for Artillery except the ornament in front, which will be a gold embroidered bugle, on black velvet ground, with the number of the regiment in silver within the bend.

For Enlisted Men: The same as for Officers of the respective corps; except that there will be but one feather, the cord will be of worsted, and the badges of yellow metal. The letter of the company, of yellow metal, to be worn in front.

All the trimmings of the hat are to be made so that they can be detached; but the eagle, badge of corps, and letter of company, are to be always worn.

The order also included the statement that the regulation was to go into effect immediately, except that the clothing of the old pattern then on hand was to be issued until exhausted.

After an initial objection by an economy-minded House of Representatives over the added expense of adopting the hat, 2 a supplemental appropriation was made by the Congress and a contract was let with John G. Snyder of Philadelphia on 30 July for 16,500 hats at \$2.75 each. This contract was unusual in that in addition to the phrase that the hats were to be "like and equal . . . to the sealed standard samples," it included the following detailed specifications:

The material to be composed of four ounces extra prime Russia Hare, carrated, and one and a half ounces of best Scotch Coney, the stiffening of the best Campbell Shellac in solution of alcohol. Inside trimming to be of the best quality black japanned leather, three inches deep, sewed to, but not through the Hat, a double row of stitching of the best black silk instead of binding around the edge of the brim:—To be manufactured in the best workmanlike manner, and fully equal in all respects to the sample pattern furnished. . . ⁴³

These specifications, with two slight changes in ingredients, continued in force through the life of

the pattern.⁴⁴ The rate of issue for the hat was set at one per year.⁴⁵ This issue rate is at some variance with that of the cavalry hat, seven in five years. This same order, however, setting the rate of issue, also authorized a forage cap for all enlisted personnel at the rate of one per year.

In June a change in the trimmings for the hats of cavalry officers was ordered. It will be remembered that the cavalry's only distinguishing branch of service had been the color of the hat cord, yellow, with the number of the regiment in front for officers and the letter of the company for enlisted men. General Order No. 7 of 24 June stated: "The trimmings for the hat prescribed [in G.O. No. 3, 24 March 1858] for officers of dragoons, will hereafter be worn by officers of cavalry, except that, for the latter, the number of the regiment will be in the lower angle of the . . sabers." In other words, where the earlier order stated that the crossed sabers of dragoon officers were to have their edges upward with the number of the regiment above, and those of the Cavalry to have their edges "reversed," now the two corps were to be distinguished only by the placement of the regimental number. Since the earlier order states that the hat trimmings for enlisted men were to be the same as for officers of their corps, the enlisted device changed accordingly.

In regard to the "eagle" which anchored the looped-up brim, comparison of a number of them taken from 1851–1854 caps and 1858 hats indicates that they are the same design, size, and composition, with the only difference being the method of attachment. During the 1961–1965 Civil War Centennial celebration, these hat eagles were reproduced in large numbers, many artificially aged, and collectors should approach specimens offered them with caution.

The general order authorizing the hat was hardly off the press before units were requisitioning the item; but because of the stocks of the old pattern cap that had to be issued until exhausted, because units had already received their annual allotment of clothing, and because of manufacturing lead time, there was no general issue until 1859.47 An effort was made, however, to get the hats to recruit depots, although some recruits during this period were still issued the cap.48

Hardly had the hats reached the troops in the field than there were numerous complaints from

officers of mounted units because the item was issued without the chin strap, which had been included with the cavalry model. Captain T. J. Wood of the 1st Cavalry in making his request for such, wrote: "The chin strap should be of light but very strong leather. Patent leather is too frail. . . The straps furnished with the first pattern of uniform hats were generally too short, and being of patent leather were soon broken. . . ." The reply of the Quartermaster General to one such complaint is worthy of note:

Your suggestions as to Hats and Chin Straps are good and acceptable. It is only by reports from officers in actual command and service that the merits of the supplies furnished to the Army can be known, but it frequently happens that articles are adopted without reference to this Office, and in all cases it is our duty to conform strictly to the pattern furnished. It was from this cause that chin-straps were omitted this year from the Cavalry and Dragoon Hats. The attention of the War Department however has been called to the matter, and they will hereafter be supplied. 50

Actually, the matter had been brought to the attention of the Secretary of War several months earlier, and he had authorized the addition of chin straps to hats issued to the Cavalry and Dragoons. As a commentary on the matter, of the more than two score 1858 pattern hats examined, including one of an officer of the 2d Cavalry, none shows evidence of ever having had a chin strap attached nor do any of the hats pictured in Miller's *Photographic History of the Civil War*, either officers' or enlisted men's.

Despite its apparent practicality and the pressure brought on the War Department to adopt it, the 1858 hat was not popular, to say the least. Comments on it ran from "nuisance," "heavy, hot, stiff, and ill-looking," to "abomination" and "unsightly abortion." One correspondent wrote to the *Army and Navy Journal:* "Many regiments refuse to draw them; others get rid of them as soon as possible after drawing them." Another wrote: "The black felt hat is so much disliked by the entire Army, that it is never worn for even dress occasions if it can be avoided and in a garrison you cannot see two officers equipped alike." Several others suggested its replacement with a light weight gray or dust colored felt. 56

A Medical Report upon the Uniform and Clothing of the Soldiers of the U.S. Army, 15 April 1868, the so-called "Woodhull Report," which represented the concensus of more than 120 professional

soldiers and/or Army surgeons, was more specific:

The hat is objectionable from its size and its great weight and want of ventilation, evils that grow in importance with the lowness of the latitude, until finally the head is oppressed by a constant, close vapor bath. In point of practice at nearly every post south of Washington the hat and cap give place in warm weather to a lighter substitute, generally of straw. On the northern frontier it does not adequately protect the ears in winter.

The suggestions for relief all point to the necessity for increased lightness and ventilation in warm climates and to greater protection in cold regions.⁵⁶

As a substitute, the report recommended what amounted to a tropical helmet for hot stations and a light-colored, brimmed hat similar to the Andrews model for more general wear.⁵⁷

A silent, but a most reliable witness, in regard to the popularity and utility of the hat is the photographic evidence of the period. Taking Miller's Photographic History of the Civil Warss as a reasonable standard, the forage cap easily outnumbers the hat by a hundred or more to one as worn by enlisted men in the many hundreds of pictures in this work. In this connection, however, it must be remembered that although the hat was originally adopted for both fatigue and dress-as the frock coat had been in 1851-the subsequent adoption of the forage cap (and sack coat or fatigue jacket) in November of 1858 50 before the hat went into general issue, for all intents and purposes relegated it to a near dress-wear status. Of the group pictures checked of men wearing the hat, better than 80 percent were of troop units serving in the armies in the warmer south-central and southeastern States as opposed to the Army of the Potomac.

The question as to which side of the hat was to be looped up and by whom is somewhat confusing. The 1855 hat was to be looped up on the right by both officers and enlisted men. The 1858 model as originally authorized was to be looped up on the right side by all personnel except officers and enlisted men of the Infanty and Artillery.61 General Order 4, War Department, of 26 February 1861, stated that infantry and artillery officers were to loop up the brim on the right, while General Order 6, War Department of 13 March 1861, stated that the brim was to be looped up on the right by mounted men and on the left by foot soldiers.62 And finally, in the official Quartermaster uniform photographs taken in 1865 or 1866, all hats on mounted and dismounted personnel alike are looped up on the left.⁶³ As far as officers are concerned, photographic evidence tells us that few ever looped up their brims on either side.

More than 20 enlisted models of the hat have been examined (Figure 3) and there is remarkably little variance with the specifications. Two have crowns as low as 51/2 inches instead of the specified 61/4, and one has a brim as narrow as 23/4 inches instead of 31/4. The crowns are flat and stiff, lined with black oil cloth glued to the surface to add rigidity, with the maker's labels printed thereon. With two exceptions these labels are similar: "U.S. Army" above a panoply of flags and arms with "Extra/Manufacture" below and the hat size again below. Of the two exceptions, one has a maker's name and address "Swift, Dickinson & Co./ Manufacturers/65 Broadway/New York" below the "U.S. Army" and the panoply. The felt includes both hare and coney hair. The cords are of worsted, terminating in 2-inch tassels as opposed to the acorns on the 1855 model, and within an allowable tolerance of the prescribed 4-foot 6-inch length. The ostrich feathers average the set 10 inches.64 Although the order authorizing the hat does not specify that the cords were to be the color of the facings of the branch of service, there are numerous instances in the record of issues of hats trimmed for infantry, artillery, etc., and all models examined carry colored cords. The 1861 regulations specify the cords to be "of the same color as that of the facing of the corps."66

As is well known, the officers of the period, especially during the Civil War years, wore a wide variety of hats, the non-regulation outnumbering the regulation by a good margin. There is in the National Collections an excellent example of a regulation officer's hat carrying the insignia of the 2d Cavalry or 2d Dragoons, that is, with the regimental numeral in the upper angle of the crossed sabers 67 (Figure 4). This specimen conforms closely to specifications and is very similar to that illustrated as number 57 in Schuyler, Hartley, and Graham's 1864 catalog. The flat crown is stiffened with glued pasteboard covered with red silk carrying the printed maker's label in gold: "Wm. H. Wilson/successor to/J. H. Wilson/Fine/Military/ and/Naval/Outfits/Philadelphia." The cord is of twisted strands of black silk and gold braid covered cotton, two each. Its original ownership is unknown. The popular low-crowned "Burnside"

NUMBER 30



FIGURE 3.—1858 Army hat.



FIGURE 4.—1858 officer's Army hat.



FIGURE 5.—The "Burnside" pattern.

model, number 60 in the Schuyler, Hartley, & Graham catalog⁶⁹ is represented by a specimen worn by Lt. Nathan Levy of the 10th Michigan Infantry (Figure 5). In poor condition, it carries no maker's label, but there is evidence that the brim was looped up on the right. The 3-inch brim is near regulation, but the 51/2-inch high crown is rounded rather than flat. It is interesting to note that the catalog calls this the "Burnside Pattern" indicating that it was so called as early as 1864. Another extremely popular model, to judge by photographic evidence, is that worn by Maj. Gen. William Tecumseh Sherman (Figure 6). With a 3-inch brim and a 67/8-inch rounded crown, this hat shows no evidence of having had the brim looped on either side. Rather, the wear fore and aft on the crown indicates that it was most probably worn with a rather deep crease. In rather poor condition, the specimen carries no maker's label. The prescribed all-gold general officers' hat cord is missing.

Although the general order authorizing the hat prescribed the insignia to be worn by both officers and enlisted men, it gave no sizes. A reasonable assumption, however, is that the badges were to follow those illustrated in full size in the 1851 uniform regulations.⁷⁰

Of the enlisted insignia, the sizes of only the number of the regiment, 5/8-inch long, and the letter of the company, 1 inch high, are given in the

1861 uniform regulations. Each was to be fixed to the hat with two wires run through the fabric and bent over. A complete description of all the insignia, including measurements, is given in the 1865 Quartermaster Manual, however. The hat "eagle" was to be 21/2 inches high by 2 inches wide and fixed to the hat with two wire loops run through the felt and pegged on the inside; the engineer castle was to be 13/4 inches wide by 11/4 inches high fixed with two wire loops; the ordnance shell and flame was to be 23/8 inches high by 13/4 inches wide, again fixed with two wire loops; the crossed sabers of the Cavalry were to be 33/4 inches long each, with the width from the back of the hilt to the point of the other 13/4 inches, the whole fixed with four wire loops. The infantry bugle, or "looped horn" as it is often called, was to be 31/2 inches long and 11/2 inches wide at the loop, fixed with two wire loops; the crossed cannon were to be 31/2 inches long each, crossing at the trunnions, with the breech 5/8 inch wide and the muzzle 1/2 inch wide, the whole fixed with four wire loops. The enlisted insignia examined all conform closely to these specifications. The "trumpet, perpendicular" prescribed in 1850 for both officers and enlisted men and in 1851 for officers only of the Regiment of Mounted Riflemen " was revived with the hat and was worn until the redesignation of the unit as cavalry in 1861.72 Quite naturally this insignia was



FIGURE 6.—General Sherman's hat.

mentioned in neither the 1861 uniform regulations, which were not published until 1862, nor in the 1865 Quartermaster Manual.

Of the officers' insignia, there is far less to go on and far more variation as to size. The 1861 regulations specified only that the staff and corps insignia were to be gold or silver embroidered on black velvet backgrounds. General and staff officers were to wear a gold embroidered wreath, of unspecified composition, encircling the silver letters "U.S." in Old English. Engineer officers were to wear a gold embroidered wreath of laurel and palm encircling a castle in silver, topographical officers a gold embroidered wreath of oak leaves encircling a gold embroidered shield. For officers of ordnance, cavalry, artillery, and infantry, gold embroidered shells and flames, gold embroidered crossed sabers, edges upward with the number of the regiment in silver in the upper angle, gold embroidered crossed cannon with the number of the regiment in silver at the intersection, and gold embroidered bugles with the number of the regiment in silver in the bend, respectively. No sizes were specified. Since the 1865 Quartermaster Manual dealt only with issue items, no specifications were given for officers' devices. Examination of a number of specimens reveals more uniformity in the size of the black velvet backgrounds than in the devices affixed thereon, the size of the devices averaging perhaps 10-15 percent smaller than those prescribed for enlisted personnel. If the 1851 uniform regulations and the Schuyler, Hartley, & Graham illustrations are taken as a standard, the documented or biographical pieces examined match rather closely, while the undocumented vary to a greater degree.⁷³ Some officers' insignia in metallic imitation gold embroidery on black velvet backgrounds are known. All of the officers' liat cords examined carry acorns on the ends, similar to those on the 1855 cavalry hat, rather than the tassels on the enlisted model.

THE 1858 FORAGE CAP

Although the 1851-1854 cap was an improvement over the 1832 and 1833 dress models, as stated above it quickly proved impractical for active service. In 1854, Inspector General Sylvester Churchill reported that at posts he had inspected since the previous June, officers queried opposed the cap at a ratio of about two to one," and the commanding officer of at least one regiment complained bitterly about the unsuitability of the cap for wear in the field and especially for fatigue duty, and requested for his unit a reversion to the 1839 pattern forage cap.⁷⁵ Admittedly, this cannot be taken as representative of the opinion of the Army as a whole, but combined with the widespread wear of nonregulation broad-brimmed hats by officers and men alike of all arms during the period, it is strong evidence that the cap was both disliked and unsuitable. A fatigue or forage cap was needed.

In February 1857, Lt. A. J. Donelson, Commanding Officer of the Company of Sappers, Miners, and Pontoniers then stationed at West Point, wrote Bvt. Brig. Gen. Joseph G. Totten, Chief Engineer of the Army, pointing out the disadvantages of the cap, especially for engineer troops who were essentially skilled laborers, and suggesting either that

the cap be retained for dress only and either the old forage cap or a felt hat similar to the cavalry pattern be issued for fatigue wear, or that such a felt hat be issued for both dress and fatigue. He went on to suggest further that if the 1851–1854 caps were retained, the allowance might be a fatigue or forage cap each year and a dress cap the first and third years, the total issue of headgear for the five year enlistment remaining unchanged.⁷⁶

Major Richard Delafield, Superintendent of the Military Academy, passed the letter along with a covering letter of approval. Totten in turn endorsed the concept and referred the proposal to the Secretary of War with the recommendation that the "Engineer Soldiers" be issued "two caps of the present style and five forage caps of the pattern lately used [i.e., the 1839 pattern] . . with such modifications as may be necessary to adapt it better to fatigue duty . . . in lieu of the seven caps of the pattern now used." He pointed out that the cost of the seven caps and trimmings was about \$14.80 per enlistment while those proposed would total about \$11.25. The Secretary of War, John B. Floyd approved the suggestion on 31 March, 77 and Delafield was instructed to have a forage cap made with

"the desired modifications" so that it might be forwarded to the Quartermaster General as a pattern. 75 Delafield passed the job on to Donelson, who had two cloth caps of the "chasseur pattern" made, which he forwarded to Washington. One of these had a low crown and one a high crown, which he said could be furnished by the maker at \$1.00 and \$.871/2 each by the hundred, respectively, without cover or insignia. The cap with the higher crown was selected and forwarded to Jesup as a pattern with the request that procurement and issue be made according to it. Jesup in turn forwarded the pattern to the Philadelphia depot with instructions to have 150 made with a supply to be kept always on hand.50 These caps were made at Schuylkill Arsenal rather than on outside contract.⁵¹

Although there is no specific mention of insignia in the endorsements of his proposal, Donelson, in his letter to Totten of 26 June, stated that "if either of the cloth caps were adopted, the supposition is that it would be worn always with the castle," while Totten in his endorsement of the original proposal did speak of the price of "caps and trimmings." Thus, the surmise must be made that the engineer castle was to be worn on the cap, probably that prescribed for the 1851–1854 cap, which would have been suitable as to size. The first listed issue was in January 1858 to engineer troops at Fort Leavenworth, Kansas, "74 forage caps, 74 cap covers," the latter an item not heretofore mentioned.

The exact design of this cap is somewhat uncertain, for as will be seen below, there is some doubt that this pattern was that selected for issue to the whole Army in 1858. The two caps that he sent to Washington Donelson called "cloth or chasseur."ss The dress of the French Chasseurs à Pied, or foot rifles, the elite of the French Army in this period, enjoyed quite a vogue with American officers, both regular and militia, in the 1850s, so neither the design nor the designation was particularly unusual. Actually, almost the entire French army had gone into a bonnet de police à visière, or visored forage cap, in the mid-1840s, very similar in design and dimensions, if not in trim, to that adopted for the U.S. Army in 1858. Again, the Albany [New York] Burgesses Corps, one of the better known and more affluent of the nation's volunteer militia organizations, as early as April of 1857 was wearing a forage cap very similar to the 1858 pattern.st

Perhaps more to the point, Capt. George B. Mc-Clellan, on his return in 1856 from an inspection tour of the European armies, had been assigned to West Point where he supervised the construction of mortar and seige batteries.^{ss} While stationed at the academy, he must have worked on his official report, which contained comments on the uniforms and headgear of all European armies, and possibly with some help from Lt. Donelson,30 who could well have been influenced in regard to the design of forage caps that he submitted to Washington. Although in his report, McClellan recommended a visorless forage cap that could be folded and carried in pack or saddle bag, he did speak in some detail of the French forage cap, describing it as having a large straight visor and a loose conical top.90

The closest thing we have to a description of the cap is a list of the materials used in its manufacture: $\frac{8}{36}$ yards of cap cloth, sweat leather, visor, two vest buttons, black muslin, fullers board, chin strap and buckle. ⁹¹

Nothing further appears in the record in regard to forage caps until the following summer. In August Brevet Major William H. French, Commanding Officer at Fort McHenry, Maryland, and of Light Company K, 1st Artillery stationed there, wrote the Adjutant General:

I send four fatigue caps of a pattern for service in garrison. It is *light, comfortable, military*, and cheap. It looks better as a dress cap than the old cloth cap.

My men were in the habit of taking out the stiffening of their old caps, to wear them on fatigue, which looked so badly that seeing one of these worn by a bugler, I told the men that if all would wear them when at work or at stables they might get them for that purpose.

In respectfully asking permission for my men to wear them I would add that the high stiff cap & the hat with a brim are not as well adapted for stable duty when grooming horses from the liability of touching the horse and being knocked off.

I send four caps for artillery, cavalry, infantry, and staff.02

This letter, which was received by the Adjutant General on 12 August, carries no endorsements, indicating that it was not seen by anyone outside the receiving office and it was not acknowledged, a highly irregular practice in the Adjutant General's Office. Yet, as will be seen below, Jesup was in some way apprised of French's request and necessarily brought into the picture, for on 12 November he wrote Col. Thomas, the Assistant Quartermaster General in Philadelphia: "The Secretary of

War is desirous of introducing the accompanying cap as a 'forage cap' for enlisted men and directs you report the cost of it The color of the welt around the crown is to correspond in color with the facings of the corps ..." Three days later Thomas acknowledged the communication, giving an estimate of the cost, and returned the cap he had been sent together with two caps made at the arsenal, apparently of the engineer pattern, remarking that the only difference between the two patterns was in the visor. The letter, forwarded on to the Secretary of War, was returned to Jesup on 1 December endorsed: "Respectfully returned with three caps and a copy of General Order No. 13 of this date. The style of the cap is to be exactly similar to the sample with the orange colored welt, without stiffenings or stitched bands, the visor however to be of the pattern described within as being cut to slope."05 The same day Jesup wrote Thomas, enclosing a copy of General Order No. 13 and the Adjutant General's endorsement, and adding that "the cap adopted was made in Baltimore under Bt. Major French's direction" and that the sample was to be followed in every particular "with the exception of the modifications ordered."96

A week later, Jesup wrote a rather curiously worded letter to Thomas:

The stiffening or staying of the cap, that you suggest, was urged against the Engineer caps you sent on, by those having the matter in hand, and the absence of anything of the kind, in the cap adopted, was claimed, as an advantage in it.

As our advice has not been sought in the matter, and a decision made without our consultation, I am not disposed to offer any suggestions, but to carry out the instructions given to me, and to leave the test of the Secretary's adoption to practical experience.

If what you apprehend should occur, the Army will make it known, and it can be remedied.⁹⁷

From this it would seem that although the engineer cap and the patterns submitted by Major French were very similar in general appearance, the former had some stiffening in addition to that in the crown plus the "stitched bands" (whatever they may have been) and also a visor "cut to slope," or convex, this latter being adopted for French's model. This is further borne out by the fact that in the list of materials used in making the engineer cap, the cost of the fuller's board, id est, paper board, was set at \$.05, and \$.05 will buy a good bit of fuller's board. Thus, the cap adopted apparently was a combination of the body of French's cap and the visor of the engineer model.

Actually, in more than one sense, French's cap had its inspiration in the 1851 model, for the two are quite similar in measurement: the height of the front and back and the diameter of the top averaging 6, 7½, and 5¾ inches respectively, in the earlier pattern, and 4, 6½, and 5¾ inches in the later model. If one took out the cap body, or stiffening, as French's men did, he would have a cap very similar to that adopted. In matter of fact, in April 1859, the Quartermaster General directed that all caps of the earlier pattern were to be issued as forage caps and, one would judge, with the bodies, or stiffening, removed.⁹⁵

General Order No. 13 stated:

For fatigue purposes Forage Caps, of pattern in the Quartermaster General's Office, will be issued, in addition to hats, at the rate of one a year. Dark blue cloth, with a cord or welt around the crown of the colors used to distinguish the several arms of service, and yellow metal letters in front to designate companies. For unassigned recruits dark blue cord or welt around the crown and without distinctive badge.

Commissioned officers may wear caps of the same pattern with dark blue welt and the distinctive ornament, in front, of the corps and regiment.⁵⁰

The sizes of the insignia were not given, but the 1861 uniform regulations specified the number of the regiment and the letter of the company worn on the hat as 5% inch and 1 inch high, respectively, and it seems probable that these same were used on the cap.¹⁰⁰ The sizes of the corps device for officers are nowhere given. Although the author has never seen or heard of an authentic regulation issue cap with the colored welt, there is no question that they were issued, the first such issue being ordered as early as 16 December 1858, 84 caps for Company E, 1st Infantry, and in January caps specifically for infantry, engineers, and artillery.101 The caps were manufactured at Schuylkill Arsenal at an initial cost of \$.85, the cost dropping to \$.57 a year later.¹⁰² General Order No. 4 of 26 February 1861 brought an end to the colored welt, stating that thereafter forage caps were to be made with a dark blue welt like that originally prescribed for unassigned recruits.103

Criticism of the cap varied from good to bad, but nowhere was it attacked so violently as the campaign hat. One complained that it was a "waste of cloth, too baggy, and caught the wind," "while another called it "useful and even natty" though not particularly beautiful. "No other cap is so comfortable. There is room for a wet sponge, green leaves, a handkerchief, or other protection against

the sun in the top. The slanting visor fits easily to the forehead." Most complaints referred to the cap's appearance, recommending that it be replaced by the "jaunty cadet" model. The Woodhull Report spoke of the difficulty of cleaning the cap, the "interference of the oblique visor with vision, its want of grip. its want of warmth, the deficient protection it affords the face and neck against the sun and rain..., and, especially, the absence of ventilation."

The earliest found detailed specifications for the cap, those in the 1865 Quartermaster Manual, state:

Forage Caps-are of 6 sizes; the bodies to be made of dark blue forage cap, or facing cloth. A cap of medium size is 15 inches in circumference at base; height in front, 4% inches; in rear, measured from base to crown on a curved line, 53/4 inches; diameter of crown, 5 inches; the body to be stiffened around the base by a piece of buckram, 23/4 inches wide; a single row of machine stitches, 16 to the inch, sewed through the buckram and body of cap, with black silk or linen thread, commencing at a point in the centre of front, 13/4 inches below the crown, and extending each way, by curved lines, around the sides of the body to a point in centre of rear, 11/2 inches above the base of the cap; the crown to be stiffened with a stout circular sheet of pasteboard, and the cap lined throughout, inside, with good black silesia; a sweat leather, of good black goatskin morrocco, 2 inches wide, to be strongly sewed to the base of the cap and through the cloth buckram and lining; a vizor of stiff glazed leather, best quality, black above and green below, in form of a crescent, the outer curved edge 13 inches long, and the interior edge 9 inches long, 2 inches wide in the middle, to be strongly sewed on the front of the base of the cap; a chin-strap, of best quality soft and pliable black glazed leather, composed of two pieces 5% inch wide, each piece 91/2 inches long, and having sewed on one end of each, a black leather loop of same width and material, and on the other end a vest button of brass, strongly sewed to the cap near the extreme points of the vizor; on one of these pieces is to be attached a slide, of No. 19 sheet brass, 1/8 of an inch long and 3/4 of an inch wide, made with a bar in the centre, over which the strap passes and fastens at the middle of the chin-straps in front of the cap; at the base, over the vizor and around the crown, a welt of the blue cloth covering is inserted; weight of cap, 4% ounces. 108

A number of specimens of obvious regulation origin ¹⁰⁰ have been examined, including one sealed sample, and their general construction and basic measurements vary little except in relation to cap sizes (Figures 7, 8). This is somewhat to be wondered at when one considers that these must be taken as a cross-section of several million made during the period by a number of different contractors. In those checked, the heights of the fronts vary from 3½ to 4¾ inches, the rears from 5¾ to 6½

inches, the diameters of the crowns from 43/4 to 6 inches, and the width of the visors in the middle from 15% to 21% inches. The bases of the cap bodies are stiffened with buckram under the sweat leathers and the interiors are lined with glazed cotton. The crowns of all are stiffened with pasteboard. Many carry makers' labels as "Geo. Hoff M&G, N.Y.," and "U.S. Army/L. J. & I. Phillips," with the addition of the contract date in some cases. All are cut in the rear in such a way as to come to a slight point over the nape of the neck. Although the cap was originally ordered to have a visor "cut to slope,"110 that is, somewhat convex, about 50 percent of those examined have visors completely flat. While the 1865 Quartermaster Manual does not precisely describe the shape of the visor, it does say that it was to be two inches wide in the center. Of the caps examined, all the convex visors are exactly 2 inches wide in the center, while the flat visors measure 15% inches in each case. A check of all clear group pictures in Miller's Photographic History of the Civil War show the convex to outnumber the flat visors in a proportion of something better than two to one. The one pattern cap, or "sealed sample," of regulation style examined carries a convex visor, two inches wide in the center.

This pattern cap is unusual enough to deserve a special note, in that its color, rather than the regulation dark blue, is a medium to dark green, carries half-round, blank, composition buttons, with the red wax "sealed sample" wafer on the sweat band and a pasteboard label attached with ribbon bearing the legend "Sample/Green Forage Cap/(Berdan)" and maker's label "Geo. Hoff & Co./Philada" in the crown. In all respects, its dimensions and construction are very close to the other regulation caps examined."

Although the green "Berdan" uniform will be discussed in depth in a succeeding volume, some note of the 1st and 2d Regiments of United States Sharpshooters should be made here." Hiram Berdan of New York, one of the most noted rifle shots in the country, in June 1861 wrote President Lincoln regarding the possibility of his forming a regiment composed of proven marksmen. The letter passed on to General Winfield Scott (to whom Berdan seems to have appealed personally) through the Secretary of War. Scott replied to Berdan that he was personally "very favorably impressed" with him and thought that such a regiment of sharpshooters "would be of great value and could be







FIGURE 7.—1858 forage cap.



FIGURE 8.—1858 forage cap with flat visor.



FIGURE 9.—Gosline's Zouaves forage cap.

advantageously employed . . in the public service." The unit was ordered into the service in August."

No official authorization for the issue of a uniform of a special color to this unit has been found. Such an issue at this time was not an exception, however, despite the tremendous pressure on the Quartermaster Department to clothe a rapidly growing army, for a number of so-called elite organizations as the numerous Zouave regiments, the Clinton Rifles, and the 4th Regiment of the Excelsior Brigade received such.115 In any case, Berdan, who has been described as a highly aggressive individual,116 was given a uniform of near regulation cut but of a medium to dark green color, as well as leather knapsacks of a "Prussian" pattern and leather leggings of "a sample approved" by Berdan,117 and a green forage cap carrying a black plume.118 The caps were first issued some time prior to 5 November. The maker of the first cap is unknown, but the first group of green uniforms was made by Martin Brothers of New York City." Both the uniforms and caps were not children of the first heat of the war, but like Zouave uniforms, continued to be issued, the green to the sharpshooters as late as 1864.120

One other sealed sample has been examined, although nonregulation, and is of considerable interest, that manufactured for Gosline's Zouaves, the 95th Regiment of Infantry, Pennsylvania Volunteers (Figure 9). Of dark blue cloth, it is piped in red at head band and crown and vertically front, rear and sides. Somewhat lower than the issue item, it measures 3 inches high in front, 5½ inches high in rear and is fitted with a flat visor. Affixed to the interior of the crown with a red wax seal with "Office of Clothing . . . [most probably 'and Equipage'] U S A" surrounding an eagle impressed on it, is the contemporary handwritten label "Charles Laing & Co./100 Zouave/Forage Caps/for Col Goslines/Regiment."

Cap Covers and Havelocks

One of the long-standing complaints against both the 1825 and 1839 forage caps, besides their issue at the rate of but one per five year enlistment, had been the fact that they were pervious to water and were issued without a water-proof cover.¹²¹ When the multipurpose 1851 cap was adopted, however,

a cap cover "(to be worn in bad weather) black, of suitable water proof material, with a cape extending below the cap ten inches, coming well forward, and tying under the chin" was authorized. When forage caps were first issued to the Company of Sappers, Miners, and Pontoniers early in 1858, cap covers of an unspecified design and material were issued with them. 122

When a forage cap was adopted for the whole Army later that year, however, the question of a cap cover was not mentioned. In fact, such was not included in official cost of clothing lists until 1862.124 Schuylkill Arsenal had continued to manufacture the caps until the great expansion of the Army in 1861, and although contracts for them were let as early as July, it was not until late October that caps "with cotton glazed covers and capes" were purchased.125 These were listed in the 1862 cost of clothing list at \$.18, but no rate of issue was indicated.126 Despite the fact that these covers were purchased in relatively large numbers and were available for issue throughout the war, they apparently were seldom worn. Pictures of their use are rare, there being few such in the whole of Miller's Photographic History of the Civil War.127 During the fiscal year ending 30 June 1865, no covers were bought or manufactured, with more than 190,000 remaining on hand on the latter date.123 These cap covers are extremely rare today and are not represented in the National Collections. For this reason, no illustration is included.

The question of havelocks is something of a puzzler. A havelock was a light cloth covering for headgear, hanging well down over the neck, worn for protection against the sun, reputedly designed by Sir Henry Havelock, a British general serving in India. It must have been somewhat similar to the 1851 cap cover.100 There is no question that such were worn in the early days of the Civil War. Although no photographs showing their use have been found by the author in the many volumes of Civil War photographs checked, the special artist, Alfred R. Waud, who was noted for his accurate detail, very definitely depicts a scouting party wearing them in a sketch dated June 1861.130 In addition, several lithographs and woodcuts of the Battle of Bull Run in July 1861 show Federal troops in havelocks.131 There are also references in war memoirs that leave no doubt that they were worn, if to a very limited degree. John D. Billings, in his

Hardtack and Coffee, called them "one of the supposed-to-be useful, if not ornamental stupidities" of the war, and stated that while whole regiments went south with them, if one survived three months active service, he had yet to hear of it.132 Another memoir was equally explicit, stating that the havelocks were so impractical that they were almost immediately transferred "to the plebian use of a dishcloth or a coffee strainer."133 Despite this evidence. havelocks do not appear in any official Army cost of clothing lists for the Civil War period, nor are they mentioned in any issue directives coming from the office of the Quartermaster General during the same time span.134 During the year ending 31 December 1864, no contracts were let for havelocks and none were mentioned as being on hand at any depot.105 Yet the U.S. War Department's Annual Report of the Quartermaster General for 1865 listed 613 havelocks on hand as of 1 July 1864, 456,943 purchased during the fiscal year, and 6682 on hand as of 31 July 1865. These could not have been the "glazed cotton covers and capes" purchased in 1861, for no such were listed, and 190,189 "cap covers" were listed as on hand as of 31 July 1865.136 This odd succession of figures, combined with the fact that no authenticated specimens are known to the author, makes the havelock, as stated above, "something of a puzzler."

The "McClellan" or "Chasseur" Cap

Much has been said about the popularly called "McClellan" type cape preferred by so many officers and worn by some enlisted men.¹³⁷ There is no question that it was a distinct type, though differing from the regulation pattern less than the campaign hats worn by many officers,¹³⁸ and was preferred by the majority of officers over the issue item. A check of Miller's *Photographic History* shows the officers wearing the nonregulation over the regulation in a proportion of about three to two.

Actually, when measured there is far less difference between the two than meets the eye, and in photographs the two are sometimes very difficult to tell apart because of the degree of floppiness and the angle from which they are viewed. "McClellan" types measured, including caps formerly belonging to General McClellan himself (Figure 10) and to General William S. Harney, varied from 3 to 3½ inches high in front and 5 to 6 inches high in rear, as opposed to the issue item, which varied from 3½ to 4¾ inches in front and from 5¾ to 6½ inches high in rear. One reason for the visual difference is the quality of the material and the method of construction. While the issue models have the sides welted to the crown, a majority of



FIGURE 10.—General McClellan's cap.

the "McClellan" types have the sides merely sewn to the crown, the latter giving a distinctly lower appearance. All of the "McClellan" types examined and a majority of those to be seen in photographs have flat visors, which adds to the illusion. McClellan's cap carries the maker's label "B. H. Stinemetz/236 Penna Avenue/Washington D C" in the crown while Harney's carries the label "Warnock & Co./No. 519 B'Way/New York." The other specimens examined carried no label.

The origin of this nonregulation pattern is difficult to determine. As with the issue model, the inspiration for the pattern may well have been French. The forage caps prescribed for general officers of the French army 1852-1870 were very similar to the "McClellan" in both height and shape and definitely lower than the American issue item.¹³⁰ Then it must be remembered that in 1857 when Lt. Donelson requested the adoption of some sort of working cap for his company of sappers at West Point, he was instructed to have a forage cap made for the Quartermaster General to use as a pattern. He had two caps of the "chasseur pattern" made up, one with a low crown, one with a high crown, the latter of which was adopted. The same year, that is in 1857, the USMA cadet forage cap apparently was changed from the 1839 Army model to the "chasseur" type.140 As the cadet model appears to have a lower crown than the regulation army pattern, it is possible that its basic design is Donelson's low-crowned but rejected cap. As post-Civil War references to officers' wartime forage caps often describe them as being of the "cadet" pattern, it seems very possible that the origin of the "Mc-Clellan" lay at the Military Academy.141

There is no question that the lower crowned "jaunty" cap was more popular than the regulation model, primarily because of its looks, and as the war decade drew to a close the crown dropped even lower giving an even more jaunty look (Figure 11a). Early in 1869 the firm of Bent & Bush of Boston was advertising a very low-crowned "Officers' French Chasseur Cap," which certainly must be considered a direct forerunner of the pattern adopted in 1872. This model certainly made its way into the Regular Establishment well prior to the 1872 change, for the National Collections include one such formerly belonging to Captain Henry S. Gansevoort, 5th U. S. Artillery, who died

early in 1871.¹⁴² When Gansevoort purchased the cap is unknown, and the maker's label cannot be deciphered, but the sweat band shows evidence of considerable use. This cap, measuring as it does 13/4 inches in front and 6 inches in the rear, is even lower in front than the 23/4 inches prescribed in 1872.¹⁴⁴ Again, a photograph of Howard B. Cushing (Figure 11b), who was appointed a 2d Lieutenant, 4th Artillery, in 1863 and who transferred to the 3d Cavalry in 1867 [killed in action against the Apaches in 1871], shows him wearing a cap equally as low as the Gansevoort specimen and with the regulation 4th Artillery insignia attached.

On the insignia, the enlisted men were to wear metal letters 1 inch high on the front of the cap to designate the companies to which they belonged.145 As in the case of the campaign hat, the sizes of the prescribed officers' insignia are not given, the regulations merely describing them as the "distinctive ornament of the corps and regiment in front."146 Four biographical caps with insignia attached have been checked, and three of the four match the Schuyler, Hartley & Graham's Illustrated Catalogue very closely, while the fourth, the "US" in wreath on General McClellan's cap is some thirty percent smaller than that on General Harney's cap and of a much inferior quality.147 Two additional officers' cap insignia should be mentioned. A photograph of Col. Hiram Berdan in the National Archives shows him holding a forage cap on the front of which is a gold wreath within which are crossed muskets with the letters "US" in the upper angle and "SS" in the lower.148 In addition, there is an extant photograph of Col. Henry A. V. Post of the Sharpshooters showing a cap insignia comprising a gold wreath enclosing the letters "U S S S" without the crossed muskets.140 Nothing is known of any cap devices worn by enlisted men of the Sharpshooters.

Other than branch and unit cap insignia were the quasiregulation so-called "Corps Badges," generally worn on the crown of the cap. First instituted by General Philip Kearny in June 1862 for his 3d Division, 3d Army Corps, Army of the Potomac, as a means of increasing esprit de corps, the concept was picked up by the 1st Division, 9th Army Corps, in February 1863 and then by the whole of the Army of the Potomac the following month.¹⁵⁰





 \boldsymbol{b}

FIGURE 11.—a, Brigadier General James H. Wilson, c. 1863, wearing a "McClellan" cap; b, Lieutenant Howard B. Cushing, c. 1869, wearing a "McClellan" cap. (a, U. S. Signal Corps photograph, Brady Collection, National Archives.)

The Army of the Potomac order was quite specific:

For the purpose of ready recognition of Corps and divisions in this Army and to prevent injuries by reports of straggling and misconduct through mistake as to organizations the Chief Quartermaster will furnish without delay the following badges to be worn by the officers and enlisted men of all the Regiments of the various Corps mentioned.

They will be securely fastened upon the center of the top of the cap.

Each corps was given a distinctive design to be worn in red by the 1st Division, in white by the 2d Division, and in blue by the 3d Division.¹⁵¹ From this start, the concept spread to the greater part of the Army by the end of the war.

THE 1864 LIGHT ARTILLERY CAP

The term "Light Artillery" for many years was loosely used to include both "horse" or "flying" artillery in which all personnel were individually mounted, and "mounted" or "harnessed" artillery, in which some personnel were individually mounted and the remainder rode the caissons and limbers. In the Civil War, the term generally indicated the artillery which accompanied the army in the field as opposed to fortress or siege artillery.¹⁵²

"Light" artillery in the Army properly dates from 1808 with the organization of the Regiment of Light Artillery. Of this unit, only one company, that of Captain George Peter, was ever mounted and then only for a period of about a year for reasons of economy. In the Army reduction of 1821, the Regiment of Light Artillery was disbanded, all the artillery of the army being organized into four regiments, one company of each regiment to be designated and equipped as light artillery. The latter provision was inoperative until 1838 when, at Secretary of War Poinsett's instance, Brevet Major Samuel Ringgold, commanding "C" Company, 3d Artillery, was directed to organize a "light" company in which all personnel were to be individually mounted; in other words, a company of "horse" artillery.153 The following year one company from each of the other three regiments was equipped as a "light" company as opposed to "horse." In 1847 Congress authorized an additional company from each regiment to be equipped as light artillery. During the War with Mexico some of these companies fought as "light" companies. Several never received their "light" equipment, and several fought as infantry. Following the war, a series of changes and counterchanges left the Light Artillery in a state of flux until the outbreak of the Civil War.

Major Ringgold, who was an extremely aggressive and influential officer, had no sooner begun the organization of his "horse" company in 1838 than he was agitating for a distinctive uniform for the unit including first, dragoon caps, and then red horsehair plumes. ¹⁵¹ The plumes were authorized for officers in 1839 and for enlisted men in 1841 with bands and tassels added. ¹⁵⁵

Early in 1844 a board of officers, of which Ringgold was a member, was set up to consider the quantity of clothing issued to the Army. In its report, in addition to reporting on its assigned mission, the board made certain recommendations in regard to the headgear of the Army. Specifically, in regard to the Light Artillery, the report recommended: "For Mounted Artillery-according to the modified pattern, the band and tassel red, the . ''156 Actually, before the plume of red horsehair board rendered its report, some change in the pattern of the cap to be issued the Artillery, and presumably the Light Artillery as well, had been made. On 11 April 1844, the Quartermaster General, in replying to a complaint of Lt. H. B. Judd, 3d Artillery, regarding the quality of the issue caps, wrote that while the caps issued had been procured by the late Commissary General, Mr. Tyson, Colonel Henry Stanton, the depot quartermaster at Philadelphia, had since been able to supply a cap of better material at the same price. Two days later he wrote Captain J. B. Scott, 4th Artillery, in regard to issue of the new type. He stated that while the old pattern had to be issued until exhausted, the quality and pattern of the cap had been improved.157 Just what this change was is unknown, but since Ringgold was a member of the board and had been successful in his advocacy of a distinctive uniform for his "horse" company,158 the pattern may have been issued to his alone. As late as 1859 when the mounted companies were requesting distinctive headgear, letters to and from the Quartermaster General and the Philadelphia Depot speak of light artillery companies being supplied with "the uniform cap in use by them anterior to 1851" and of "the Ringgold Cap used prior to 1851." 150 Although the modification must have been slight, a modification it must have been, for the 1845 cost of clothing lists carried the uniform cap of both "Light Artillery" and "Horse Artillery" at \$1.27, with that of the Infantry and Artillery at \$1.22 and that of the Dragoons at \$1.23. In the same lists the band and tassel of both the Light and Horse Artillery was listed at \$.53 and that of the Dragoons at \$.50, and the hair plume of the former at \$.78 and the latter at \$.42, indicating a difference throughout.160

The 1851 uniform change brought to an end, for several years at least, a distinctive uniform and headgear for the Light Artillery. Although General Order No. 1 of 30 January 1854 authorized the

short "shell" jacket "for all mounted men," the 1851 cap and its 1854 counterpart continued to be issued to all artillery units.161 Sometime in 1857, however, before the adoption of the campaign hat for the whole Army, there seems to have been some agitation in favor of the cap and the horsehair plume as opposed to the hat by one or more of the mounted companies.102 The agitation increased in the next months to the point that even after the hat was prescribed for the whole Army in March 1858, the Secretary of War instructed Jesup to issue the 1851-1854 pattern with horsehair plume to those light companies which preferred them to the hat.163 Jesup then proceeded to call in all caps and plumes in stock at various posts around the country for such issue.161 Rather oddly, some of the light companies preferred the hat, for during the general period there were instances of the issue of caps and plumes to some light companies and hats to others.165 Indeed, this seems to have carried over to as late as 1861, even after the War Department had ordered that the light artillery companies were to use the "old pattern uniform cap with red horsehair plume.166 In June 1861, Harper's Weekly carried a woodcut of Company "E," 3d Artillery, definitely equipped as light artillery but with all personnel wearing frock coats and hats.107

When several of the light companies first began requesting the caps and plumes, Colonel Thomas, the depot quartermaster in Philadelphia evidenced some doubts as to the cap being strong enough to carry the plume and as a result made several issues of the "Ringgold cap, used prior to 1851." This resulted in some small confusion because of the two different types being in use at one time until Brevet Lt. Col. J. B. Magruder, 1st Artillery, demonstrated a method of strengthening the 1851–1854 model so that it would successfully carry the plume. This slight modification, whatever it was, came to the attention of the Secretary of War and resulted in General Order 20 of 1860 noted above.

With the outbreak of war, this cap and plume, which could hardly have been more unsuitable for field or combat wear, all but dropped out of sight. A search of thousands of photographs for the period 1861–1865 has failed to uncover a single picture of light artillery so uniformed, and a search of letters emanating from the Office of the Quartermaster General directing issues of such indicates that but few were sent to the troops. Lt. Philip S.

Chase, 1st Rhode Island Light Artillery, said that it was rare for a volunteer unit to receive the cap and plume and that he saw very few of them during the war.¹⁷¹

In the latter part of 1863 there seems to have been a slight revival of interest in the cap. In September, Colonel George H. Crosman, the depot quartermaster in Philadelphia, instructed the military storekeeper at Schuylkill Arsenal to send 170 light artillery caps with trimmings to New Bern, North Carolina, for issue to the "23rd New York Battery."172 And in November, in answer to a query from Lt. Guy V. Henry, 1st Artillery, the Quartermaster General replied that the uniform for officers and men of light artillery was given in "Article LI, revised regulations of 1861" which stated that the "hat" for "companies of Artillery equipped as Light Artillery [was to be] the old pattern uniform cap, with red horsehair plume, cord and tassel."173 Then in November, Meigs directed Lt. Col. D. H. Vinton, the quartermaster in New York City, to send 333 "uniform caps, Light Artillery" with plumes, cords, etc., to New Orleans.171 Vinton, in turn, placed a requisition with the Philadelphia depot for 500 light artillery caps and trimmings, the disparity between 500 and 333 seemingly representing Vinton's desire to build up his stocks of these items.175 Despite the fact that on 31 December 1863 there had been on hand in Philadelphia 2345 light artillery caps,176 Crosman, on 29 January 1864, let a contract with W. C. Dare of Philadelphia for 1452 "Light Artillery Uniform Caps" according to "sealed samples" in his office, at \$2.89 each, "each piece to be marked with the contractor's name." The same day he contracted with William Horstmann Brothers of Philadelphia for 1600 red hair plumes, 1600 bands and tassels, and 374 brass eagles "for Light Artillery caps."177

Just what this Dare cap was can be surmised with a fair degree of certainty but with no absolute surety. The stocks of the 1851–1854 pattern had not been exhausted and no contract for light artillery caps, other than that let to Dare, was let by the Philadelphia Depot during 1861 or the period 15 August 1862 through 1865. There is no evidence in the record that a change in cap form was ever requested by Crosman or that such was ever authorized, and, unfortunately, the press copies of his letters sent for the period November 1863 through July 1864 cannot be found. Actually, under exist-

ing procedures, Crosman did not need authorization from Washington to negotiate a contract for so small an amount.179 Indeed, the letter books of the office of the Quartermaster General for 1863-1864 indicate many issues of special type uniforms and equipment without stated or apparent authorization from the top.180 In any case, in April 1864, Meigs directed the issue of 1500 light artillery caps with all trimmings to the quartermaster at New Orleans.¹⁸¹ In June 1864, however, when Meigs was making up his cost of clothing lists for publication, he very curtly asked Crosman why he had priced light artillery caps at \$1.06 in 1863 and \$2.89 in 1864 and if the increase included the trimmings.182 Crosman's complete reply is missing, and the Office of the Quartermaster General's register of letters received merely states, in reply to Meigs letter, the price paid for light artillery caps "with explanations."183 Whatever Crosman's "explanations" may have been, they must have been acceptable to Meigs for nothing more of the matter appears in correspondence between the two and the cost of clothing list published in July carried the light artillery cap at \$2.89 with the trimmings an additional \$1.94.184

The origin of this cap form, which in general is similar to the 1851-1854 pattern although quite different in detail, is unknown and there is no hint given in the corresponence of the period. However, in an unpublished report of a board of officers established in 1862 to explore the possibility of a uniform change is included: "Cap for Light Artillery Officers-The cap ornaments and trimmings as now worn in full dress, except that the cap shall be of the shape of model, deposited in Qr. M. Genls. Office. Trimmings and plume as now worn."15 Whether this is the pattern cap referred to in Crosman's contract with Dare is of course unknown, but at least a pattern was available. The 1865 Quartermaster Manual describes the cap and trimmings in minute detail.

Uniform caps for light artillery—of 6 sizes; the following are the specifications for caps, No. 3, medium size, viz: body of cap made of stiffened felt, so as to preserve its form; made on sample block, and covered with dark blue forage cap cloth; diameter at the base, $7\frac{1}{2}$ inches; at the crown, $5\frac{3}{4}$ inches; covered at top with stiff glazed leather, of best quality, extending over the body $3\frac{1}{4}$ of an inch; sewed strongly at 4 points,—front, rear, and sides, with 5 stitches each, and depressed in the crown $5\frac{1}{10}$ of an inch; a band of thin glazed leather, best quality, $1\frac{1}{8}$ inches wide encircling base; height of cap in front, $5\frac{3}{4}$ inches; in rear, curved, $7\frac{3}{8}$ inches;

circular vizor of stiff glazed vizor leather, 113/4 inches long, inside edge, and 19 inches on outside edge, breadth in the middle, 23/4 inches, strongly sewed on body with 20 stitches; sweat leather of black morrocco of best quality 3/4 of an inch wide, sewed on exterior of base of cap, and folded inside; a small piece of morrocco, 11/2 inches long and 1 inch wide, sewed inside of body of cap, 11/2 inches from the top, with ten stitches, leaving a loop to receive the whalebone stick of hair-plume; two chin straps of thin glazed leather, best quality, 5% inch wide, one of which to be 8 inches long, having sewed on one end a strong 7/8-inch buckle, of No. 19 brass; at the other end a yellow vest button, with a piece of No. 18 iron wire, 2½ inches long, looped in the eye of the button, with which to fasten the end of the strap to the cap, and having a glazed leather slide attached to strap, through which to pass the end of the other strap after it has been buckled; the other chin strap of soft glazed leather, of same quality and width of short chin strap, and 121/2 inches long, and having at one end 4 holes, punched at equal distances, to receive the tongue of buckle under the chin, and 2 additional holes near the middle of strap, to receive the tongue of buckle when on the cap; the other end of this strap is fastened to the hat by a yellow vest button, with wire, similar in all respects to that described above for fastening the end of the other strap to hat.

Brass crossed cannon,—stamped on a thin sheet of brass, No. 28, representing 2 cannon crossing each other at the trunnions, muzzles upwards; length, $3\frac{1}{2}$ inches; breadth at breech of cannon, $\frac{5}{6}$ inch; breadth at muzzle, $\frac{1}{2}$ inch provided with 4 small brass wire loops, $\frac{3}{6}$ inch long, strongly soldered on the back, to fasten them on hat.

Brass bugles,—stamped on a thin sheet of brass, No. 28, length, $3\frac{1}{2}$ inches; height across a crook, $1\frac{1}{2}$ inches; provided with 2 iron wire loops, one of which is $\frac{3}{6}$ inch and the other $\frac{1}{4}$ inch long, strongly soldered on back of bugles, to fasten them on the hat.

Horse-hair plume—of bright scarlet, fast color, length 15 inches; circumference at the bast, where it is encircled by a brass ring, 3½ inches; diameter of brass wire ring ½ inch; securely plaited and fastened for a distance of 4 inches on a square piece of whalebone, 8 inches long and ¼ inch square; the plume to be secured at its lower end, around the whalebone, by a piece of red morrocco ¾ inch wide, sewed around it.

Tulip, for horse-hair plume.—A thin sheet brass, No. 28, tulip of 4 leaves, strongly soldered to a shell and flame of same metal; length from bottom of shell to top of tulip leaf, 3½ inches; length of tulip proper 2½ inches; diameter measured across top of tulip leaves, 1 inch, opening at top to receive the plume; at bottom of tulip proper a round opening, ½ inch in diameter; a strong loop of brass wire, 1-16 [½6] inch diameter, ¾ inch long, forming a rectangle, and strongly soldered to inside of shell, so as to pass through the cap and hold the tulip and plume.

Eagle, for light artillery cap,—of thin sheet brass, No. 28, holding in left talon 3 arrows, and in dexter talon an olive branch, and with beak turned to the right; height, from talons to beak, 2 inches; breadth, from tip to tip of wings, 3 inches; breadth, from arrow points to tip of olive branch, 2 inches; a strong, brass wire loop ½ inch long and ¾ inch

broad, securely soldered on back of eagle, to pass through the cap and hold the lower end of plume stick.

Cord and tassle for light artillery caps,—to be made of scarlet worsted braided cord, (with cotton filling inside of cord,) and braided on a carrier machine, about guage [sic] 5 or 3-16 [3/16] inch thick; two plaits, with about 21/4 inch cord between them; the one for front of cap 14 inches long, and the one for back of cap 17 inches long; from each plait is 6 feet of cord, with a round plaque, 25% inches in diameter, (made of 3 gimps,) and a tassel, attached to end of each cord; these two cords pass through a tassel and two small slides, and about 4 inches above the plaques; to have a small loop netted on, by which to attach and suspend the plaques and tassels, from a button on the breast of the coat. The tassels (three in number,) are to be of solid worsted, with a netted head, about 21/2 inches long, including head; the skirt or fringe of tassels, composed of from 80 to 90 ends of bullions; the cord and tassels to weigh about 31/2 ounces.

Scroll and ring, for light artillery caps.—The scroll to be a circle, sheet brass, No. 28, 1 inch in diameter, corrugated, convex ¼ inch: a hole in the centre in which is inserted a double loop of brass wire ¾ inch long, projecting ¼ inch on outside and ½ inch inside, strongly soldered on inside of scroll; a double ring of stout brass wire, ½ inch diameter, passed through the outer loop, from which to hand the tassel cord.

Several caps in the National Collections (Figure 12) that carry the maker's label in the crown "W. C. Dare/Manufacturer/21 North Second St./Phila." conform to these specifications with tolerances of no more than 1/8 inch. And the Schuyler, Hartley & Graham catalog of 1864 illustrates a very similar pattern with a sunken tip as "Artillery Cap," albeit with incorrect insignia. Then again, the so-called official quartermaster uniform photographs, originally believed to have been made in 1862, but

now known to have been taken in 1866, very clearly illustrate the Dare cap form with the insignia as called for in the 1865 Quartermaster Manual quoted above.¹⁸⁷

Throughout the remainder of the war, there were small issues of light artillery caps but only to mounted batteries or to units previously provided with them, and never to recruits. In fact, the issues made during the period were confined to units in garrison at established posts. Whether or not these issues included examples of the "old" or 1851–1854 pattern is unknown, but probably so, since there were stocks of the "old" on hand as of 30 June 1865. As of that date, there were a total of 3398 light artillery caps on hand at the various depots throughout the country. Of these, more than half had to be of the earlier model as the Dare contract was the only such made during the calendar year 1864 or fiscal year 1865. 180

In the reorganization of the regular establishment following the war, the artillery strength was set at five regiments of twelve companies each, two companies in each regiment to be mounted with a special strength of 122 enlisted men each.¹⁹⁰ Three years later the number of mounted companies was cut to one per regiment, for a total of five.³⁹¹

Soon after the regulars went into occupation in the south or into garrison, there were numerous requisitions for and issues of light artillery caps, albeit only to the mounted companies.¹⁹²

Fortunately there are several contemporary illustrations showing the cap in use. Two photo-



FIGURE 12.—Light artillery cap, 1864.

graphs of Capt. William M. Graham with the officers and color bearer of Light Company K, 1st U. S. Artillery, and another of the color bearer alone, show the cap worn by all, although only that of the color bearer carries the correct insignia. The cap of the latter very definitely has the sunken tip as prescribed in the Quartermaster Manual and shown in the Schuyler, Hartley and Graham cata-

log, while this detail is unclear in regard to the officers' caps. Harpers Weekly for 8 June 1867, carries a very clear woodcut entitled "New Regulation Uniform of the United States Artillery" (Figure 13). This caption is misleading in regard gard to the word "new," for the artillery was not given a new uniform until the 1872 change despite considerable agitation for such. That the caps



FIGURE 13.—"New Regulation Uniform of the United States Artillery," by A. R. Waud. (From Harper's Weekly, 8 June 1867.)

worn in the picture were "new" to most of the public is obvious for they had seldom been seen during the war and the woodcut was made after a drawing made in Richmond, Virginia, by Alfred Waud. The note accompanying the woodcut is somewhat clearer:

Regulation Artillery Uniform

Our engraving on page 356 represents the uniform adopted by the Government for the artillery arm of the service. The sketch was made at Richmond, Virginia, while one of the batteries of the Fifth United States Artillery was on dress parade. The coat of the officers and the jacket of the privates are a dark blue in color; the horse-hair plume of the hat is scarlet, as also are the ornaments and aiguillettes upon the jackets of the privates (the same decorations of the officer's uniform being of gold), and the trowsers, as in present regulation, are of light blue cloth.¹⁹⁵

With an authorized enlisted strength of 1220 enlisted men in the light companies and an issue rate of five caps per five year enlistment, something of a drain was placed on the cap supply by these units. From a total of 2886 on hand as of 30 June 1866, stocks dropped to 1943 as of 30 June 1867 and to zero sometime early in 1868.³⁹⁰

At this point, the record becomes somewhat cloudy, but the sequence of events can be deduced from the evidence at hand. Sometime in the fall of 1867, seemingly as the result of a requisition for 400 caps from San Francisco, which Crosman in Philadelphia reported as being unable to fill,107 Perry contacted Horstmann Bros. & Co. in Philadelphia and had them prepare a "block" for a light artillery cap and then several sample caps, one of which was forwarded to the Secretary of War for approval. Crosman was then authorized to purchase enough caps to fill the San Francisco order to the number of 220 as he had recommended, and this he did. 198 For the rest of its life, the light artillery cap lived a "hand-to-mouth" existence, the Philadelphia Depot being authorized to "purchase [them] if not on hand."199

It seems most probable that all the caps purchased during this period were made by Horstmann. The firm had an excellent reputation with the Army and always seemed willing to produce in small quantities if asked to do so. Indeed, the last reported purchase was from Horstmann, 34 caps, at \$3.16 each.²⁰⁰

Sixteen light artillery caps have been examined. Five carry a round white label pasted to the crown:

"[numeral for size number]/W.C. Dare/Manufacturer/21 North Second St.,/Phila." The other eleven carry a round green label pasted to the crown: "[numeral for size number]/Horstmann, Bros. & Co./Manufacturers of/Military Goods/Fifth and Cherry Sts.,/Philadelphia." One of these latter is a sealed sample. No cap of this pattern with any other makers' labels has ever come to the author's notice. A careful check of the Horstmann caps against those made by Dare and against the specifications in the 1865 Quartermaster Manual reveals them to be practically identical in every respect and in accordance with the specifications as set forth. Thus, when one considers the chronology of this cap, the specifications in the manual must have been based on the Dare cap and the "block" prepared by Horstmann must have been based either on the Dare cap or the specifications in the manual, or both.

In the late spring of 1867, a rumor seems to have started going the rounds of both the Army and the uniform houses that a change in either the entire artillery uniform or the artillery cap alone was to take place. The rumor must be given some credence, for Perry on two occasions wrote his quartermasters in the field that a change in the cap was contemplated.201 During the same period, suppliers were asking about such a change and receiving the answer that such had neither been authorized nor announced.202 No change of any sort in the cap was mentioned in orders prior to the publication of the 1872 regulations. The origin of the rumor can only be conjectured at, but the publication of the Woodhull Report in April 1868 recommending a number of changes in army headgear may have been the source. Oddly enough, there is no mention of such a possible change in the United States Army and Navy Journal for the period.

When the mounted batteries were reduced from two to one per regiment in 1869, there were complaints about the units thus dismounted losing their shell jackets, "gorgeous shako" and "brilliant aiguillettes," while at least one regiment requested that the entire unit, mounted and foot, be authorized to wear the same uniform as the light battery, that is, shell jacket and cap with plume. As a result of this latter request, the Secretary of War authorized the issue of shell jackets to all artillery companies since there were some 120,000 on hand,

but withheld the issue of caps to any but the light batteries since they would have to be purchased, adding to his endorsement that "the new regulations may prescribe a new uniform."

The end of the light artillery cap in the Army

came in the summer of 1872 with the authorization of a new uniform for the whole Army and a directive by the Secretary of War to sell at auction all such caps and insignia (but with no mention of the red hair plumes) at public auction.²⁰⁵

THE 1872 REGULATION HEADGEAR

War Department General Orders Nos. 76 and 92, issued 29 July and 26 October 1872, respectively, prescribed an almost entirely new uniform for the officers and enlisted men of the Army. As to headgear, for full dress, for general officers, officers of the general staff, and staff corps, a chapeau; for light artillery, cavalry, and enlisted men of the Signal Corps a black felt helmet with appropriate trimmings, distinctly Prussian in style; for foot troops a cap, again appropriately trimmed, of French design; for undress, a forage cap, "chasseur pattern," very reminiscent of the "McClellan" type, which had been so popular with officers during and after the Civil War; and for fatigue and campaign wear, a campaign hat of a distinctly different pattern from that adopted for the whole Army in 1858.

Despite some agitation within the Army, particularly among the officers, during the middle and late 1860s for a change, such was just not economically feasible. Of the more than 1,000,000 volunteers on the rolls in May 1865, better than 800,000 had been demobilized by November of the same year. By September 1866 the strength of the Regular Establishment had dropped to less than 39,000. Thus, the Army was left with huge stocks of uniforms, arms, and equipment which could only be disposed of on the open market at a tremendous loss, which would have brought screams of anguish from economy-minded Congress, and thus had to be used. In 1870 Meigs in his annual report wrote:

No appropriation for the clothing and camp equipage of the Army has been made since the war [and none had been asked for]. The large appropriation made early in 1865 and the proceeds of sales of surplus and damaged clothing have sufficed for . . . the purchase or manufacture of such articles as were not in store and have been needed for the past five years.

Meigs went on to say, however, that the Act of 12 July 1870 forbidding the use of balances of appropriations, except for the payment of obligations incurred during the year for which the appropriations were made, had left the Army with no funds for the purchase of such clothing and equipage not in store during the current fiscal year.²⁰⁰

In closing his report, Meigs mirrored the conservatism of some of the older officers regarding a uniform change:

Some officers desire to see a change in the Army uniform. I think that, while so large a stock of clothing still remains on hand, such a change is inadvisable. It would involve an unnecessary expenditure of public money. The uniform in which the people of the country fought the battles and made the campaigns of the war is endeared to them by the recollection of many a hard-fought field and many a bivouac. It is simple, inexpensive, serviceable, and military. Those who lead lives, like that of the soldier, in the forest or in the wilderness, seek to purchase the surplus articles of Army clothing as the most durable and serviceable they can obtain. The armies of Europe tend to the use of materials like ours. The dark blue coat and blouse, the light blue trousers, form a uniform unsurpassed in any service for actual duty in the field.²¹⁰

But stocks of many items were running low or had been exhausted and long storage had resulted in considerable deterioration, all of which necessitated a request for a deficiency appropriation in the fiscal year 1871.²¹¹ The time for a uniform change was approaching.

The "Woodhull Report"

On 3 August 1867, C.H. Crane, the Assistant Surgeon General of the Army, wrote as follows to the Medical Directors and Chief Medical Officers of the Army:

You are respectfully requested to call upon med cal officers of experience, serving under your command, for their opinions regarding the hygienic fitness (for the localities where they are now on duty) of the present uniform and allowance of clothing for enlisted men, and to invite suggestions for its modification.

You will please collect these reports, without delay, and transmit them, with your remarks, to this office.

By order of the Surgeon General: 212

This communication elicited in the next several months a total of 168 replies from all geographical areas covered by the Army. These were digested and worked into a report for the Surgeon General by Assistant Surgeon General Alfred A. Woodhull and submitted in manuscript form on 31 January 1868. It was published in printed form as A Medical Report upon the Uniform and Clothing of the Soldiers of the U.S. Army under the imprint of the Surgeon General's Office, 15 April 1868.²¹³ It was apparently printed in a limited edition in the small printing shop annexed to the Surgeon General's office at this time.²¹⁴

Of far greater importance than the report itself are the 168 reports and/or letters on which it was based. But here we encounter an utter void and disappointment, an exercise in research fascination and frustration worthy of being included in Richard Altick's Scholar Adventurers had the ending been a happier and more fruitful one.²¹⁵

During 1867 and a portion of 1868, Asst. Surgeon Woodhull was assigned to the Surgeon General's Office carrying out administrative and professional duties as assigned.216 Sometime during the fall of 1867 he was given the task of collating and digesting the reports requested by the Surgeon General in August. The task was Woodhull's alone, for the special orders of the period do not show that any board was appointed for it and the assignment was verbal insofar as the record shows. This latter would not have been unusual, however, for the office was a small and intimate one in those days.217 But here the trouble begins. We know from the final report that 168 replies were received.218 Yet from August 1867, when Crane's order went out, until 15 April 1868, the date of the printed report, not one single communication dealing with the directed subject matter was entered in the register of letters received at the Surgeon General's Office or in the name and subject index of letters received. Similarly, Woodhull's formal letter of transmittal enclosing the manuscript report, 31 January 1868, was not entered in the register. A list of the officers who replied to Crane's letter, as well as the entire statements of 22 officers, were submitted with the manuscript report but were omitted from the printed version "on account of their voluminousness."210 The names of the twenty two whose "entire statement" were omitted were included however.220 The fate of these "backing"

papers can only be guessed at. It does seem most possible, however that Woodhull, under the press of work, instructed the clerks in the office to set aside all answers to Crane's August letter for his immediate perusal when time permitted from his other duties (being sent from all over the country, the letters would have dribbled in over quite a wide time span) and thus were never entered in the register of letters received.

The report contains some excellent recommendations and some of rather dubious value, and it was of considerable influence in the 1872 uniform changes. Those portions relating to headgear are as below:

HAT AND CAP

A very respectable number stationed between the fortieth and forty-second parallels silently acquiesce in the present head-covering, but elsewhere it is the subject of general complaint.

Proportionably to the exposure of the head to heat and confinement of its exhalations, is the tendency to cerebral oppression and disease. In northern climates all the well-known effects of cold follow the absence of adequate protection.

The hat is objectionable from its size and its great weight and want of ventilation, evils that grow in importance with the lowness of the latitude, until finally the head is oppressed by a constant, close vapor-bath. In point of practice at nearly every post south of Washington the hat and cap give place in warm weather to a lighter substitute, generally of straw. On the northern frontier it does not adequately protect the ears in winter.

The objections to the cap are, the difficulty of cleansing with soap and water, owing to the pasteboard it contains, the interference of the oblique visor with vision, its want of grip, for the northern stations in winter its want of warmth, the deficient protection it affords the face and neck against sun and rain in any climate, and, especially, the absence of ventilation and the transmission of solar heat by its resting directly upon the top of the head—an evil that is aggravated by its color.

The suggestions for relief all point to the necessity for increased lightness and ventilation in warm climates and to greater protection in cold regions.

They are chiefly these:

- 1. Authority to wear on all occasions an ordinary light straw hat during the warm weather, a period that varies with the locality. The value of the straw hat consists in its lightness, its porosity and its defense against the direct rays of the sun. But it is not readily transported, is fragile, is rarely sightly, is somewhat inconvenient in the exercises of the manual, cannot be slept in, and is unsuitable for cold weather. Its general informal use is due to the necessity of substituting something for the uniform, its accessibility, and its low cost.
 - 2. For dress a stiff hat, resembling that formerly worn in

the army and lined or unlined according to season, with a woolen pompon, as shown in the accompanying illustration [Figure 14]. This is easily lined, is susceptible of ventilation and ornamentation, and is generally associated with notions of soldierly appearance. Its chief defects are its weight, its inadequate protection for the ears and neck, and its unyielding structure.

For fatigue, a cloth bag cap, such as is worn in the French and Austrian services and shown in the accompanying illustration [Figure 15]. This, which may be regarded as the natural complement of any stiff hat, is admirable for its portability, being transportable in the pocket, and for its adaptation to sleeping and to many fatigue duties. The side flaps may be turned down at night and in cold weather, but the cap is not suited for exposure to the sun in hot climates.²²¹

3. The Scotch or Glengarry cap with a visor, as advocated by Dr. Parkes for the British Army [Figure 16]. This



FIGURE 14.—"Stiff Dress Hat." (From Woodhull Report, 1868, fig. 1.)

is recommended for ours from its lightness, its portability, its coolness in summer by being set upon top of the head, its warmth in winter by being pulled down over the ears and back of the neck, and its capability of being slept in. It is imperfectly illustrated here. It also allows the addition of a fur band, that may be turned down, in cold climates and a capote can readily be pulled over it. (The bag cap possesses these last two advantages, also.) It has the very serious defect, but no more than the present cap, of not shielding the sides of the head, face and neck from the sun and rain. With whatever cap is worn in hot climates a long broad Havelock, properly made of white linen and quilted half an inch thick, must be worn to protect the back of the neck and occiput.



FIGURE 15.—"Cloth Fatigue Cap." (From Woodhull Report, 1868, fig. 2.)



FIGURE 16.—"Scotch Cap with Visor." (From Woodhull Report, 1868, fig. 3.)

In cold climates in winter the contrivance reported by Bvt. Lieut. Colonel Alden, as used by the troops on the plains, would be a valuable addition to an ordinary cap. It consists of a piece of wadded cloth, to be attached, by means of three button holes on the upper edge, to the buttons on the sides of the cap and to an extra button sewed on the middle seam behind, and tied beneath the chin by tapes attached near the lower front corner.

The shape and application are illustrated in [Figures 17 and 18.]

4. For hot stations either a kepi or casque or light brimmed hat, essentially after the style of the Malay hat. To be made of some stiff, light material with a pearl-colored cover and an air-space of half an inch between the ring and

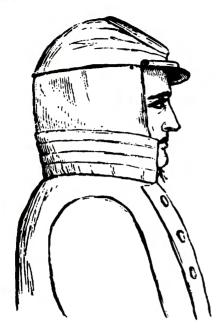


FIGURE 17.—"The [Scotch] cap with an additional piece of cloth, as used in winter on the plains." (From Woodhull Report, 1868, fig. 4.)



Figure 19.—"External view of the Ventilated or Eastern Hat." (From Woodhull Report, 1868, fig. 6.)

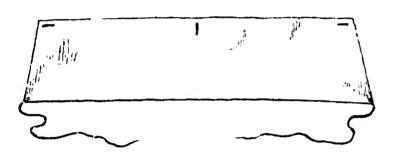


FIGURE 18.—"The cloth detached from the [Scotch] cap, showing its attachment by button holes and tapes." (From Woodhull Report, 1868, fig. 5.)

the head, as is here illustrated [Figures 19, 20]. The excat form, for which there are several suggestions, is immaterial while the principle is adhered to.

5. A light-colored, brimmed felt hat. This is, by all odds, the most generally recommended, either as a simple felt or looped up for dress, somewhat as in these imperfect illustrations [Figures 21, 22]. This may be kept perfectly simple, or be adorned in the most ornate manner. The brim should have a width about equal to the height of the crown.

Probably the most serviceable hat ever used in the United States Army was supplied the Second Dragoons by General Harney, in Texas, in 1853. It was a broad-brimmed, soft felt, of a pearl or stone color, capable of being looped up, but with a stiff brim when let down, and with an orifice for



FIGURE 20.—"Sectional views of the Ventilated Hat." (From Woodhull Report, 1868, fig. 7.)



FIGURE 21.—"The Three-Cocked Hat." (From Woodhull Report, 1868, fig. 8.)

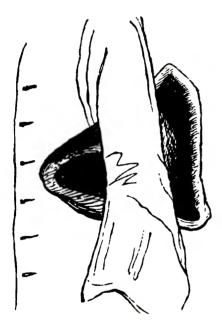


FIGURE 22.—"The Cocked Hat, held under the arm." (From Woodhull Report, 1868, fig. 9.)

ventilation on each side of the crown that might be closed at pleasure. This was exclusively used for scouting, but if authorized it might well be used for all purposes. It appears to combine all the essentials of protection and comfort and not a few elements of beauty.

[Further investigation has shown that the hat here spoken of was designed during the Mexican War by Colonel T. P. Andrews, (Paymaster General, retired, very recently deceased,) then commanding the Voltigeur Regiment. A number of this pattern were made but, not being sent out in

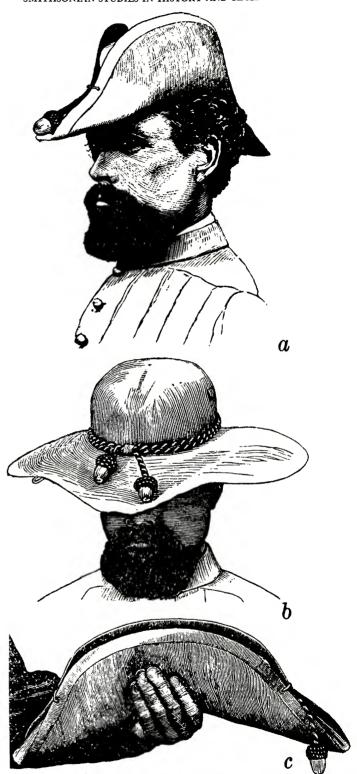


FIGURE 23.—The Andrews hat: a, "as generally worn"; b, "in the rain or excessive solar heat"; c, "compressed for transportation." (From Woodhull Report, 1868, figs. 10, 11, 12.)

time for issue in the campaign, were stored until obtained by General Harney as just mentioned. No specimen of this hat can now be found in the Quartermaster's Department, or elsewhere, but, after this report was originally submitted. a model hat was constructed on this plan, from information received from Colonel Andrews and from officers who had seen and men who had worn the original. It is picturesque and soldierly when cocked; it affords the amplest protection from sun and rain when turned down; it can be laterally flattened for transportation without detriment. Three views of this hat illustrate these characteristics [Figure 23]. The model, now deposited in the Army Medical Museum, was made, by direction, by Wm. R. Cole & Co., hatters, of Baltimore. It is believed that this hat is the most appropriate that has been proposed. The manufacturers estimate that it can be furnished of good quality at a wholesale cost not to exceed two dollars and a half.][222]

A gray, light felt hat of some description is, without doubt, the most serviceable and should be fairly tried. There might be two grades for ordinary use [suited to the different climates] of such a quality that either might be worn in an emergency and sufficiently inexpensive to be frequently issued. For the very cold stations a pattern of extra warmth might be issued without inconvenience or special expense to the government or soldier.

[Several officers in Arizona recommend a light-color brimmed hat, the under side of the brim to be lined with green as a relief for the eyes from the glare of the sun in that verdureless region.] An experimental issue of the Malay style might be tried, but it is probably the Harney [Andrews] hat properly made would fulfill every necessary indication. But whatever covering is worn, it must be light in color and be raised from the crown, to save the soldier from the disastrous effects of direct solar heat and confined hot air.

The Marcy Board

In December 1867, the Headquarters of the Army convened a board of officers, consisting of Generals Sherman, Sheridan, and Augur, to consider a long overdue revision of the Articles of War.223 The board rapidly completed its work and on 28 January 1868 Sherman, as chairman, submitted a draft to the Adjutant General.224 A few days later Sherman wrote the Adjutant General regarding the preparation of a new system of revised Army regulations and closed by saying that he was leaving to resume command of his Indian-troubled Division of the Missouri.²²⁵ On 14 February the remaining members of the board reported their completion of a revision of regulations and submitted them to headquarters.226 Meanwhile, Surgeon General Barnes had received Woodhull's report and forwarded it to the Headquarters of the Army with the recommendation that it "and accompanying

papers be referred to the Board of General Officers [then] in session . . . having the subject under consideration." The report was accordingly ordered sent to Sherman.²²⁷ Despite this, there is no evidence that the board either saw or acted upon the report, and here the whole matter drops from official sight for some time.

The 1872 Board

In July 1871 the Secretary of War directed the General in Chief to establish a board of officers to convene in New York City "for the purpose of preparing a system of General Regulations for the administration of the affairs of the Army," or in other words to revise the current regulations. 223 Comprising the board were Col. R. B. Marcy, the Inspector General of the Army, Col. J. H. King, 9th Infantry; Col. Henry Hunt, 5th Artillery; Maj. Richard Dodge, 3d Infantry; and Maj. Andrew Alexander, 8th Cavalry.220 In September Marcy wrote the Secretary of War. "Do you wish that we should bring into [the] new regulations any changes in uniform? We think it can be improved upon and made better for the service. At present so much clothing of the old pattern has been sold to citizens that they are found wearing it everywhere. If material changes were made this would not be the case .. "230 This letter carries no endorsement and apparently remained unanswered. Meanwhile Marcy requested and was furnished a copy of the report of the 1862 uniform board over which Gen. Mc-Dowell had presided.²³¹ There is no further mention of a uniform change, either in correspondence or in those proceedings of the board that have survived, until the next spring. Late in the following April, the board, having completed its work on the regulations, was ordered to reconvene early in May to consider the subject of a uniform change.232 This it did in rather short order, submitting its report on 21 June and being formally dissolved a few days later.233

The board, which worked on the uniform question less than two months, appears to have kept no formal minutes of its deliberations, rather working initially from the printed uniform regulations of 1861 (reprinted in 1863 as revised edition) with handwritten comments and changes, and proceeding to a final draft in page proofs, again with changes and comments in longhand.²³⁴ There is

no documentary evidence that the board asked for or saw the Woodhull Report, but the individual pieces of uniform and headgear that it recommended and that were adopted, especially the pleated blouse, the campaign hat, and to a lesser extent, perhaps, the dress cap, make it plain that considerable weight was given to the illustrations in the report, if not to the text. Samples of a dress coat, fatigue jacket, dress cap, helmet, forage cap, and campaign hat, both for officers and enlisted men, were made up by private concerns at the behest of the board for its consideration and submission to the Secretary of War, all without consultation with the Quartermaster General and/or the Philadelphia Depot. As to the headgear, Horstmann of Philadelphia made the sample helmet and R. Warnock of New York the dress cap, the forage cap, and the campaign hat, for which they were paid \$59.60 and \$40.50, respectively.²⁰⁵ After adoption the samples were forwarded to the Assistant Quartermaster General at Philadelphia so that the clothing depot could estimate probable costs and production lead time, the officers' models being then returned to Washington where they were to be protographed for reproduction with the new regulations.²⁰⁶

The new uniform was described in General Order No. 76, War Department, 29 July 1872 and General Order No. 92, War Department, 26 October 1872 (Figure 24). The two orders are identical in wording, but the earlier one was issued in bound form with colored lithographic plates of the officers' headgear (less the "fatigue hat") dress and undress coats, sword belts and plates, and shoulder knots—the headgear and accoutrements to scale, seemingly as an aid to civilian tailors who might



FIGURE 24.—1872 regulation uniforms. (From Harper's Weekly, September 1872.)

be at too great a distance from Washington or Philadelphia to make use of the sealed samples available there. The headgear was described as follows:

HAT OR CAP (FULL DRESS).

For General Officers, Officers of the General Staff, and Staff Corps: Chapeau, according to pattern.

For Officers of Light Artillery and Cavalry: Black felt helmet, with gold cords and tassels, and gilt trimmings, according to pattern.

For all Storekeepers: Forage cap of dark blue cloth, without braid: badge same as for General Officers.

For all other Officers: Of dark blue cloth, ornamented with gold braid and trimmings, according to pattern.

For Enlisted Men of Light Artillery and Cavalry: Black felt helmet, same pattern as for officers, with cords and tassels of mohair—red for Light Artillery and yellow for Cavalry. Helmet, ornamented with yellow metal trimmings, as per pattern.

For all other Enlisted Men: Of blue cloth, same pattern as for officers, ornamented with mohair braid of the same color as facings of the coat; trimmings of yellow metal, according to pattern.

FORAGE CAP.

For General Officers: Of dark blue cloth, chasseur pattern, with black velvet band and badge in front.

For all other Commissioned Officers: Of dark blue cloth, chasseur pattern, with badge of corps or regiment in front, top of brass to be even with top of cap, and according to pattern in Quartermaster General's Office.

For all Enlisted Men: Of plain blue cloth, same pattern as for officers, with badge of corps or letter of company of yellow metal worn in front as for officers.

FORAGE CAP BADGES.

For General Officers: A gold embroidered wreath on dark blue cloth ground, encircling the letters U.S. in silver, old English characters.

For Officers of the General Staff, and Staff Corps: Same as for General Officers, with the exception of those for Ordnance Officers which will have a gold embroidered shell and flame on dark blue cloth ground.

For Officers of Engineers: A gold embroidered wreath of laurel and palm encircling a silver turretted castle on dark blue cloth ground.

For Officers of Cavalry: Two gold embroidered sabres, crossed, edges upward, on dark blue cloth ground, with the number of the regiment in silver in the upper angle.

For Officers of Artillery: Two gold embroidered cannons, crossed, on dark blue cloth ground, with the number of the regiment in silver at the intersection of the cross-cannon.

For Officers of Infantry: A gold embroidered bugle, on dark blue cloth ground, with the number of the regiment in silver within the bend.

FATIGUE HAT.

For Officers and Enlisted Men: Of black felt, according to pattern, to be worn only on fatigue duty and on marches or campaigns.

PLUMES FOR OFFICERS.

For General-in-Chief: Three black ostrich feathers.

For other General Officers, for Officers of the General Staff, and Staff Corps: Two black ostrich feathers.

For Regimental Officers of Foot Artillery and Infantry: Of cock's feathers, to rise five inches above the top of the cap, front feathers to reach the vizor, rear feathers to reach the top of the cap, with gilt ball and socket: color of plume to be red for Artillery and white for Infantry.

For Officers of Light Artillery and Cavalry: Horse-hair plume; gilt ball and socket, plume to be long enough to reach the front edge of the vizor of the helmet: color of the plume to be red for Light Artillery and yellow for Cavalry.

PLUMES AND POMPONS FOR ENLISTED MEN.

For Artillery: Red pompon, pattern shape; ball and socket of yellow metal.

For Infantry: White pompon, same shape and with same ball and socket as for Artillery.

For Ordnance: Crimson pompon, same ball and socket as for Artillery.

For Engineer Troops: Red pompon, with white top; same ball and socket as for Artillery.

For Light Artillery: Red; and for Cavalry, yellow horsehair plume, same size and length as for officers; socket according to pattern.

THE FULL DRESS CAP

The "full dress" cap prescribed for all foot officers and foot enlisted men was very definitely French in origin as was the British infantry cap of the period.²³⁷ In general form it was a cut-down version of the 1851–1854 pattern with a narrower visor. Just where the uniform board got its immediate inspiration is not recorded. The Woodhull Report carried an illustration of a similar cap,

although bound with leather at the top and bottom.²³⁸ A very similar cap, again bound with leather at the top and bottom, was advertised by Bent & Bush of Boston early in 1869, indicating its possible use by militia units prior to 1872.²³⁰

The cap is described in regulations only as "of dark blue cloth, ornamented with gold braid and trimming, according to pattern," for officers and "of blue cloth, same pattern as for officers, ornamented with mohair braid of the same color as facings of the coat; trimmings of yellow metal" for enlisted men. Officers' caps were to have plumes of cock feathers rising 5 inches above the top, the front feathers reaching the visors, red for artillery and white for infantry. Enlisted men were to have pompons, "pattern shape; ball and socket of yellow metal," red for artillery, white for infantry, crimson for ordnance, and red with a white top for engineer troops.²¹⁰

The first contract was let on 30 October with Bent & Bush of Boston for 18,000 caps, complete with trimmings at \$2.49 each. No specifications were included with the contract, but the caps were "to be equal to the sealed samples except that the . [were to] contain two ounces of Double Ring Russia and one half ounce of Coney each."241 By 1878 the unit price without trimmings was quoted at \$1.59, and by the next year had dropped to \$1.16.212 The initial issue rate was set at one per year of enlistment at a cost of \$2.00.243 The date of first issue is uncertain. Although issue of the cap was ordered as early as 4 December 1872, because of a shortage of funds and the fact that manufacture of the new uniform coats was delayed, only 1456 were issued during the fiscal year ending 30 June 1873. By comparison, 14,382 caps were issued during fiscal year 1874.241

Prior to 1876 no detailed description and measurements of the 1872 headgear were given, the bidders being furnished official sealed samples of the enlisted models, and the lithographs included with General Order No. 76 providing guidance in regard to the officers'. Although sealed samples of the officers' headgear were on file in the Quartermaster General's office, few suppliers of this latter appear to have used them, for as early as 1874 there was enough dissension among senior officers about the lack of uniformity in dress for the Secretary of War to take action. In October of that year he directed the Quartermaster General to prepare an accurate description of all articles of officers' dress for dissemination throughout the Army.245 In relation to the headgear, Meigs had the standard samples which had originally been used by the 1872 board forwarded to the original makers requesting that they furnish the proper "trade specifications," that is, detailed descriptions, for his use.246 Based

on the information received and on samples retained in his office, he then had a detailed description of all items of officers' clothing drafted in the form of a general order and forwarded it to the Philadelphia Depot for review and comment.247 The draft was commented on at some length by the military storekeeper there, the comments including valuable descriptive material and several sketches.245 These together with the draft general order were returned to the Quartermaster General and referred to a board of officers set up to review matters relating to the Quartermaster Department.249 This board in turn drew up a complete description, with illustrations, of all items of officer clothing which was published in the War Department's Annual Report of the Quartermaster General for 1876. The illustrations, of "cuts," were merely a reprint of the lithographs which accompanied the 1872 regulations. A description of the campaign hat was not included, but rather that of the 1876 pattern, which had been recommended but not formally approved.250

The full-dress cap was described as follows (the descriptions of other pieces of headgear will be included below where appropriate):

FULL-DRESS CAP.

Pattern as shown in accompanying cuts numbered 5, 6, and 7, felt shell, covered with indigo-blue cloth; 3½ inches high in front; $4\frac{1}{2}$ inches high on sides; $6\frac{1}{2}$ inches high over the swell of the back; crown 51/2 inches long by 5 inches wide; revolving ventilator in crown; gold-wire braid 1/8 of an inch wide around the lower edge and around the crown at top, also, from top to bottom at each side and at back; patent-leather vizor unbound; patent-leather chin-strap 1/2 of an inch wide with gilt slide; gilt side or chin strap buttons, vest size, according to arm of the service; japanned or goatskin sweat-leather, silk lining; plume-socket of leather on inside at front with metallic guard at opening on top and front edge of crown; gold-embroidered eagle with shield on breast, surmounted by thirteen stars in silver; length from top of stars to end of tail, 13% inches; width from tip to tip of wings, 11/2 inches; tips of wings joined by an arc of rays; embroidered badge of arm or corps in front; bottom of badge to be even with top of chin-strap.251

War Department Quartermaster Specification Number 3, 31 May 1876, described in detail the enlisted model:

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE
Specifications for Dress-Caps.

The body or shell is made of felt composed of equal parts of Russia, best coney-backs, muskrat, extra coney, and one-

half $(\frac{1}{2})$ part of washblow. It weighs, uncovered, two and three-fourths $(2\frac{3}{4})$ to three (3) ounces, according to size. Front vertical about three and one-half $(3\frac{1}{2})$ inches high; back five and one-half $(5\frac{1}{2})$ inches long, rises upward and forward in a convex sweep, and meets the crown at a point one and one-eighth $(1\frac{1}{6})$ to one and one-fourth $(1\frac{1}{4})$ inch higher than the point where it meets the upper edge of the front.

The crown is slighly oval, five and one-fourth $(5\frac{1}{4})$ inches in diameter from front to back, four and one-half $(4\frac{1}{2})$ inches across. Ventilator in center of crown. At the front edge is an opening, bound with a thin strap of enameled metal, to admit the stem of the pompon, which is also held in position by a small leather socket sewed to the inside of the cap-front, about one-half $(\frac{1}{2})$ inch below the crown.

The body is covered with fine wool-dyed indigo-blue cloth, braided around the upper edge immediately below the crown, around the lower edge one-fourth (1/4) to five-sixteenths (5/16) of an inch above the latter: also straight down the back, and in a straight slanting line on both sides, equidistant from back and front seam. This braiding is worsted three-sixteenth (3/16) of an inch wide, and of the following colors: for infantry, sky-blue; engineers and artillery, scarlet; ordnance, crimson; commissary sergeants, gray; hospital stewards, green. A visor of heavy enameled leather, straight and horizontal, front edge slightly convex, sides straight, corners rounded, inner edge following the shape of the cap on both sides, ending in a point about five (5) inches from front seam.

On each side, immediately behind the end of visor, is a small regulation brass button for chin-strap.

The latter is made of thin enameled leather five-eighths $(\frac{1}{2})$ of an inch wide, in two parts, eight and one-half $(\frac{1}{2})$ to nine (9) inches each, and arranged to be lengthened and shortened, as described for helmet chin-strap. Sweat-leather, one and three-fourths $(\frac{1}{4})$ to two (2) inches wide of Belgium leather. In front, immediately below the crown, is a brass eagle, and below the latter the badge of the corps or arm of services.

Sizes same as of helmets.

Adopted May 31, 1876.

Pompons for Dress-Caps—Of fine worsted, firmly made on a woodblock.

Nap well raised and close. To be pear-shaped, three (3) inches long, one and three-fourths (1¾) inch in diameter at bottom, and one (1) inch at top. Under the center of the bottom is a brass half sphere about eleven-sixteenths (1¼6) of an inch in diameter, from which protrudes a stem three (3) inches long, made of strong copper wire.

Color of pompons for infantry, white; artillery, scarlet; engineers, lower half scarlet, upper half white; ordnance, crimson; commissary sergeants, gray; hospital stewards, green.

Adopted May 31, 1876.

M. C. MEIGS,
Quartermaster General.
But. Major General, U.S.A.²⁵²

A number of examples of the cap have been examined, including six sealed samples (Figures 25, 26) and three officers' models (Figure 27) which can be included in the same category. Two of these latter, one made by Horstmann and the other by Bent & Bush, carry attached a label reading:

1747 Qr Mr Gens Office 1874 Received Jun 17

The third carries a label in a handwriting very similar to General Marcy's:

......'s Uniform cap for
....ents of foot artillery & Infy. recommended by
the Board for revision of Army
Regulations

R B Marcy I. Genl & Presdt. of Board

The latter cap carries the maker's label of Warnock & Co. in the crown and definitely must be considered the original or one of the original models supplied the board.

The enlisted models all follow the 1876 specifications within allowable tolerances, while the officer's examples, the three mentioned above plus several others, are closer in detailed measurements to the one-half scale lithographs. The differences between the two are not great, but they are consistent; height in front for officers, 37/8 inches, for enlisted men, 31/2; height in rear, for officers, 61/2 inches, for enlisted men 51/2; diameter of crown, for officers, 6 inches, for enlisted men, 51/4.

The regulations prescribed the insignia for the cap only as "gold trimmings" or "yellow metal, according to pattern" for officers and enlisted men, respectively. No clear indication was given as to exactly what badge each branch of the service was to wear, possibly relying on usage that had been in effect since 1832. In November 1872 the inspector general prescribed for hospital stewards, ordnance, and engineer soldiers, respectively, a wreath of brass with the letters "U.S.," "O.D.," and "E.C." inside, but said nothing of the badges for the line units. This order also prescribed that the cap braid and pompon for hospital stewards was to be emerald green.253 As late as mid-December the Philadelphia Depot quartermaster was seeking information from Washington as to the size and pattern of insignia for both headgear and uniform coat collars. The query brought from the Secretary of War the endorsement: "Forage caps, badges, and

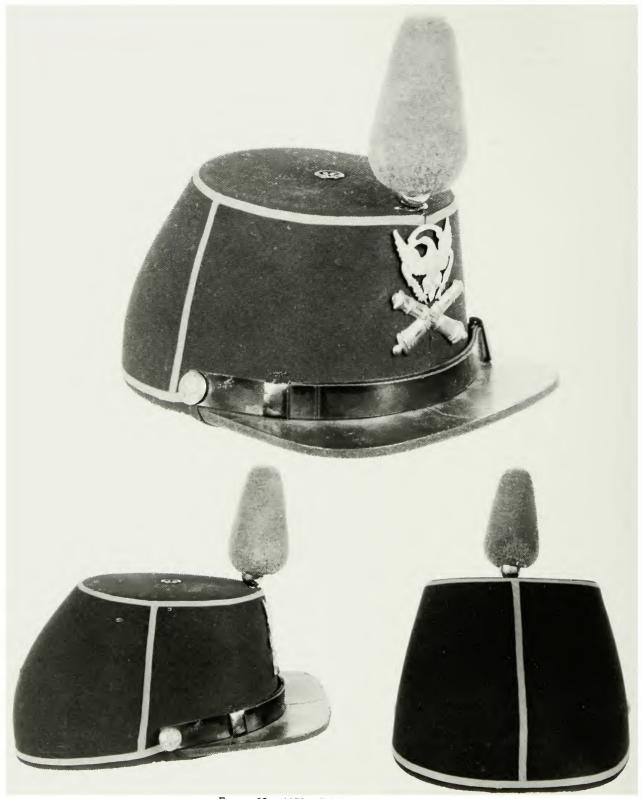


FIGURE 25.—1872 enlisted man's dress cap.



FIGURE 26.—Enlisted personnel in 1872 dress coat and cap.

trimmings for all enlisted men, same as now worn, but reduced in size." Whether this meant that forage caps as well as the insignia were to be reduced in size or that the badges for forage caps alone were to be smaller is not clear from the terse language. In view of the context of the original inquiry, however, the latter seems more probable.254 In March 1873 the badge for commissary sergeants was changed to a crescent in white metal placed vertically,255 and in June the engineer and ordnance badges were changed to the castle and shell and flame, again with nothing said about the line units.256 The cost of clothing list issued the same month seemed to resolve the matter, however; for under "Uniform Dress Cap" are listed "eagle, crossed cannon, castle, bugle, crescent, and wreath,"

but no letters or numbers, although they were listed under "Forage Cap." In fact, the matter of regimental and company designation does not seem to have been officially resolved until 1877 when letters and numbers were prescribed for both dress and forage caps. In 1875 the "bugle" or "looped horn," so long the badge of the infantry, was discarded for that branch, being replaced by crossed rifles with the number of the regiment in the upper angle. This was altered somewhat several months later when the letter of the company was ordered placed in the lower angle. Field and band musicians were to continue to wear the bugle and letter then prescribed. The service of the company was ordered placed in the lower angle. Field and band musicians were to continue to wear the bugle and letter then prescribed.

Quartermaster Specification No. 8, adopted 31 May 1876, gave the measurements for insignia:



FIGURE 27.—1872 officer's dress cap.

Cap Bugles: an old-style bugle with circular crook, and a cord slung three fold around the lower part, terminating in in two tassels on one and one tassel on the other side. Height across crook ½ inch; width from mouth piece to outer edge of bowl 2½ inches.

Castles for Cap: an ancient cast with three towers; height of center tower $\frac{1}{2}$ inch; of side towers; $\frac{1}{2}$ inch; of battlements between towers, $\frac{5}{8}$ inches; width at base $\frac{1}{8}$ inch.

Crescents for Caps: width from point to point, 15% inch, greatest width in center ½ inch.

Crossed Cannon: two cannon crossing each other at the trunninons, muzzles upward; length, 21/8 inches; breadth at breeches, 2 inches; at muzzles, 1/8 inch.

Crossed Rifles: two rifles crossing each other at a point equidistant from the butt and muzzle; muzzles pointing upward and outward, hammers upward, their position crossed mak-

ing the upper space form an angle of 137°; length of rifle, 25% inches; the whole ornament occupying a rectangular space about 21% inches wide by 13% inches high.

Eagles for Cap: To be worn on caps of all arms of the service; an eagle with national shield on breast, head surmounted by a scroll bearing the motto "E pluribus unum," extending downward and meeting olive branch and arrows in the talons of eagle; height, $1\frac{1}{2}$ inch; greatest width between tips of wings, $1\frac{1}{2}$ inch.

Shells and Flames for Cap: diameter of shell, 3/4 inch; height of flame from upper edge of shell, 7/8 inch; greatest width of flame, 11/8 inch.

Wreaths for Hospital Stewards Cap: two olive branches held together at the bottom by a loop and knot, turning upward and bending in an oval shape, approaching each other at the top; height, 1½ inch; greatest distance between outer edges, 2% inches; greatest width of single branch, 5% inch.

Brass Letters for Cap: "A" to "M"; Roman capitals; 5% inch long; edges beveled.

Letters "U.S.": of white metal, chased; Roman capitals ½ inch high; to be placed within the wreath.

Numbers for Cap: Nos. "1" to "0" inclusive: 5% inch long, edges beveled.261

Taken in toto, the reaction to and comment on the dress cap was slight and rather noncommittal. Quartermaster General Meigs disliked the white plume of cock feathers on the officers' caps, stating, perhaps somewhat facetiously, that he was "revulsed" at United States Army officers being "made liable to the state joke of 'showing the white feather'." On the other hand, the United States Army

and Navy Journal editorialized that the cap was "admitted on all sides to be a vast improvement" over the old "dress hat," i.e., the campaign hat that had been adopted for the whole Army in 1858,265 and Military Storekeeper Rogers at the Philadelphia Depot thought the cap to be "admirable."2014 General Order No. 6 of 1876 which asked for officer comment on issue clothing brought little more reaction. An assistant surgeon wrote that the small ventilator in the crown was worthless, which it obviously was; Colonel Clitz of the 10th Infantry thought the cap well made, durable, light, and comfortable; Colonel Andrews of the 25th Infantry considered it "suitable for its purpose"; Lt. Col. Whistler, commanding officer at Fort Riley, called it a "decided improvement"; while Captain Morse of the 6th Infantry thought its quality excellent and the color good, albeit asking for instructions on cleaning the pompons.205 Only the Miles Equipment Board of 1879 was strongly derogatory-openly favoring as it did the adoption of a modification of the mounted helmet for all branches-stating in its published report that "the present shako . . . of the Infantry [was] objectionable and cause[d] great dissatisfaction; . [was] of poor material . . and badly shaped "266

On 7 February 1882, after the adoption of the spiked and/or plumed helmet as a dress item for all branches, the Secretary of War directed that all remaining caps of the 1872 pattern be sold.²⁰⁷

THE LIGHT ARTILLERY-CAVALRY HELMET

The 1872 Light Artillery-Cavalry helmet may have seemed a rather violent departure from the stylistic drabness of the 1858 campaign hat and forage cap, which were so closely associated with the Army in the Civil War and post-Civil War periods. Though different in basic design, it was hardly more flamboyant or more useless for other than strictly dress wear than the 1832 Infantry-Artillery cap, the 1833 Dragoon cap, or the 1864 Light Artillery²⁶⁸ cap, all with their cords, bands, tassels, and metal hardware. Certainly, it was in step with the times.

Much has been speculated about the immediate origin of this helmet form. Because of the Prussian-Germanic addiction to the spiked helmet, and more especially the German victory over France in

1870, it has long been generally accepted that the immediate influence was German. Actually, in the absence of any formal minutes of the 1872 board and the absence of any mention of influence foreign or otherwise in the fragments of proceedings which do exist, the question becomes somewhat academic. The Army merely states that it should approach "in shape the helmets as seen in antique Greek sculpture."260 Anson Mills, then Major, 3d Cavalry, among others, believed it to be primarily of Prussian derivation.270 Actually, the Prussian Army did lead the way in the matter of the plumed and/or spiked helmet, first adopting a deep version with a rather extended "lobster tail" in the rear in 1842, and retaining the general form with considerable variation well into World War I.271 In 1843, the British followed suit, adopting a helmet of "Germanic origin" for the Household Cavalry, and several years later a similar headpiece for the heavy cavalry and the "Mounted Staff Corps." Colonel Henry J. Hunt, 5th Artillery, one of the ranking members of the 1872 board, writing in 1875, seemed to settle the matter as far as the U.S. Army is concerned when he stated flatly that "the model was that of the English Horseguards."

The first contract for helmets was let on 30 October 1872 with Horstmann Bros. & Co. of Philadelphia, the firm that had made the sample for the board. The accepted bid was for a total of 9000 (8700 cavalry and 300 artillery) with trimmings; that is, plumes, cords, and bands, and hardware, at \$5.461/2 each.274 The allowance to each soldier was set at one with trimmings in the first and third year of a five year enlistment and issued at a cost of \$5.47.215 The date of the first issue of the helmets is uncertain. Although General Orders No. 76 and 92 prescribed that the new uniform was to be regulation as of 1 December 1872, shortage of funds prior to the 1873 appropriation plus difficulties experienced in obtaining colorfast facing cloth for the dress coats set production and issue back some months.276 Although the contract for helmets with Horstmann was let in October 1872, as of 30 June 1873 only 228 were listed as having been purchased, and 194 as issued.277

As was the case with the other headgear, a description and measurements of the helmet were not detailed until the Army started publication of printed specifications of clothing and equipage in 1876. Even the description of the officers' helmets in the 1876 Quartermaster General's annual report gave no dimensions stating merely "measurements about as indicated on cuts," despite the fact that Military Storekeeper Rogers in his "comments" on the draft description of officers' clothing included a sketch with measurements (Figure 28). Detailed measurements of the helmet trimmings, which Rogers furnished, were included, however.

HELMET.

Pattern as shown in accompanying cuts numbered 8, 9, and 10; heavy body of fur bound with fine patent leather; measurements about as indicated on cuts; patent-leather chin strap 5% of an inch wide with gilt slide; patent-leather vizor-strap folded 3% of an inch wide, double tsitched, connecting chin-strap buttons; goat-skin sweat-leather.

Ornaments as follows:

Eagle.—Of yellow metal, gilt; pattern same as in coat of arms of the United States, with national shield on breast;

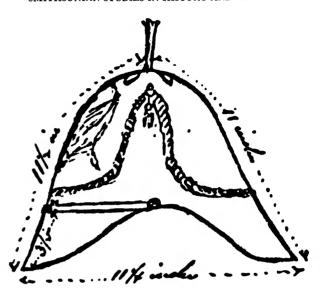


FIGURE 28.—Sketch of 1872 officer's helmet. (From MSK Rogers' "Comments," RG 92, NA.)

head surmounted by scroll with motto "E Pluribus Unum" in relief letters, scroll extending downward and outward and joining olive branch and arrows in talons of eagle; whole height, 4½ inches; greatest width between tips of wings, 4 inches; secured to helmet by wire stems.

Top piece and plume-socket.—Of yellow metal, gilt; base or foot a cross-piece made convex to fit the top of helmet; ends of arms mitre-shaped and fastened to helmet by ornamental buttons; length between points of opposite arms, 51/4 inches; arms at widest part 11/4 inches, edges grooved and beveled: sphere one inch in diameter, on base surmounted by short neck with ring, (neck 1/2 inch, ring 5/8 inch diameter,) from which is raised an inverted conical tube representing rays and displaying on front an heraldic eagle, the head of which is surmounted by a star, in relief; diameter of tube at top one inch; height, (including sphere at bottom,) three inches; the plume held in posittion at top of socket by a brass pin 43/4 inches long, having ornamental head, and a small brass disk; this pin enters through the socket and top piece; the shell of helmet and concave brass disk, (17/8 inches in diameter,) on the inside, and is secured by a brass thumb-nut.

Scrolls and rings.—Of yellow metal, gilt, placed at sides near top, between the arms of the top piece; the scroll, (or button,) is ornamented to correspond with the fastenings of top piece, and in ¾ of an inch in diameter; small eye and ring, (½ inch in diameter,) in center, to hold cords and bands; stem to enter shell of helmet and fasten on the inside.

Side or chin-strap buttons.—Of yellow metal, gilt, 1/8 of an inch in diameter, according to arm of service; edges beveled and grooved, surface slightly convex and chased; secured to helmet as the scrolls are.

Plumes .- According to arm of service.

Cords and bands or braids.—Of gold-thread cord, 2½ lines; the bands loop plaited and fastened to rings and scrolls at sides and festooned on front and back of helmet; the front festoon falls to the upper edge of vizor and the

rear one to a corresponding depth behind; the loop plaiting is about 3/4 of an inch wide; at left ring and scroll a pendant tassel of sixty or seventy fringes where the cords are fastened; gilt cords about 5 feet 8 inches long with two netted slides of about 3/4 inch diameter; flat braided ornament 23/4 inches in diameter and tassels on each end of cord.

Specification Number 1 adopted 31 May 1876 described the enlisted model in great detail.²⁸⁰

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE

Specifications for Helmets.

To be made of felt composed of one part each of Russia, best coney-back, muskrat, extra coney, and a half part of wash-blow. The body approaches in shape the helmets as seen in antique Greek sculpture—top spherical, sides vertical, front and back gently sloping outward to the point where the helmet is to rest on the head; thence, in a more diverging line extending in front to a vizor, in the back to a cape for the protection of the neck. From center of top along the sides to lower edge about eight (8) inches, to extreme point of vizor eleven and one-half (11½) inches, to extreme point of back eleven (11) inches.

Vizor is gradually narrowing, and rounded at the front; length about three and one-half $(3\frac{1}{2})$ inches, width across the forehead about twelve (12) to twelve and one-fourth (12 $\frac{1}{4}$) inches, across the front (one inch above the extreme point) about five (5) inches.

The neck-cape is about seven and one-fourth $(7\frac{1}{4})$ inches wide, three and one-fourth $(3\frac{1}{4})$ inches long, corners rounded.

The edge of helmet, vizor, and cape is bound with fine enameled leather. On either side, about three and one-half $(3\frac{1}{2})$ inches above the lower edge, is a ventilator.

At the lower edge, on either side, is a button-fastening for chip-strap.

The latter consists of two parts, made of enameled leather, five-eighths (5%) of an inch wide, each about nine and one-half $(9\frac{1}{2})$ inches long. These parts are united, and can be lengthened or shortened by means of a loop (same material as strap) at the end of one, and a brass bar-buckle one (1) by three-fourths (3%) of an inch at the end of the other part. From one side button to the other, straight across the front, is another strap of enameled leather, five-eighths (5%) of an inch wide, stitched on the body of the helmet.

Sweat-leather, two and one-half $(2\frac{1}{2})$ inches wide of Belgium sheepskin.

The helmet is ornamented with eagle, top piece, and plume-socket, scrolls and rings, and side buttons, and is trimmed with hair plume and cords and bands.

Helmet ornaments are made of sheet-brass, No. 24.

Hair Plumes for Helmets: Made of good horse-hair, dyed. To droop from top of socket over back and sides of helmet.

The hairs are woven and sewed together at one end, giving the latter the form of a flattened knob about one and five-eighths (1%) inch diameter, with star-shaped brass eyelet in center to admit the pen of the top piece. Length of plume from eyelet to end, fourteen (14) inches.

Cords and Bands for Helmets: Made of worsted, No. 26, and "machined" cord. The bands are loop-plaited, fastened

to the scroll-rings, and festooned on front and back of helmet, the festoons reaching in front to the upper edge of chin-strap, and approaching the lower edge of back within two (2) inches.

The loop-plaiting is about one (1) inch wide, and ends under the scrolls on the left side in a tassel of sixty (60) to seventy (70) fringes one and three-fourths (13/4) inch long. Through the braided head, about three-fourths (34) inch diameter, passes the continuation of the bands in the form of two cords, each five (5) feet eight (8) inches long, with two (2) slides netted over a fuller's board three-fourths (3/4) inch in diameter, five-eighths (5%) of an inch high. Three inches from the lower end the cords are fastened together by a braided knot holding a loop about two and threefourths (23/4) inches long. At the end of each cord is also a small braided knot and aiquillette, plaited flat in three strands of smaller cord, in oval shape, two and threeeighths (23%) inches long, two and three-fourths (234) inches wide. From the lower end of each aiguillette is suspended another tassel of from sixty(60) to seventy (70) fringes one and three-fourths (13/4) inch long, with braided head three-eighths (3/8) of an inch high, three-fourths (3/4) inch diameter.

Adopted May 31, 1876.

M. C. MEIGS Quartermaster General, But. Major General, U.S.A.

Specification Number 8, adopted 31 May 1876, described the helmet's metallic ornaments.²⁵¹

Eagles for Helmet.—Made of sheet-brass, No. 24, of the shape of the eagle in the coat of arms of the United States, with a national shield on the breast, head surmounted by a scroll with the motto "E pluribus unum"; scroll extending downward and meeting olive branch and arrows in the talons of the eagle. Whole height, four and one-half $(4\frac{1}{2})$ inches; greatest width between tips of wings, three and seven-eighths $(3\frac{7}{8})$ to four (4) inches. Two loops of strong wire soldered on the back to fasten to helmet by means of two small pieces of leather. [Adopted May 31, 1876.]

Side Buttons for Helmet.—One on each side, a little above lower edge of helmet.

They are one (1) inch diameter, edge beveled and grooved, surface slightly convex, and chased.

They are secured to the helmet by double brass-wire loops, as the scrolls are.

Design for Cavalry and Signal Service: Two crossed sabers, hilts downward and outward. For Light Artillery: Two cannon crossed at the trunnions. [Adopted May 31, 1976.]

Plume-Sockets for Helmet.—A cross-shaped foot, with convex bend, to fit exactly the surface of helmet top.

Each leaf-shaped point of the cross is fastened by means of an ornamented button with stem of two thin wires.

Length of cross between alternate points, five and a quarter $(5\frac{1}{4})$ inches; each leaf one and a quarter $(1\frac{1}{4})$ inch at widest, three-quarters $(\frac{3}{4})$ of an inch at narrowest part; edge beveled and grooved.

On the center of the cross rests a sphere one (1) inch in diameter, surmounted by a short neck with ring, the former one-half $(\frac{1}{2})$, the latter five-eighths $(\frac{5}{8})$ of an inch diameter, combined about one-half $(\frac{1}{2})$ inch high, from which

arises an inverted conical tube, fluted, ornamented by an heraldic eagle with star above his head.

The top of the tube ends in four triangular points. Width of tube across top, one (1) inch. The plume is fastened to the top of this socket by means of a brass pin one-fourth (1/4) of an inch thick, four and three-quarters (43/4) inches long, with ornamented button at upper and screw-thread at lower end.

The latter enters through the socket and helmet, and is fastened at the inside by means of a brass washer one and seven-eighths (1%) inch diameter, and a thumb-nut. The plume is held in a drooping position by the head of the above-mentioned brass pin, and a brass disk, one and one-fourth (1¼) inch diameter, laid under the woven top part of the plume and resting on the points of the socket. [Adopted May 31, 1876.]

Scrolls and Rings for Helmet.—One on each side, between the leaf-shaped points of the top piece, its lower edge one-half $(\frac{1}{2})$ inch below these points.

The scroll is three-fourths (3/4) inch in diameter, ornamented to correspond with the fastening of the top piece.

On the top of the scroll, in the center, is an eye of thin wire three-sixteenth $(\frac{3}{16})$ of an inch high, holding a thin brass ring one-half $(\frac{1}{2})$ inch in diameter, to keep the cords and bands in position.

The stem of scroll is formed of two pieces of thin brass wire to fasten it at the inside of helmet. [Adopted May 31, 1876.]

A number of enlisted models of the helmet have been examined, including one sealed sample, and one officer's model that formerly belonged to Lt. Col. George A. Custer. The sealed sample carries the maker's label of Horstmann Bros. & Co., who made the pattern helmet for the uniform board and who was the first contractor for the model,282 and thus may very well pre-date the specifications (Figure 29). In any case, the sample conforms closely and the other enlisted examples follow within allowable tolerances. Although the lithographs accompanying General Order No. 76 state that the headgear pictured are "1/2 size of pattern," there is a noticeable difference in the scaled measurement of the crown to visor, 101/4 inches instead of 111/2, and in the visor contour when compared with the sealed sample. In this, however, it should be noted that all the headgear in the lithographs are designated for officers." The Custer helmet conforms to these (Figure 30) and stays within range of the printed specifications in other respects, except as to quality.

The difficulty of two contractors, in different cities, producing such a helmet without some variation in contour resulted in two distinct helmet shapes although in each case measurements are the same. Figure 31 is of the sealed sample made by Horstmann. Figure 32 is of an example made by Bent & Bush of Boston.283 Notice that where the rear of the Horstmann example slopes almost immediately from the center of the crown, the body of the Bent & Bush helmet is much more fully rounded, the "lobster tail" sloping to the rear from a much lower point and giving the illusion of its point being closer to the point of the visor, which it is not. Also, where the rear of the Horstmann helmet has a very gentle curve from side to side. the sides of the Bent & Bush "lobster tail" are sharply almost squared in. These differences were noted and commented on by quartermaster officers, but no corrective action is known to have been taken.234 One other small but noticeable difference between the Horstmann and Bent & Bush helmets is in the type of ventilators used; where Horstmann used a round screen wire model, Bent & Bush used one resembling a pinwheel but without moving parts (not observable on Figure 32).

The proper manner of attaching and arranging the helmet cords in a uniform manner throughout the Army proved a bit of a problem and in 1873 a general order was issued clarifying the matter.

The helmet cords will be attached to the left side of the helmet and come down to the left shoulder, where they are held together by a slide; one cord then passes to the front and the other to the rear of the neck, crossing upon the right shoulder and passing separately around to the front and rear of the right arm, where they are again united and held together by a slide under the arm; the united cords then cross the breast and are looped up to the upper button on the left side of the coat.²⁸⁵

The general reaction to the helmet was not favorable. Captain John R. Rogers of the Philadelphia Depot, commenting from the practical angle of a veteran quartermaster officer, thought the crown too light and not broad enough to take the strain of the plume and socket and the binding around the edges too light and too narrow. (Indeed, of the enlisted models examined, all have either cracked crowns or split visors or both.) Still Rogers believed it to be "the most sightly headgear" he had ever seen.256 Col. Henry Hunt, 5th Artillery, who had been a member of the Marcy Board, stated that the issue item was "not according to the model selected in 1872"; the visor was too large and awkward, the helmet in general did not have the military style of the pattern, and the NUMBER 30



FIGURE 29.—1872 enlisted man's helmet.

plume was too large, awkward, heavy, and long.²³⁷
The largest number of comments came as a result of General Order No. 6, War Department, 29
January 1875, which directed commanding officers of posts to comment on, among other things, the suitability of the clothing then issued.²³⁸ The gen-

eral consensus published in Circular No. 8 by the Surgeon General's Office²⁵⁹ was that the helmet was too heavy, had too steep a visor, and generally caused headaches. A survey of the actual correspondence on which the circular was based places the emphasis somewhat differently. The greatest





FIGURE 30.—The Custer helmet.





FIGURE 31.—The Horstmann helmet.



FIGURE 32.—The Bent & Bush helmet.

condemnation of all the 1872 model headgear came from active service posts on the frontier, especially those on the high plains of the north and northwest, with little or no complaint from posts in the Division of the Atlantic. Letter after letter spoke sharply of the unsuitability of all the types of issue headgear for winter wear and asked for fur caps and ear flaps. ²⁰⁰ As to the actual weight of the helmet, an issue specimen complete with bands, cords, tassels, and plume proved to weigh 16



FIGURE 33.—Paiute Chief Winnemucca in "Chief Coat" and 1858 Army hat with 1872 helmet front eagle. (Courtesy of Nevada Historical Society.)

ounces. In contrast, the World War I issue steel helmet weighed 34.8 ounces, and the World War II helmet with liner 52.3 ounces.²⁰¹

In 1881 when a somewhat different pattern helmet was adopted for the whole army, all of the 1872 models were ordered shipped to the Philadelphia Depot where they were turned over to Horstmann & Bros. who cut them down to conform to the new style. They were then reissued.²⁹²

THE FORAGE CAP

The forage cap adopted by the Marcy Board was little more than a continuation of the nonregulation "chasseur" or "McClellan" pattern so popular with officers during and after the Civil War and which hatters had been advertising during the late 1860s.203 Indeed, the 1872 regulations used the term "chasseur." It is apparent that the members of the board personally favored the model for there is no evidence that they paid attention to the comments regarding it in the Woodhull Report as they did in relation to the campaign hat.294 Woodhull had written pointedly of the cap's shortcomings, its "want of grip . . its want of warmth, the deficient protection it afford[ed] the face and neck against sun and rain . . . and . . the absence of ventilation." The Report also noted the difficulty of cleaning it and had suggested the adoption of a detachable flap for the rear and sides to be used in cold weather.205 The regulations read:

For General Officers: Of dark blue cloth, Chasseur pattern, with black velvet band and badge in front.

For all other Commissioned Officers: Of dark blue cloth, Chasseur pattern, with badge of corps or regiment in front, top of badge to be even with top of cap, and according to pattern in Quartermaster General's Office.

For all Enlisted Men: Of plain blue cloth, same pattern as for officers, with badge of corps or letter of company of yellow metal worn in front as for officers.

Warnock & Co. made the pattern or patterns for the board and the first contract was let with Bent & Bush of Boston on 30 October for 28,000 caps at \$1.07½ each.²⁶⁶ The allowance was set at one cap and cover per year of enlistment at a price to the individual of \$1.08 for the cap, \$.21 for the cover, and \$.03 for the insignia.²⁰⁷ The first issue was ordered in February 1873.²⁰⁸

The first real description of the cap was of that for officers. Indeed, it had been the wide divergence from standard of the officers' forage caps that in large part triggered the description published in the 1876 Annual Report of the Quartermaster General.²⁰⁰

FORAGE-CAP.

Chasseur pattern, as shown in accompanying plates numbered 3 and 4; of indigo-blue cloth; 3 inches high in front; $3\frac{1}{2}$ inches high on sides; 6 inches from edge of crown to bottom of band at back; crown 5 inches in diameter; depth of band about $1\frac{1}{4}$ inches; gilt side or chin-strap buttons, vest size, according to arm of service; patent-leather

chin-strap 3/8 of an inch wide; patent-leather vizor unbound; japanned or goat-skin sweat-leather, silk lining; embroidered badge of arm or corps in front; bottom of badge to be even with top of chin-strap.

For general officers, the band of cap to be of black velvet.

FORAGE-CAP BADGES.

For general officers.—A gold-embroidered wreath on darkblue cloth ground, encircling the letters U.S. in silver, old English characters.

For officers of the general staff and staff corps.—Same as for general officers, with the exception of those for ord-nance-officers, which will have a gold-embroidered shell and flame on dark-blue cloth ground.

For officers of engineers.—A gold-embroidered wreath of laurel and palm, encircling a silver-turreted castle on darkblue cloth ground.

For officers of cavalry.—Two gold-embroidered sabres, crossed, edges upward, on dark-blue cloth ground, with the number of the regiment, in silver, in the upper angle.

For officers of artillery.—Two gold-embroidered cannons, crossed, on dark-blue cloth ground, with the number of the regiment, in silver, at the intersection of the cross-cannon.

For officers of infantry.—Two gold-embroidered rifles, without bayonets, barrels upward, on dark-blue cloth ground, with the number of the regiment, in silver, in the upper angle.

Even with these specifications, the officers' model continued to diverge from the standard seemingly at the whim of the individual concerned, the trend always being toward a lower crown. As late as 1892 the Quartermaster General was stating in his annual report that as the crown of the forage cap had gradually been lowered to the extent that it was difficult to keep on the head, steps had been taken to return to the original model, including specifications and new samples. This statement could hardly have referred to the enlisted model, unless the soldiers were buying them from civilian sources, as a check of those specimens bearing contract dates in the late 1880s and early 1890s shows them to conform to the 1876 specifications as to height of crown.300

Quartermaster Specification No. 5, adopted 31 May 1876, gave the first detailed description of the enlisted cap:

WAR DEPARTMENT
QUARTERMASTER GENERAL'S OFFICE

Specifications for Forage Caps.

Made of best wool-dyed indigo-blue cloth. Band about one and one-fourth (11/4) inch wide, strengthened by a strip

of strong split-leather of the same width, sewed in between the cloth and the sweat-leather. The front rises straight and vertical one and one-half $(1\frac{1}{2})$ to one and five-eighths $(1\frac{5}{8})$ inch above the band, sides straight and slightly converging toward the crown. The back, about five (5) inches long, rises from the band forward at an angle of 45 degrees, slightly convex.

The crown is circular, about four and three-fourths (43/4) inches in diameter, made upon strong "tarred board." The shape of the cap would thus give an incline to the crown of one (1) to one and one-fourth (11/4) inch from rear to front.

A straight horizontal vizor of patent enameled leather, about three-sixteenths ($\frac{3}{16}$) of an inch thick, shaped as described for dress-caps. A small brass regulation button on each side, immediately behind the end of the vizor, for chinstrap.

The latter is made in two parts, of fine enameled leather about one-half $(\frac{1}{2})$ inch wide, each part about nine (9) inches long, and arranged, as on dress-cap, to be lengthened and shortened at will.

Sweat-leather of Belgium leather, one and one-half $(1\frac{1}{2})$ inch wide.

Lining of glazed muslin, fastened by its lower edge only to the inner stiffening of the band, the upper edge gathered with strong thread.

Adopted May 31, 1876.

M. C. Meigs, Quartermaster General, But. Major General, U.S.A.³⁰¹

Between 1876 and 1895 when another pattern was adopted, the specifications were changed somewhat, but to no appreciable degree. ***

Late in 1883 the Headquarters of the Army ordered the black leather chin strap on officers' caps replaced by a two-strand "cap-strap" of gold on silver cord.303 It seems probable that this order merely legitimatized what had been in being for some time, for of the nine officers' caps examined, all had the gold "cap-strap" rather than the leather chin strap, one of them having belonged to an officer 304 who left the Army over two years before the order was issued, and all show evidence of considerable wear. There was some minor confusion as to the style of these cords, some terminating at the chin strap buttons in a figure eight, others having a gold thread "slide" or "turk's head" on either side. In 1884 the Quartermaster General furnished the United States Army and Navy Journal with specifications calling for the gold "slides," one-half inch long and of three-eighths inch diameter. 905

A number of enlisted models of the cap have been examined and all follow the specifications within allowable tolerances (Figure 34). The officers' models are something again. With the exception of that worn by Maj. Gen. Winfield Scott Hancock (Figure 35a) all are lower in the front than called for, several by as much as 50 percent (Figure 35b), even when they can be dated later than the officers' specifications of 1876.

The regulations were more specific as to the insignia for the forage cap than they had been in the case of the dress cap, although the problem of size was not settled until 1877. Caps of general officers and officers of the general staff and staff corps (all of whom were authorized the chapeau rather than the dress cap) were to carry a gold embroidered wreath encircling the silver letters "US" in Old English, except those of ordnance officers, which would carry a gold embroidered shell and flame, and of engineer officers, which were to bear a silver turreted castle within an embroidered wreath of laurel and palm.305 Cavalry officers were to wear gold embroidered crossed sabers, edges up, with the number of the regiment in silver in the upper angle; artillery gold embroidered crossed cannon with the regimental number in silver "at the intersection;" and for infantry, a gold embroidered bugle with the regimental number in silver in the "bend" or loop. Enlisted arm and branch insignia followed those prescribed for the dress cap in design and dimensions. 303 In 1882 the badge of hospital stewards was changed from the wreath and "US" to the wreath and caduceus.300 A year later, officers of the Adjutant General's Department were authorized to wear a "solid silver shield bearing thirteen stars" within a gold embroidered wreath, and the following year signal corps officers were authorized a gold embroidered wreath encircling two crossed signal flags with a vertical burning torch at the intersection.310 In 1885 signal corps enlisted men were authorized the crossed signal flags and torch (what they wore before that date is unstated) and the classification of musicians was clarified somewhat with "band" musicians being authorized a lyre in white metal, "field" musicians continuing with the bugle or "looped horn" with the number of the regiment in the loop and the company letter above, the cavalry trumpeters being authorized the cavalry crossed sabers with the number above and the letter below. The dimensions of the bugle and crossed sabers apparently were to be the same as those given in the 1877 specifications, but nowhere were the dimensions of the lyre and signal flags given in detail. At the same time, post quartermaster sergeants



FIGURE 34.—1872 enlisted man's forage cap, with 1876 insignia.



FIGURE 35.—Officers caps: a, General Hancock's cap; b, 1872 forage cap, with very low front.

were authorized a crossed key and pen in white metal, apparently to be worn within a wreath, although the general orders did not specify this until 1888.³¹¹ In 1887 there was another change for hospital stewards, the caduceus and wreath (color of metal wreath not specified) being replaced by a Geneva cross in white metal within a wreath of white metal, while the enlisted men of the Hospital

Corps were to wear merely the cross in white metal. The dimensions of the cross were not given.³¹²

In 1889 there was another change, the crescent for commissary sergeants going from a vertical position to horizontal with points upward. The next year officers of the Inspector General's Department were authorized a gold wreath encircling "gold or gilt sword and fasces, crossed and wreathed" in lieu

of the "U S." ^{an} In 1891 there was another change, Signal Corps enlisted men being authorized a wreath of unburnished gilt metal to go about their crossed signal flags. ^{and} The regulations outlining the uniform for Indian scouts as approved in 1890 did not authorize a forage cap. ^{and}

Except for the response to the Secretary of War's request for comments on the uniform made in 1875, there was little positive reaction to the forage cap one way or the other. Even then, the greatest percentage of comments indicated at least tacit acceptance in that the correspondents, rather than voicing objection, recommended an increase in the issue rate from one to two per year of enlistment.317 Advocates found the cap "neat" and an improvement over the old model, "excellent in every respect," and "suitable in every way." 318 The United States Army and Navy Journal reported that a large majority found the cap "graceful, nobby, and soldierly in appearance," commenting further that the defects in the cap could easily be remedied; that if the crown was too low, it could be raised; if the visor was objectionable, a sloping one could be substituted; that in so doing, its military style would be maintained. The opponents of the cap were more vociferous in their protests. Their greatest objection to it was its lack of protection against the elements, certainly a sound one. Others commented that it was uncomfortable, that it tended to fall off easily, this latter because of its low crown, and that it caused headaches and even "baldness." 220 Perhaps the most comprehensive comments came from an infantry captain in a letter to the editor of the United States Army and Navy Journal. Of the headgear in the Army, he wrote, the forage cap was the most widely worn and yet did not meet normal requirements in a single particular. Such a cap, he continued, should be flexible, light, and waterproof, should protect the eyes and the back of the head, should fit comfortably, and should be military in style.321 This was indeed comprehensive, but not very practical.

In 1877, as a result of a number of reports that the issue cap covers were unpopular with the men and were either not being drawn or were being thrown away, their purchase was discontinued and they were omitted from the supply table.²²²

THE FATIGUE OR CAMPAIGN HAT, 1872-1902

The "fatigue hat" adopted by the 1872 Board was described "for officers and enlisted men: of black felt, according to pattern, to be worn only on fatigue duty and on marches and campaigns." and Even in the absence of any of the board's proceedings, the hat was definitely based on that as pictured, but not as described, in the Woodhull Report.324 The pattern was unusually broad-brimmed, could be worn with the brim down or hooked up on the sides, and could be folded and carried under the arm like a chapeau bras. The board either ignored or overlooked the salient features of Woodhull's recommendations, however; that is, it specified that the hat was to be black, as opposed to the recommended light color to reflect the sun's rays, and made no provision for ventilating the crown, a point of much complaint in regard to the 1858 model.325

The pattern hat adopted by the board and the specifications for its material were furnished by Warnock & Co. of New York. The components of the material were as follows:

Materials for 14 dozen hats.

15 lbs. B.C.B.Y. Coney

15 " Extra

10 " White Blown

10 " Muskrat natural

10 " No. 1, H. 2d Quality

60 lbs.

14 oz.

840 oz. for 14 dozen hats—5 oz. to each Hat. 326

These specifications were sent to Col. L. C. Easton in Philadelphia with instructions that the contracts let should require the manufacture of the hats "according to the proportions given." ²²⁷ On 16 September Easton forwarded to Meigs two hats, the pattern adopted by the board and another made by P. Herst, a hatter of Philadelphia with whom Easton had had previous correspondence regarding hats and with whom Easton had placed an order for a lot of 1000, requesting that Meigs make a choice. The finish of the board pattern was described as "plain" and that of the Herst model as "velvet." ²²⁹ Meigs, in his reply stated that, while he preferred the velvet finish of the Herst hat

(which he thought might be chosen as far as outward appearance went), he was not an expert on the matter and directed Easton to seek the best professional advice, especially as regarded durability. This Easton apparently did for it was not until a month later, 19 October, that he let a contract with Herst for 9000 hats complete with cords and tassels at \$2.831/2 each. On 29 October he contracted with the same supplier for an additional 10,000 at \$2.80, the latter without cords or tassels, which were to be supplied from stocks of the 1858 pattern cords still on hand. Herst later provided an additional 22,000 in 1874 at \$2.30 each. ²⁰¹

The allowance was set at one per year of enlistment at an initial issue price of \$2.90 complete, this dropping to \$2.46 two years later. The first recorded issue was ordered on 4 December 1872, to Battery K, 5th Artillery at Fort Sullivan, Maine.

The term "fatigue," although used in the regulations prescribing the hat and in much official correspondence regarding it, quickly dropped out of usage being replaced officially by the term "campaign," and continuing in official and unofficial use until the demise of the general pattern early in World War II.³³⁴

No detailed description of the enlisted pattern is known. Since, as will be detailed below, this pattern was replaced by another in 1876, the specifications published that year describe an entirely different hat. The officers' model, on the other

hand, is described in detail in the Quartermaster General's draft description of items of officers' clothing, with additional comments and sketches in Rogers' comments thereon: ³³⁵

Fatigue Hat

Body of felt composed of

11/4 oz. yellow carott, Best coney backs,

11/4 " " extra coney

1 " " H double ring russia

1 " Raw Muskrat,

1 " extra piece carott

Net Weight of Hat 5 oz.

Goat skin Sweat-Leather. Black silk binding 1 inch wide to show ½ inch on each side of brim. Black hooks and eyes.³³⁶

Rogers' comments and sketches were as follows:

The crown of the Fatigue Hat is made lens-shaped so as to fold with crease in centre lengthwise of the Hat. The brim turns up at each side and is hooked at the outer edges in front and rear of body of hat thus giving the outline a sweep nearly semi-circular from extreme point of front to extreme point of rear. The brim is flat and is $4\frac{1}{2}$ inches wide—outer edges slightly concave where the hooks and eyes are sewed [Figure 36].

Four specimens of this hat (which are extremely rare)—three of which appear to be unworn—have been closely examined and all conform very narrowly with extant descriptions, with contemporary photographs, and with each other (Figure 37 shows three views of a sample). The felt is of animal fur of several different types, at least one of which is rabbit, bonded only with steam. The brim when

lide View of Satyue the Same with with bring and bring and bring down that of bring and Crosson.

FIGURE 36.—Sketch of 1872 campaign hat. (From MSK Rogers' "Comments," RG 92, NA.)



FIGURE 37.—1872 campaign hats.

down is eliptical rather than round, measuring 5 inches in width on the sides, 33/4 inches at the hooks and eyes, and 41/2 inches directly in the front and rear. The crown is 51/2 inches top to bottom without the crease. The brim is edged with two rows of black stitching 1/4 inch from the edge and an equal distance apart. The hat band is of black ribbed silk one inch wide with a bow on one side. Two of the specimens examined still carry sweat bands of tan leather, 2 inches wide, and carrying

the maker's label "P. Herst & Son/Manufacturers/ Philada./Contract Oct. 12, 74." One officer's model is known, that formerly belonging to Capt. Frederick W. Benteen (Figure 38). It conforms to the description above and differs from the enlisted models only in quality and in the black silk binding on the edge of the brim.

Reaction to the hat was somewhat slow to surface, but when it did, it was little short of violent, creating something of a minor crisis in the Quar-



FIGURE 38.—Captain Benteen's campaign hat.

termaster Department, and resulted in the replacement of the hat with a new pattern. In May 1874, in a routine weekly report to Major C. E. Compton, commanding officer at Fort Dodge, Kansas, Captain E. Butler of the 5th Infantry stated that his men were complaining of the lack of durability of the issue hats.337 Compton forwarded the complaint through channels to Washington whence it was referred to Captain Rogers, the Military Storekeeper at the Philadelphia depot, for comment. Rogers answered that the hats issued to the 5th Infantry were fully up to standard and, in his opinion, free from objection as to quality. He went on to say that this was the only complaint he had heard, other officers heard from being universally in favor of the model, but recommended that Captain Butler forward samples of the faulty item. This Butler did, enclosing also a statement signed by eight enlisted men to the effect that the hats issued them showed signs of breaking up after a week's wear and becoming totally unserviceable after about 120 hours actual wear in the field. The forwarded samples were submitted by Rogers to experienced hatters in New York and Philadelphia for examination and comment. All agreed that the hats were of good quality and that it would be impossible to get the specimens in such condition in 120 hours wear. In his endorsement, Rogers called the complaint "inconsiderate, groundless, and sweeping" and added that Butler had been deceived by his men "and led into the blunder of a hasty and unjust condemnation of a good article." He suggested that Butler be instructed to investigate the matter further, especially in regard to the length of time the hats were in use, and report his findings. Butler

retorted with affidavits from 44 enlisted men and statements from a number of officers of the 5th Infantry and 6th Cavalry, all condemning the hat in positive terms, with details as to how long individual hats had lasted, the average for the enlisted men being one month in the field or in garrison, with one officer stating that he personally completely wore out an issue item on a 20-day scout. Meanwhile the Secretary of War had ordered all post commanders throughout the country to report on the suitability of the issue clothing and equipment for use by the Surgeon General in a report on the hygiene of the Army at large. 333 The resulting numerous comments hit the hat as hard as Butler and his supporters had. Two officers favored it, one a major of ordnance stationed at Ft. Monroe, Virginia, and the other an acting assistant surgeon, in reality a civilian. The others reporting, and they were numerous, disliked the hat and said so, remarks running from "inferior" to "worthless" and "a complete failure" (Figure 39).

All the criticism was echoed at the highest level, although somewhat belatedly, by Bvt. Maj. Gen. Edmund Schriver, the Inspector General of the Army, in an inspection report on a trip through the West. His comments were short and direct: "Ridiculous in design [and] faulty in manufacture . . better suited to a wet nurse than a soldier in the ranks I state this without fear of contradiction." ³³⁰

The evidence was too strong and Rogers went over to the defensive, admitting that the hat had not given satisfaction, but at the same time maintaining that the shape of the hat, not the quality of the material, was at fault. Meigs then directed



FIGURE 39.—Army personnel wearing 1872 campaign hat. (Idaho Historical Society.)

one of the hats be sent to Warnock & Co. for their opinion on the material, as they had originally furnished the sample approved by the board. Warnock replied to the effect that while the hat submitted contained the same material as the sample originally furnished and in the correct proportions, they had discovered that they had made a mistake in the stock used. They proposed to substitute a new combination of materials to remedy the defect. which would result in a new hat somewhat more expensive but one which they would guarantee. All this Meigs reported to the Secretary of War in a brief 310 and asked for instructions as to how to proceed. The Secretary replied that in his opinion it was poor economy to buy something cheap simply because it was cheap, and directed Meigs to have Warnock make up a dozen sample hats of different quality and pattern, but of the recommended material, and subject them to trial.

The Philadelphia Depot was instructed to procure the hats from Warnock, as well as samples from other manufacturers and send them to Washington. Philadelphia found the Warnock hats to be "stiff and ungainly" and unsuited to field wear and sent only one on to Meigs together with three made by P. Herst of Philadelphia, indicating strong preference for one of the Herst models. Meigs in turn forwarded the preferred Herst hat along with the Warnock pattern and an issue model to the Secretary with the recommendation that 100 of the Herst be purchased and sent to the Department of Arizona for trial by the same troops that were then running tests on cork helmets. The suggestion was approved 18 September and the hats procured and sent West.

On 2 October, Meigs wrote the Adjutant General requesting that a board of officers be set up to consider among other things "the best pattern of a

campaign hat for the Army." Such a board, to be headed by Bvt. Maj. Gen. D. H. Rucker, was ordered convened in December.³¹¹

In January 1876, Meigs forwarded the board all correspondence on the question of a change in hats with the information that 100 of a proposed new model had been sent for trial to the Department of Arizona and requested that it review the whole matter. The board in turn requested all reports of the trials and was told that none had been received. (Actually no reports of the trials were received in Washington prior to the submission of the board's report.) 313

Late in March, after somewhat lengthy deliberations, the board submitted its report together with a sample of the hat it recommended. Taking its directive comprehensively, the group did not confine itself simply to the pattern of the hat, but rather "extended its inquiries to the questions of material, weight, ventilation and durability combined with a proper degree of economy." As an example of somewhat inverse thinking, the remainder of the report is quoted in full.

The board is of the opinion that the Campaign Hat for the Army should be soft and pliable, of light-weight, firm texture and the greatest possible durability that can be obtained for a reasonable price.

With this view the Board has procured information from all available sources in regard to the manufacture and component materials of the various hats of the character named fabricated for Army and commercial purposes. Experts in the manufacture of hats of all kinds have been examined and their opinions obtained.

There appear to be two distinct kinds or classes of felt hats:—one made from fur and the other from wool.

Those manufactured from fur are of a vast variety of qualities ranging from very low to very high prices according to the quality and kind of material. It is, however, generally conceded that no fur hat, that will give good service, can be manufactured, except from the better quality of furs and at a price varying from \$2.50/100 to \$3.00/100 each. If from the best quality of furs, the prices would range much higher.

Whether made from fur or from wool, no inspection can exactly determine the particular material or materials from which made, so that in any case, much reliance must be placed on the integrity of the manufacturer. No positive test can be applied save that of actual wear.

It is, however, thought by the Board that there will be less opportunity for imposition in the manufacture of wool hats, while the cost of material being much less, there will be less inducement in that direction.

From all the information the Board has been able to obtain, wool hats of the best grade will give equal service with the best grade of fur hats. This has been attested, even by

prominent hatters engaged exclusively in the manufacture of fur hats. Severe tests were also instituted by the Board with satisfactory results.

In view of all these facts, and the greatly decreased cost to the soldier, together with the large saving to the government, the Board is induced to recommend felt hats made of wool for issue to the enlisted men of the Army.

The pattern recommended for adoption, has been sent to the office of the Quartermaster General, duly sealed for identification. It is a plain black, velvet finished, hat, similar to the fatigue hat worn by officers during the late war; with crown $5\frac{1}{2}$ inches high, and brim $2\frac{3}{4}$ inches wide, for medium sized hats, the edge of the brim turned over and stitched, without binding; with a revolving ventilator in each side $3\frac{1}{2}$ inches above the brim; and with a japanned sweat leather.

For all purposes of the service it is believed that black is the most desirable color.

It is further recommended that the campaign hat for officers be of the same color and pattern as that for enlisted men, either of fur or wool as may be preferred by the individual officer. If of fur, the brim need not be turned over nor bound. A sample hat of fur, duly sealed, has also been sent to the Quartermaster General's Office.

The Secretary of War approved the findings of Meigs and directed Rucker to submit three additional hats of the same pattern together with specifications, the latter being duly adopted.³⁴⁵

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE

Specifications for Wool Campaign Hats.

Mixture.—To be of clean wool, of fine grade, equal in quality to XXX Ohio fleece. No waste or shoddy to be used in mixture.

Weight.—Hat bodies to be weighed out, five and one-half $(5\frac{1}{2})$ ounces heavy, of clean wool.

Shape.—The 7½-size to be six (6) inches deep to center of tip, and five and one-half $(5\frac{1}{2})$ inches deep at front and rear. Other sizes in proportion, varying one-sixteenth $(\frac{1}{16})$ of an inch to each size.

Brim.—Edge of brim to be turned over three-eighths ($\frac{3}{8}$) of an inch on the upper side, and stitched down with two (2) rows of stitching, and to measure two and a half ($\frac{2}{2}$) inches in front and rear and two and five-eighths ($\frac{2}{8}$) inches in width at sides.

Trimming.—Trimmed with eight (8) ligne Union braid, same quality as on sample hat; to be sewed on by sewing machine. Sweat to be of brown Japanned lea her, turned on top, one and three-quarters (134) inch wide, and sewed in hat by sewing machine. Two of "Brachers' Patent Ventilators," one on each side of crown, three and one-half (3½) inches from brim.

The hat to be velvet finished, soft and pliable, same as standard sample.

Not more than six (6) hats to be packed in each band-

Adopted June 14, 1876. [Figure 40]

M. C. MEIGS, Quartermaster General, Bvt. Major General, U.S.A.

The first contract was let in June with John T. Waring & Co., Yonkers, New York, for 15,000 hats at \$1.25 each and the cost to enlisted personnel was set at the same with an additional \$.07 for the cord and tassel.²¹⁶ Because of the large existing stocks of

the old model, no matter what its deficiencies, issue was delayed until April 1877, and then with the proviso that they were to "be supplied only to troops in the field or on the frontier, as required by existing numbers."

Early in 1878 the old pattern hats were being sent to the military prison at Ft. Leavenworth for issue to prisoners, and the following fall all existing stocks were ordered turned in and shipped to the Philadelphia Depot. There, in an attempt to



FIGURE 40.—1876 campaign hat.

salvage something from them, it was found that by reducing the width of the brim and reblocking the crown, the old hats could be made to conform to the new pattern, in appearance at least. Due to their lack of strength and durability, however, the Secretary of War directed that they not be issued to enlisted personnel, but rather reserved for sale to officers. Issue to prisoners at Ft. Leavenworth continued and in 1881 a lot of 300 of those altered were sent to Washington for sale to District of Columbia "extra or Inauguration Police." The remainder were apparently sold to surplus dealers.

Throughout its life, this hat was worn with cords and tassels of the pattern prescribed for the 1858 hat, the majority of them from surplus 1858 pattern stocks. These were priced at \$.07 each.³⁵¹

It is obvious from its report that the board reasoned in its selection of a wool over a fur felt for the new pattern, but no explanation can be found in the proceedings or in allied correspondence for the choice of the black color other than the bland statement: "For all purposes . . . it is believed that black is the most desirable color." On the contrary, recommendations in regard to campaign hats had almost universally called for a light color as opposed to dark because of the former's capacity to reflect heat and that of the latter to absorb it. As early as 1847 the commanding officer of the Regiment of Voltigeurs and Foot Riflemen requested a campaign hat of gray or drab color, and throughout the Mexican War and the years nearly up to the Civil War, nonregulation drab colored hats were common in the frontier army.352 Despite the adoption of the black 1855 cavalry model and the 1858 pattern for the whole Army, agitation for a light colored, as opposed to black, hat continued, culminating in a strong recommendation for such in the Woodhull Report.353 Although the very outspoken criticism of the 1872 hat was aimed primarily at its lack of durability, much of the correspondence included criticism of the black color because of its tendency to absorb heat.354

Although there was no widespread voiced reaction to the new model one way or the other for the first several years of its use, what criticism that was heard generally related to the question of color. Actually, during the period more attention seems to have been placed on the trials of the summer cork helmet which had been initiated in 1875 and which were to continue for some years. By 1880

the criticism was becoming more noticeable with the question of durability coming to the surface. Early in 1882, Major J. C. Breckinridge, an assistant inspector general, in his report following an extensive tour of frontier posts, suggested that a campaign hat of better quality than the current model in either black or drab color "according to climate" be issued. He stated further that the price of the issue hat was too low "to warrant a good article" and that the enlisted men were buying non-regulation hats whenever they could afford them.³⁵⁶

When this report came to the attention of Brig. Gen. Rufus Ingalls, the new Quartermaster General (Gen. Meigs had retired on 6 February), he directed the Philadelphia Depot to turn the matter over to Captain Rogers, the Military Storekeeper, who was to furnish the Quartermaster General's office with several sample hats of different colors and quality. Ingalls stated that the question of issuing drab or slate colored hats had been frequently brought to his attention in the past months. Rogers complied, indicating in his letter of transmittal a decided preference for a change in material and color. "The only proper substance to use in the manufacture of hats of this character," he wrote, "is a fair quality of fur felt. They will cost considerable more to begin with than the wool hats, but a reasonable careful man can make two of them last through a term of enlistment, whereas he would want five of the wool ones." He then went on, recommending the omission of the patented "Brasher" ventilator called for in the specifications as being too expensive and its replacement by a simple eyelet.357 Ingalls made a selection of fur felt hats and requested authority to purchase 1000 for test, stating that they would cost about \$2.00 each in quantity as opposed to the then current \$.67 for the fur model. The Secretary of War approved and they were procured and issued to troops in the Southwest.353 By mid-1883 reports from the field were so overwhelmingly in favor of the drab hats, in many cases considering them superior to the cork helmets, that another 1000 were ordered with large ventilating holes in the side. Following receipt of additional favorable opinions, the Secretary of War in October directed that thereafter only drab fur felt hats were to be procured, these to have a large ventilator replacing the "Brasher," which was considered essentially worthless, and that samples should be sealed and specifications

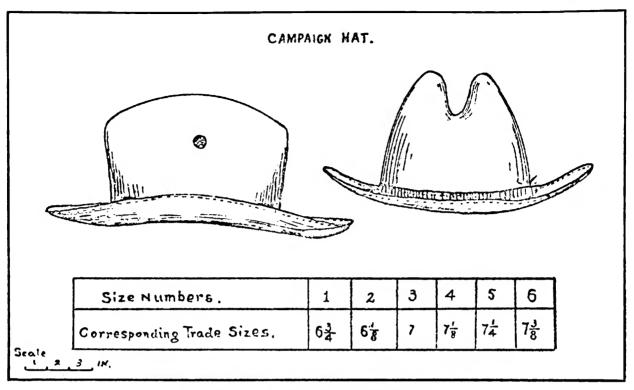


FIGURE 41.—Drab campaign hat, c. 1883. (From Annual Report of the Quartermaster General, 1884.)

drawn.³⁵⁰ These were adopted 14 December 1883 and later were published together with a line drawing of the hat (Figure 41) in the annual report of the Quartermaster General for 1884.

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE.

SPECIFICATIONS FOR FUR CAMPAIGN HATS.

Mixture.—To be composed of two-thirds best coney and one-third fine blown nutria.

Weight.—Hat bodies to be weighed—4¾ ounces heavy. Shape.—Block to be 5¾ inches deep to center of tip.

Brim.—To be 234 inches wide in front and rear, and 3 inches wide at sides; to be of double thickness, and to have two rows of sitching, as shown on sample.

Color.—To be a drab or other suitable color, as per sample.

Trimmings.—To be trimmed with 8-ligne union band—same quality as on hat—to be sewed on by hand. Sweat to be an imported lined leather, $2\frac{1}{4}$ inches wide, sewed to the reed by zigzag stitch. A wire-gauze ventilator to be on each side of the hat, $3\frac{1}{2}$ inches from brim—to be of size as on sample hat.

The hats to be doe finished, as per sample. To be packed three hats in each bandbox. Adopted December 14, 1883

S. B. HOLABIRD,
Quartermaster-General, U.S.A.300

The first of these hats were purchased in mid-1883 and early 1884 on the open market in relatively small lots from William H. Hurlbut of New York at prices ranging from \$1.75 to \$1.89 each. The first contract was let with Raymold & Whitlock of New York in June 1884 for 8007 at \$1.67. The item was issued at a cost to the men of \$1.79. With some relatively minor changes, this hat continued in use until 1912 when the "Hat, Service," "olive drab" with the "Montana Peak" was approved.

Several of these changes are worth noting for identification and dating purposes. In 1889 the rows of stitching on the brim increased from two to three and the "wire gauze" ventilator was replaced by a number of small holes punched in the sides and arranged in design as on the "standard sample" (Figure 42). In 1895 the weight of the hat was dropped from 43/4 to 33/4 ounces and in 1897 the upper edge of the sweat band was turned over 1/4 inch and cemented and a narrow strip of oiled silk about 1/2 inch wide was welted in between the sweat band and the body of the hat."

The advent of the war with Spain brought some renewed attempts to increase the ventilation in the

hat. In June 1899 the Philadelphia Depot was directed to procure 1000 hats with corrugated wire side ventilators similar to those abandoned in 1889, and corrugated insertions under the sweat bands, 500 of leather and 500 papier mâché, to be sent to Cuba for trial. Specifications for these were issued as an addition to, not as a substitute for, those for the standard then in use. An unspecified portion of the trial hats were to have the edge of the brim turned under and secured with three rows of stitching, the remainder merely to have the edge of the brim stitched like the standard model.305 Then in December 1900, Horstmann & Co. submitted to the Philadelphia Depot a sample hat with a corrugated sweat band insert made of aluminum. As the leather and papier mâché inserts had not proved to retain their stiffness, the Quartermaster General authorized the procurement of 2000 trial hats, 1000 to have inserts of aluminum and 1000 inserts of celluloid. These were to be secured by non-rustable wire; as in the 1899 trial models they were to have wire side ventilators and the edges of the brims were to be turned over and stitched or merely stitched. All were to be sent to Manila and Cuba for trial. During the fiscal year 1900, more than 350,000 of these models with the sweat band inserts were purchased. Both the wire side ventilators and the corrugated sweat band inserts were dropped in the 1904 specifications. The second street of the

Of the examples examined, none conformed to the 1883 specifications, that is, having the wire gauze side ventilators and two rows of stitching on



FIGURE 42.—Drab campaign hat, model 1889.

the edge of the brim. Others followed closely the 1889–1895 and 1899 specifications. Of those following the latter, all examined had sweat band inserts of papier mâché rather than leather and had the brim merely stitched rather than turned over, and none examined had the aluminum and/or celluloid inserts called for in 1900. All carried the contractor's name and date of contract. The officers' models examined all generally followed the various specifications, but were of a far superior quality.

Although nothing specific was said about the hat cords for either the 1876 black or the 1883 drab models until 1887, they were issued in fair numbers throughout the entire period and presumably worn. ²⁰⁵ In 1887 a gratuitous issue of one cord with each hat issued was authorized, to be continued until old stocks were exhausted. ²⁰⁰ Issue continued until the outbreak of war when procurement in large numbers was initiated. ²¹⁰

Although the old and new model cords were of the same length and were worn in the same manner, they differed radically in method of construction and terminals. While the 1858 cord was made of four strands twisted with tassels at either end, the 1899 cord was braided of 16 strands and carried acorn terminals like the 1855 cavalry model and the

Civil War period officers' models. Colors prescribed were: Post quartermaster sergeant, buff; post commissary sergeant, gray; Hospital Corps, green; Engineer Corps, scarlett and white, with alternate stripe running lengthwise; Ordnance, crimson; Signal Corps, black; Cavalry, yellow; Artillery, scarlett; Infantry, blue.371 This infantry blue was soon changed to white³¹² and in 1902 the Hospital Corps changed from green to maroon and white with alternate stripes running lengthwise. Ordnance from crimson to red and black, again with alternate stripes running lengthwise, Signal Corps from black to orange and white with alternate lengthwise stripes, and Infantry from blue to light blue. Officers' cords were to be of gold for general officers and of gold and black silk intermixed for others.373 For organizational identification of enlisted men in 1899, the letter of the company and the number of the regiment were prescribed for wear on the hat. In the case of engineer troops the letter of the company only was to be worn.374

Rection to the drab model was generally positive over the years, and the fact that it was continued from its inception until the early years of World War II with only an alteration in the shape of the crown bears mute evidence of its utility.

THE 1881 HELMET

In January 1881, after protracted consideration, the full dress cap adopted in 1872 was discontinued and a helmet, a rather modified version of that then prescribed for the Cavalry and Light Artillery, adopted for all personnel other than general officers and officers of the general staff and staff corps.³⁷⁵

The 1872 cap had never been liked and this combined with the growing popularity of the Germantype spike helmet both abroad and among American militia units resulted in the change.³⁷⁶

The change grew out of the report of the 1878–1879 Army Equipment Board headed by Colonel Nelson A. Miles. This board, set up primarily to consider the subject of entrenching tools "and also the equipment of troops in general" ³⁷⁷ interpreted its mission in the broadest possible sense and duly submitted a voluminous report that seemed to go far beyond the directed task and included a num-

ber of recommended changes in Army dress.³⁷⁸ In regard to dress hats the comments and recommendations were specific:

The present shako and helmet of the Infantry, Cavalry, and Artillery are objectionable and cause great dissatisfaction. They are of poor material (felt) and badly shaped, and the Board accordingly recommends the adoption for all officers and men of the line of the Army of helmets of the patterns herewith submitted and which may be generally described as follows:

For all mounted officers of the line, a cork helmet covered with black cloth, with eagle and chin-chain of the pattern submitted, further trimmed and ornamented with hat cord and braid arranged as now prescribed for the helmets of officers of Cavalry and Light Artillery: the plume to be detachable, of buffalo hair, and of the color of the facings of the corps.

For all dismounted officers of the line, a cork helmet covered with black cloth, with spike and eagle and chin-chain of the pattern submitted. The chin-chains of foot officers will not be worn down habitually; it will be attached to

the left side, pass diagonally up across the front of the helmet and be secured at the back.

For all enlisted men of Cavalry and Light Artillery a helmet of the pattern submitted, ornamented and trimmed the same as prescribed for mounted officers, except that the eagle shall be as now worn, the chin-strap shall be of leather, the braid and hat-cord of worsted, and the plume of horse-hair, to be detachable.

For all other enlisted men, a helmet of the pattern submitted, to be ornamented with spike, eagle, and black chinstrap, as per pattern submitted.

This change of hats, if approved, will reduce the first cost of the dress hat five dollars or more, and the weight of the hat for mounted troops six ounces.

Soon after the appointment of the board and perhaps indicative of the comprehensive scope it intended to pursue, Nelson asked the Adjutant General to circularize the Army for comments regarding improvements that might be made in the "general equipment" of the troops and at the same time asked to examine any foreign uniforms and equipment in possession of the government or which might be obtained from abroad. Headquarters of the Army complied in regard to the circular and the response was quite heavy. So

Just what actually triggered the board into recommending the Prussian-type helmet as a replacement for the caps other than the current popularity of things Prussian and the poor shaping of the mounted helmet is not clear from the record. At least one experienced officer wrote the board at some length as to the unpopularity of the dress cap with many line officers and the great satisfaction the British infantry was finding in the helmet. The writer went on to describe at some length the "admirable military appearance" of a volunteer militia unit he had seen in San Francisco wearing spiked helmets with brass trimmings and chain chin straps, stating further that the piece appeared light, snugfitting, and comfortable, "the true and only headgear that should cover a soldier's head for full dress."381

Whatever the reasoning, the board, then sitting in New York, leaned heavily toward the helmet and had Henry V. Allien, a well-known hatter of that city, make up six sample helmets, both summer and winter, and seven watercolor drawings of each variation in trimmings, that is, for enlisted men of foot troops, front and side view, enlisted men of mounted troops, summer helmet for enlisted men, helmet for line officers of foot troops, that for

all mounted line officers, and summer helmet for all officers. (Figures 43–45). ³⁹² In addition, the board procured from the Philadelphia Depot four other sample helmets, with trimmings, made by Horstmann. ³⁹³

When the board submitted its report, it returned the sample helmets and paintings to Washington, commenting on the paintings. "They are complete except for the eagle ornament of the officers' helmets which is in paper instead of metal The tiger head on the officers' helmets will be modified somewhat when the perfect die is cut." "354"

Whether the trimmings on the helmets recommended for adoption were all prepared by Allien or were partially pirated from the Horstmann models furnished the board is unknown, but exmination of the paintings for the enlisted patterns (those whose eagles were of metal) reveals that the front plates were those prescribed for the 1872 helmet and originally furnished by Horstmann. It may be that they were a mixture of the two, for in a set of detailed notes furnished by Horstmann with its samples is the comment that two of the front plates were the "present U.S. Cavy. Helmet Eagle[s]" and the side buttons on one were those used by the "English Militia," perhaps the same "tiger head" side ornaments mentioned by the board and shown on the officers' model.385 These are the side buttons that later became the subject of some little controversy at the time of the final adoption of the helmet. Captain J. P. Sanger, the recorder of the board, in his letter of 6 May to Meigs cited above, called the device a "tiger head." In this he was mistaken, as was Horstmann in relating them to "English Militia." Most of the 19th century helmets of the British regular cavalry had their chin straps or chains attached with lion head bosses.386

When the board's report was submitted for consideration by the General of the Army, it was forwarded for comment to the Quartermaster General and the Chief of Ordnance. Upon receiving it, Meigs passed it on to the Philadelphia Depot for an estimate of the cost of the proposed changes.³⁸⁷ The subject of the helmet seemed to interest Meigs, for while waiting for Rogers' figures, he instructed the quartermaster in Philadelphia to procure and send to him four German helmets: One Guard Cuirassiers, one dragoon, one artillery, and one infantry of the line.³⁸⁸ These he discussed with



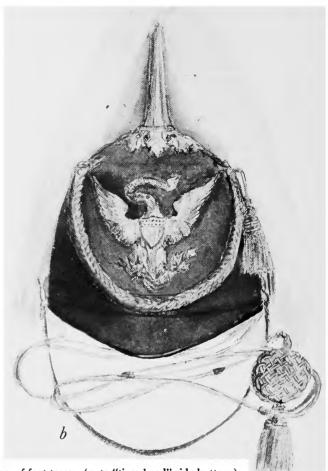


FIGURE 43.—Dress helmets: a, for line officers of foot troops (note "tiger head" side buttons);
b, for all mounted line officers.

General Sherman, retaining the cuirassier model in Washington and sending the others back to Philadelphia. 380

When Meigs reported that the proposed uniform changes would entail a deficit of something over \$525,000 for that fiscal year, Sherman disapproved almost all those which could not be effected without cost, among them the helmet. The Secretary of War concurred with the endorsement: "No changes will be made at any time which involve an expenditure not clearly within existing appropriations, and great care will be taken to avoid a deficiency." 2000

The issue of the dress cap versus the helmet was far from dead, however. Feeling on the subject ran higher than had been realized, for late the next year a group of some 573 officers sent General Sherman a signed petition requesting the adoption of the helmet in place of the cap.³⁹¹ The petition,

which was given considerable publicity in the service-oriented press,392 seemed to ring a bell with Sherman, for he had the petition referred to Meigs for comment and directed that the sample helmets recommended by the Miles Board the previous year, together with a comparison of cost of the then regulation enlisted cap and the helmet, be sent to his office. 903 When this was done, Sherman indicated that he would approve for all arms a black felt, as opposed to a cork, helmet and asked for a cost estimate. Meigs relayed the request to Philadelphia. Somewhat confused, Rogers wired Meigs back for information as to which of the samples Sherman preferred so that it might be used as a guide in checking cost and preparing further samples.304 Without waiting for an answer, Rogers requested Allien & Co. of New York, who it will be remembered prepared the Miles Board samples, to send to Philadelphia the blocks and dies used in

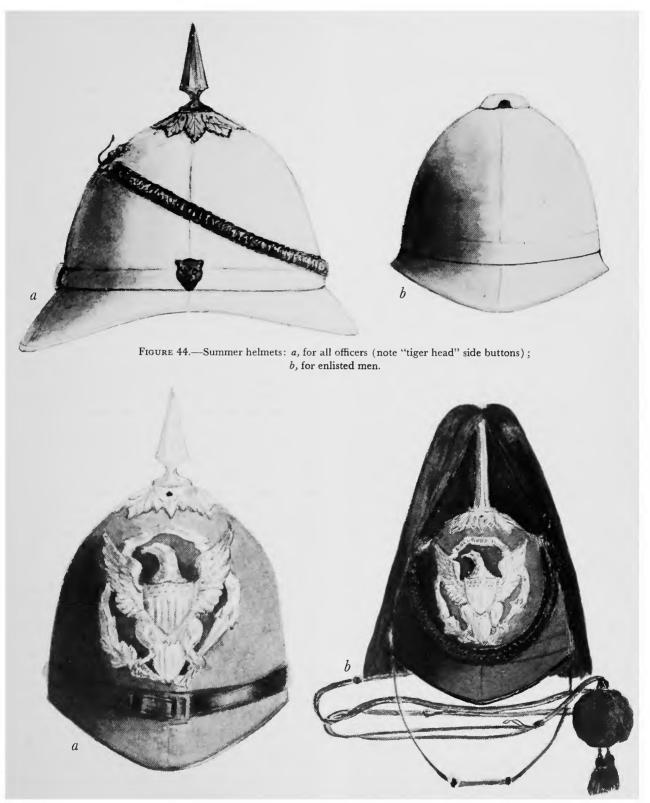


FIGURE 45.—Dress helmets: a, for all foot soldiers; b, for enlisted men of mounted troops.

making them, apparently for use in making additional samples.³⁹⁵

Communication on the subject between Meigs and Sherman continued with the Quartermaster General rather neatly summing up the whole matter: "The present cavalry officer's helmet is of felt and weighs 191/2 ounces complete [while] the present officer's cap is cloth covered pasteboard and weighs 71/4 ounces." Meigs then went on to say that the helmet asked for in the petition was that recommended by the Miles Board and weighed 171/9 ounces for the mounted article. "You have signified that you will approve a black felt helmet properly ventilated," he continued, "as soon as one can be invented that won't weigh down the wearer As the outward appearance of the officer's helmet as an article of uniform is all that directly concerns the government (since they buy their own) will it not be sufficient to adopt some pattern and color leaving the material to be selected by the officer himself? . . If the officers generally desire the change, will it not be well to indulge them? Whenever the officers get a helmet, petitions to give the same to the enlisted men will be in order and must be met. But in the meantime actual trials and experience of officers will probably develop the best material and pattern." 396 The tone of this letter leads one to believe that Meigs was plumping for adoption of the helmet for enlisted personnel as well as officers, and if this is what he intended, he was successful, for several days later Sherman approved the change for the whole Army and directed Meigs to draft a general order for submission to the Secretary of War.397

Meanwhile Meigs continued to press Rogers for the additional samples then being made and a good bit of confusion resulted, which was not resolved for several months. On 16 December, Rogers forwarded four helmets made by several manufacturers with a long letter describing them, their prices, and a general discussion of their possible ornaments, making a particular point of saying that in order to insure uniformity, the government should procure and own the dies for the metal trimmings, to be loaned to manufacturers, a point on which Meigs agreed.³⁰⁰ On 27 December Meigs forwarded to Sherman his draft of the general order on the helmets which was in turn published as General Order No. 4, Headquarters of the Army, 7 January 1881. 400

By direction of the Secretary of War the following modifications in the uniform of the Army are made:

I. The dress cap for regimental officers and men will be discontinued and in lieu thereof the following adopted:

Helmets for field officers.—According to the pattern on file in the office of the Quartermaster General. Body: of cork or other suitable material covered with black cloth, or of black felt at the option of the wearer. Trimmings: cords and tassels, top piece and plume-socket, chain chin-strap and hooks, eagle with motto, crossed cannon, rifles, or sabres, all gilt, with the number of the regiment on the shield in white; plume of buffalo-hair, white for infantry, yellow for cayalry, and red for artillery.

Helmets for other officers of mounted troops and of Signal Corps.—Same as above, except that color of plume shall be orange for Signal Corps.

Helmets for other officers of foot troops.—Same as above, except that the trimmings are as follows: Top piece, spike, chin-strap with hooks and side buttons, eagle with motto, cross rifles or cannon, all gilt, with the number of the regiment on the shield in white.

Officers' summer helmets.—Body: of cork as per pattern in the office of the Quartermaster General, covered with white facing-cloth; top piece, spike, chain chin-strap, and hooks, all gilt.

Helmets for all mounted troops.—Body: of black felt as per pattern in the office of the Quartermaster General, with leather chin-strap, large crossed cannon or sabers, letter of company and number of regiment, plain side buttons, top piece and plume-socket, all brass; horse-hair plumes and cords, and band with rings of the color of the arm of service.

Helmets for all foot troops.—Of same pattern and material as for mounted troops, with leather chin-strap; and plain side buttons, top piece and spike, of brass.

Trimmings.—Commissary sergeants, a crescent of white metal; hospital stewards, a wreath of brass, with letters U. S. in white metal; engineers, a castle, with letter of company; ordnance, a shell and flame; artillery, crossed cannon; infantry, crossed rifles, and letter of company and number of regiment, all in brass.

The allowance of helmets will be one in the first and one in the third year of enlistment.

This order will go into effect, except for cavalry and light batteries, on the 1st of July next or as soon thereafter as the supplies can be procured by the Quartermaster's Department; for cavalry and light batteries whenever the present stock of helmets is exhausted by issues.

A new price-list and table of allowances, based upon these changes, will be promulgated by the time this order goes into effect.

Officers may use the new helmet immediately if they so desire.

Following the publication of the order, Meigs had the approved samples photographed and the pictures rather widely distributed. Several days later he forwarded to Philadelphia the sample adopted for enlisted men with instructions to procure four similar models for use as sealed samples

to be sent to Washington together with specifications for the same.402 It should be noted here that because of the confusion over the samples, which was to increase over the next several weeks, the specifications were not drafted until much later, finally being published in May after a number of changes had been made. On 14 January, Rogers wrote Meigs for information as to the officers' helmets and asked that the models that had been adopted be sent to him. 403 Meigs replied in a rather involved letter that, as will be seen, served to confuse the Philadelphia Depot even more. The Quartermaster General stated that he was returning the six helmets recommended by the Miles Board, two of which had been adopted for officers (that for field and mounted officers and the officer's summer helmet), and made the point that Sherman particularly desired that the helmets be uniform in shape. He inclosed a set of the helmet photographs.404

The confusion became complete with the publication of the 22 January issue of the United States Army and Navy Journal, which carried a feature article, including illustrations made from six of the seven photographs of the approved patterns. Even a cursory glance indicates the confusion: The approved patterns were not all of one shape; the selection included helmets both from the Miles Board samples and the four furnished by Rogers; and the brass trimmings differed between officers' and enlisted models and between foot and mounted officers. The pattern for enlisted men, although quite similar to that selected by the Miles Board (as shown in the drawings), was apparently patterned on one of Rogers' four models in that it carried a pin-wheel ventilator on either side, in addition to crossed cannon without an eagle for a front plate, plus a spike base taken from the 1872 helmet (Figures 46, 47).405 It should be noted, however, that the side buttons carried the branch of service device as in the Miles Board drawings. That for foot officers was from the Rogers models as opposed to the Miles Board helmets in that the shape was distinctly different, the spike base was again

FIGURE 46.—Officers' helmets: a, officers of foot troops (note shape and model 1872 spike base); b, field officers' helmet with spike (note shape and "tiger head" side buttons); c, summer helmet (note shape and "tiger head" side buttons).

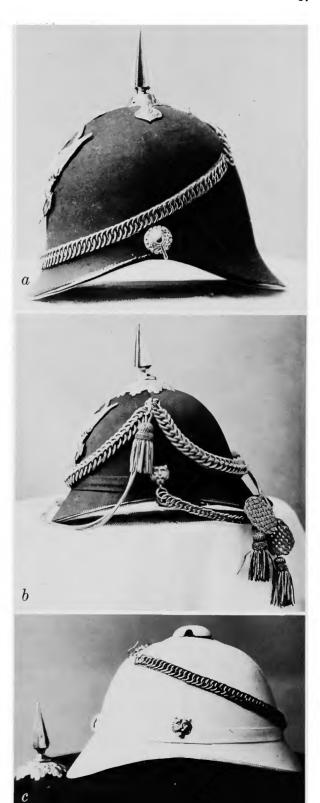




FIGURE 47.—Helmet for enlisted men (note "pin-wheel" ventilator). (From *United States Army and Navy Journal*, 22 January 1881.)

that used on the 1872 model, and the side buttons were of a chain-link rosette type as opposed to the Miles Board drawing "tiger head." The officers' summer helmet was taken directly from the drawings with a wreath of foliage spike base and "tiger head" side buttons, 600 as was that for field and mounted officers. The front plate for enlisted men was the crossed weapons called for in General Order No. 4, but that for officers was of an entirely new design made up by Rogers and mentioned in his letter to Meigs of 16 December. 101 In addition, the chin chain on the officers' summer helmets was arranged high to low from left to right as viewed, while that on the foot officers' winter helmets was just the reverse. 102

Just how and why these discrepancies in the patterns crept in is not the least clear. Certainly there was no need for undue haste once Sherman had approved the change. It does seem possible, however, that since the selection of the insignia and trimmings had obviously not been settled at the time of approval, to say nothing of the helmet shape, the photographs were deliberately released to the press and others in order to evoke comment as to the preferences of the members of the service. In any case, before any such comment was forthcoming Rogers was working at standardizing the ornaments and front plates. Working with Horstmann he came up with a set of designs, which he forwarded to Meigs in care of the draftsman suggesting that the enlisted men be given a front eagle similar to that for officers. 409 After considerable correspondence between Philadelphia and Washington, a second trip to Washington by the Horstmann designer, plus consideration of designs solicited from other suppliers, Rogers personally took to the capital the fruits of his labors, which Meigs submitted to Sherman who approved them. The helmet shape was that designed originally by Allien, that is, that formerly furnished to the Miles Board. 410

Several days later, Rogers, in forwarding to the depot quartermaster his estimates for the brass trimmings and front plates for the coming year, stated that the estimate did "not comprehend any . . . for mounted helmets as the present stock will be issued to them until exhausted as per General Order No. 4," which accounts for the 1872 front plate on cut-down 1872 and Model 1881 helmets in numerous photographs. The next day Meigs ordered depot quartermasters to forward all 1872 pattern helmets to Philadelphia for alteration to conform with the new pattern. On 16 March, Rogers forwarded to Washington the specifications for the pattern as last approved, which were adopted 6 May and published.

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE.

Specifications for Helmets for all Troops.

Material.—To be black: To be made of felt composed of one part each of "Russia" and best "coney," and one-half part of short stock nutria or beaver; wine stiffened. Such other suitable material besides felt of the above composition as may from time to time be determined upon bids received in response to advertisement may be used if approved; in which case the character and quality of such material, as shown in the sample submitted and accepted, will govern the contract.

Shape, Etc.—To be in shape according to standard sample. Black enameled leather band, about seven-eighths (%) of an inch wide, to surround the helmet at base of crown, and to have an adjustable chin-strap of the same material

with brass sliding-buckle, as on sample. The lower edge of helmet to be bound with black enameled leather and the inside of visor all around to be lined with green Morocco leather, pasted to the body with rubber cement. The sweat to be of Belgian sheep-skin, about two (2) inches wide; inside the sweat band about an inch wide of heavy enameled leather or cloth. All to be well stitched in place. A shell ventilator, according to pattern, to take the place of toppiece or spike when desired.

Sizes.—To be of six (6) standard sizes, numbered from one (1) to six (6) inclusive, corresponding to the trade sizes 634 to 738 inclusive.

The standard sample to be followed in all respects as to shape, quality of materials, workmanships, Etc.

RUFUS INGALLS, Quartermaster General, Bvt. Major General, U.S.A.

Adopted May 6, 1882, in lieu of specifications (No. 1) adopted May 31, 1876, which are hereby canceled.

690—Q.M.G.O.,1882. C. & Eq. Supplies.

NOTE.—

Ornaments and Trimmings for Foot Troops.—The toppiece to consist of a spike on a base of oak leaves according to sample, and to be made to screw into the base of ventilator, as shown in sample. Eagle with shield and motto, and side buttons, according to pattern, for each arm of the service. All to be of yellow metal.

The number of regiment or device of corps to be in white metal (German silver), and be borne in the lower half of shield on eagle's breast, according to pattern.

For Mounted Troops.—The top ornament to consist of a horse-hair plume (color according to arm of service) and a yellow-metal plume-socket, as described in specifications, which rests upon the oak-leaf base. Eagle with shield and motto, and side buttons, according to arm of service. All to be of yellow metal.

The number of regiment or device of corps, in German silver, to be borne on shield, as described for foot troops. 414

With very few modifications these specifications held good for the life of the helmet. In April 1882 a description of the trimmings was detailed in specifications. Further changes in these trimmings followed those for the insignia for forage caps (see pp. 49-52).

The specifications for the trimmings were as follows: 415

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE.

Specifications for Metallic Ornaments for Helmets, Forage Caps, and Uniform Coats.

FOR HELMETS.

Eagles.—Eagle according to pattern, made of No. 24 sheet-brass (high); American eagle displayed proper with

national shield on breast and bearing in beak scroll with motto "E pluribus unum;" olive branch in dexter talon and bunch of arrows in sinister. For troops of the line the distinguishing arms are displayed under the shield, viz: Artillery, the crossed cannon; cavalry, crossed sabers; infantry, crossed rifles, and upon the lower part of shield is borne the regimental number in German silver. For the staff and staff corps, the crossed arms are omitted and the designating badge, in German silver, is borne upon the lower part of shield, viz: For hospital stewards, the caduceus; for commissary sergeants, the crescent; for engineers, the castle, for ordnance and ordnance sergeants, the shell and flame, and for signal service, the crossed flags. When flat the eagle is of about the following dimensions: Greatest width between tips of wings four and one-quarter (41/4) inches: from upper edge of scroll to tip of tail three and seven-eights (37/8) inches. It shall be molded to the form of helmet shell and be provided with three (3) wire loops by which to fasten

Spike and Base (Foot Troops).—Spike to be of polished high brass, according to pattern, hexagonal, fluted surface, with screw of brass to fit socket in top of helmet. Height of spike three (3") inches; widest diameter one (1") inch; length of screw (in the clear) three-fourths (3/4") of an inch; base of No. 24 sheet-brass (high); oak-leaf design according to pattern, eight (8) points, bed in center to receive base of spike and hole cut for spike-screw.

Plume Socket (for Mounted Men's Helmets).—To be of high brass, according to pattern. An inverted fluted cone with mitered top (four points), front ornamented with the national eagle and shield and a single star surmounting eagle head. Spherical base, into the mouth of which the cone is securely brazed, and which is formed into a hexagonal pedestal at the bottom similar to that of spike so as to rest firmly upon the oak-leaf base and be bored for the plume pin. Height of spherical base (including mouth and pedestal) about one and one-half (11/2") inches; of cone two (2") inches; diameter of cone at top one (1") inch, at bottom five-eighths (5%") of an inch; diameter of spherical base one (1") inch. Plume pin, with ornamental head and plain washer (each about one and one fourth (11/4") inches in diameter), about four and three-quarter (43/4") inches in length, the thread of which shall be cut so as to screw into ventilator socket in top of helmet. For the lower end of pin a large open washer or disk with beveled edge to bear against the inside of helmet shell for the better security of the top piece, and be kept in place by a small brass thumbnut. Diameter of disk, about two and one-half (21/2") inches.

The oak-leaf base to be the same as described for foot helmets.

Side Buttons.—Side buttons to be of high brass, according to pattern, with flat brass double stems. Devices on buttons in relief: For engineers, the castle; for ordnance, the shell and flame; for hosptal stewards, the caduceus; for commissary sergeants, the crescent; for signal corps, the crossed flags; for artillery, the crossed cannon; for cavalry, the crossed sabers; for infantry, the crossed rifles.

Numbers.—Numbers to be one-half $(\frac{1}{2})$ inch in height and made of No. 18 German silver, according to pattern, with two soft copper wire stems to hold them on shield.

Devices.—Devices for staff and staff corps to be of German silver, according to patterns. Designs as mentioned in description of eagle, and stems as for numbers.

Scrolls and Rings (Mounted Troops).—Scrolls and rings. One on each side, between the leaf-shaped points of the top piece, its lower edge one-half $(\frac{1}{2})$ inch below these points. The scroll is three-fourths $(\frac{3}{4})$ diameter, ornamented to correspond with the fastening of the top piece. On the top of the scroll, in the center, is an eye of thin wire three-sixteenths $(\frac{3}{16})$ of an inch high holding a thin brass ring one-half $(\frac{1}{2})$ inch in diameter, to keep the cords and bands in position. The stem of the scroll is formed of two pieces of thin brass wire to fasten it at the inside of helmet. All to be high brass.

Adopted April 21, 1882, in lieu of specifications No. 8, of Book of Specifications, and conforming to standard samples this day adopted.

[Signed] RUFUS INGALLS, Quartermaster General, Bvt. Major General, U.S.A.

35. Q.M.G.O., 1882 G & Eq.: Supplemental.

When specifications were published in 1892 detailing the uniform for Indian scouts, the helmet front plate was to be "the eagle prescribed for mounted men with the device (crossed arrows) in lieu of the number." Since the scouts normally operated with the cavalry, it seems evident that they wore the front plate of that arm with the crossed arrows as pictured in the specifications on the shield. The side buttons were also to carry the crossed arrows.¹¹⁶

One small detail remained. On being queried by the regimental quartermaster of the 15th Infantry, the General of the Army decided that the regimental staff officers of artillery and infantry, being mounted, were to wear the helmet trimmings prescribed for officers of mounted troops, that is, the plume and cords as opposed to the spike.⁴¹⁷

Because of the confusion caused by the photographs made in January and published in the United States Army and Navy Journal, Rogers conceived the idea of making "phototypes" of the finally approved models to obviate any further trouble. This was done and the pictures were distributed to all quartermaster officers and to the headquarters of military divisions and departments and published in that year's Annual Report of the Quartermaster General.⁴¹⁸

Even before a contract was let for the new model, altered 1872 helmets were being sent to subordinate installations for issue to "all branches." ⁴¹⁰ The

first contract for the new helmets was let to Raymold and Whitlock of New York City, 16,000, untrimmed, at \$1.69½ each. Horstmann won the contract for the front plates, side buttons, and white metal numbers, while Raymold and Whitlock supplied the top pieces and spikes. Subsequent contracts, also with Raymold and Whitlock, dropped the unit price of the untrimmed helmet to \$1.39 in 1882 and \$1.29 in 1882. The initial issue price was set at \$1.70 for the basic helmet with the trimmings additional; varying between foot and mounted troops. The rate of issue was one for the first and third years.

A number of these helmets have been examined, both officers' and enlisted including one officer's summer model, and all conform to the specifications within allowable tolerances (Figures 48-51). The altered helmets were something else again. As can be seen (Figure 52), they were of a distinctly different shape, but, as we know, were issued and presumably worn. Those examined carried the Horstmann label with "Remodeled 1881" added.423 The officer's summer model (Figure 51) is particularly interesting in that it is apparently a very early one, was made by Allien, is almost identical in shape and construction to that shown in the Allien-Miles Board watercolors and in the helmet photographs made in December 1880 and reproduced in the United States Army and Navy Journal; among its nonregulation trimmings it carries the lion head side buttons which caused some adverse comment. It formerly belonged to Bvt. Maj. Gen. Judson Kilpatrick, a 1861 graduate of West Point. Kilpatrick resigned from the service in 1865 and served as minister to Chile 1866-1870 and from May 1881 until his death there in December of the same year.424 The helmet, which must have been purchased prior to his departure for South America in May 1881, was apparently intended to serve as part of a quasidiplomatic uniform.425 In addition to the lion head side buttons and rear chin chain hook with chain, it carries a regulation 1881 staff front plate (which was not authorized for wear on the summer helmet) with two silver stars affixed to the shield and the 1881 oak leaf plume or spike base to which is fixed a four inch hexagon metal piece surmounted by a flowing plume of black cock feathers.

Due to some confusion as to the proper method of wearing the helmet cords by mounted individuals, the Headquarters of the Army in 1886 prescribed the following:

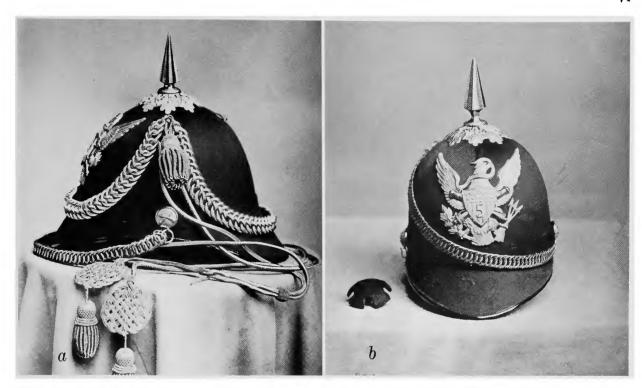


FIGURE 48.—Officers' helmets: a, field and mounted officers' helmet (spike substituted for plume); b, foot officer's helmet.

The helmet cords are attached to the left side of the helmet, and come down to the left shoulder, where they are held together by a slide; one cord then passes to the front and the other to the rear of the neck, crossing upon the right shoulder, under the shoulder strap, and passing separately around to the front and rear of the right arm, where they are again united and held together by a slide under the arm; the united cords then cross the breast and are looped up to the button of the shoulder-strap on the left side. 426

And in 1889, all band musicians were given the privilege of wearing mounted helmet trimmings, that is, plumes and cords. 427

Reaction to the helmet, pro or con, was slow to surface. Military Storekeeper Rogers, on a tour of western posts in 1883, found troop units generally satisfied with the change except for several easily corrected small details, such as the length of the chin straps. Not until the 1890s was there any adverse comment. Captain H. F. Kendall, 8th Cavalry, in writing on the uniform in the Journal of the United States Cavalry Association, stated: "Beginning with the head, we have the forage cap, the helmet, and the campaign hat. The two former offer us object lessons on the military supremacy of the two leading nations of Europe, which is just about the limit of their utility." 420 Others called



FIGURE 49.—Helmet for enlisted men.

the helmet "hot and heavy," "uncomfortable for all occasions," and "frequently causing headache. Derhaps it was time for a change. Still, all in all, it must be remembered that this helmet continued in use for a total of 21 years, longer than any previous piece of dress headgear.



FIGURE 52.—Altered model 1872 helmet. (Courtesy of Gordon Chappelle Collection.)

THE CORK OR SUMMER HELMET

The adoption of the white (and sometimes brown or khaki) summer helmet for use in especially hot climates together with the change in color of the general issue campaign hat from black to drab was a continuation of the long struggle by certain elements of the Army for better protection from the heat in both uniforms and headgear. True, the Army had worn white cotton dress in the 1830s and 1840s, dropped in the 1851 uniform change, but it had never had a true hot-weather issue headpiece. The Woodhull Report of 1868 had recommended a "casque or light brimmed hat" similar to the "Malay hat" with the head sitting in a ring and an air space between the ring and the hat, but there is nothing in the record to indicate that any consideration was ever given the recommendation or that it had any influence on the helmet when it was adopted.431

The immediate impetus for the adoption of a summer helmet for trial stemmed directly from the controversy over the failure of the 1872 campaign hat. During the latter stages of the little crisis, the Quartermaster General, motivated by a picture in the *Illustrated London News* showing British troops in India wearing a hot weather helmet, asked the help of Sir Edward Thornton, the British Minister in Washington, in obtaining a specimen. Before receiving a reply, Meigs broached the subject of summer helmets with the Secretary of War, sending him a sample and recommending that 200 similar to it be authorized for purchase and issue for trial in the Southwest. The recommendation was turned down on the grounds of lack of funds.

Some weeks later Meigs received through Minister Thornton a sample of the helmet, with puggaree, then in use by the British Army in the tropics with the promise of a further sample of a pattern just adopted. When this letter was received, Meigs forwarded it to the Secretary with a covering letter in which he recommended that "in view of the failure of the campaign hat . . . they should be tried as a substitute therefor." He further recommended that the British pattern be submitted to the Medical Department for its views and asked that he be permitted to purchase a number for trial in Texas and Arizona, adding that funds were available under the current appropriation. When the Surgeon General concurred in the concept of

such a trial, the Secretary directed that 100 with puggaree be procured and sent to the Southwest for trial and report.⁴³⁵ The purchase was at a unit cost of \$3.00 per helmet plus an additional \$.50 for the puggaree, the entire group being sent through San Francisco to units in Southern California and the Arizona Territory.⁴³⁹

Reaction to the helmet was, for the most part, somewhat negative. While the general pattern was found suitable for the climate, most reports complained that the model was too heavy and had insufficient space between the head and the body of the helmet for proper ventilation.⁴¹⁰

In January 1878 the commanding officer of Company E, 9th Cavalry, requested that his unit be issued the "'India Helmet' of a light dust colored drab, nearly white, similar to that adopted for Cadets in GO No. 121, of 1877" for wear in the summer heat of the Southwest.441 When referred to Meigs for comment, he replied that while he personally would prefer such a helmet in hot climate, reports on the first test indicated that it was a failure. He said that he felt, however, that such radical changes were seldom liked at first and that the model would eventually win approval in the ranks.442 The Secretary of War approved the issue of 100 of the cadet helmets for trial.443 The Philadelphia Depot obtained a sample of the helmet, which originally had been furnished the Academy by Henry V. Allien of New York, and drew up specifications.444 These Meigs approved and directed to Philadelphia to have 100 manufactured and forwarded to Santa Fe.415 The exact appearance of the cadet model is unknown as there is no authenticated specimen of it in the National Collections or at the West Point Museum and none has come to the attention of the author.

Several months later the commanding officer of the Artillery School at Fort Monroe, Virginia, requested the adoption of a summer helmet for warm weather wear at the school, "a modified shape from that prescribed . . for the Corps of Cadets," and enclosed a description of it prepared by Allien & Co. of New York. The modifications mentioned were minor, the cloth covering the crown to be in four sections as opposed to six in the cadet model and the visor being longer in the rear than in the front. The description also called for a gilt chain

chin strap backed with white leather and a gilt spike for full dress, items not prescribed for cadets. The request was approved on 11 June 1878 and the Quartermaster General so informed. Two hundred and fifty were procured and issued, although, as far as the record shows, without the chin chains and spikes as requested. Also, when the specifications for this helmet were finally issued on 5 May 1880, the chin chain and spike were omitted. They were finally authorized in G.O. No. 4, Headquarters of the Army, 7 January 1881, when the helmet was prescribed for the whole Army.

WAR DEPARTMENT
QUARTERMASTER GENERAL'S OFFICE

Specifications for Cork Helmets.

Shape and weight.—To be in shape according to standard sample, and to weigh about seven and one-fourth (71/4) ounces when finished; reasonable variations (from this weight) due to sizes to be allowed.

Material, etc.—The shell to be composed of two thicknesses of the best quality of cork, laminated or scarf-seamed, and securely cemented together with shellac. The linings to

be firmly shellaced to the inside of shell; that for the dome to be of slate-colored drilling, and that for the visor or shade to be of emerald-green merino or cashmere. Sweat-leather to be on frame or hoop as in sample, well separated from the shell (for ventilation) by ten (10) small cork studs securely fastened; sweat to be about one and three-eighths (13%) inch deep, and to be provided with a drawing string. Outside covering to be of the best quality of bleached cotton drilling, in four (4) sections, welt seamed and secured to the shell with shellac. Band of same material, about three-fourths (34) of an inch deep. Edge to be bound with stout bleached stay-binding. Adjustable ventilator at top as in sample. Chin-strap of white enameled leather, and brass hooks for same, as in sample.

Adopted by the Secretary of War May 5, 1880.

M. C. MEIGS
Quartermaster General,
But. Major General, U.S.A. 450

The Annual Report of the Quartermaster General for 1884 carried even clearer and more detailed drawings of the helmet (Figure 53).⁴⁵¹

On 13 May, Colonel W. R. Shafter, whose 1st Infantry was on orders for Texas, wrote the War Department relative to the possible issue of helmets to his regiment there. When the letter was referred to Meigs for comment, he wrote: "In the

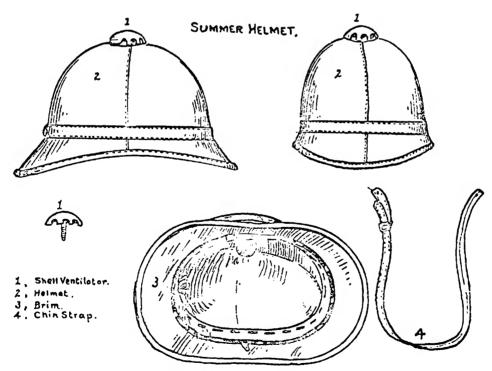


FIGURE 53.—Sketch of cork helmet, model 1880. (From Annual Report of the Quartermaster General, 1884.)



FIGURE 54.—The Gordon helmet.

5th instant the Secretary adopted a standard cork helmet for the Artillery School and I suggest this helmet be made also the standard for the Army." He went on that it was very hot in Texas and that the 1st Infantry would need the headgear quickly. He estimated the cost per helmet would be \$3.00 to \$3.50 each. This recommendation regarding the whole Army the Secretary approved, and on the following day Meigs directed the Philadelphia Depot to purchase immediately 500 helmets in anticipation of a requisition from Shafter's unit. These were purchased from Horstmann.

Approval of the helmet was formalized in General Order No. 72, Headquarters of the Army, 4 November 1880, issue to be made only to troops in hot climates and then in lieu of campaign hats, the necessity to be certified by the department commander. The rate of issue was to be one each for the first and third years of an enlistment. The first contract was let with Apple & Co. of Philadelphia, 25 May 1881, for 6000 at \$1.69 each, this price dropping to \$1.431/9 by 1883.⁴⁵⁵

There was some minor experimentation with the helmet in the next few years that should be mentioned. A model made of crushed cork, as opposed to laminated sheet cork, was tried and found to be impractical. As a result of a number of complaints that the white helmet offered too conspicuous a target, both khaki and "drab" covered helmets were issued for trial. These trials were seemingly inconclusive as there was no general issue of other than white helmets until the turn of the century.

The original specifications remained in force from 1880 to 1899 with the exception of a very slight change in weight in 1892. ⁴⁵⁷ In 1899, however, there was a distinct change in shape, dimen-

sions, and color. All to be covered with "Government Standard Khaki," and the visor width increased from 2 to 21/2 inches in front and from 21/2 to 35% inches in the rear to give greater protection to the neck. 453 Then in 1900 came specifications for "Cork Helmets (khaki and white)," essentially the same model as that of the previous year except that the visor was to be lined with green wool instead of cotton.459 Specimens examined generally conform with very slight tolerance except that no example has been seen with a wool visor lining. These last specifications were the basis for all subsequent issues of the helmet, which generally carried through the Philippine Insurrection period. It is interesting to note that the 1902 uniform change called for both a white and a "service" helmet for all personnel. General Order No. 197, War Department, 31 December 1904, gave final clarification of the status of both white and khaki, directing that they be issued until exhausted and then discontinued.460

One officer's model has been examined, that belonging to Captain Charles Garnett Gordon, 6th Cavalry, who served from 1867–1887. This specimen (Figure 54), which should not be confused with the officers' summer helmet authorized in the general order prescribing a helmet for the whole Army, seems to have done double duty for field or fatigue use in place of the campaign hat, as well as for a dress helmet, in that it is fitted with chin chain side and rear buttons and shows evidence of having had the oak leaf spike or plume base attached. It resembles more nearly the shape and dimensions of the 1899 model than the 1880, is covered with a white wool flannel, and carries the maker's label "Henry V. Allien & Co./New York."

THE WINTER CAP

No authenticated example of the winter caps issued between 1876–1902, either fur or canvas, is in the National Collections or is known to the writer. Discussion of these is included because of the widespread use of the models.

Although a headpiece especially designed for wear in cold climate was not authorized until 1876, in addition to field expedients that one can be sure both officers and enlisted men used in extremes of weather, there were a few instances where the Army

did make provision of a sort for the protection of the head and ears against cold.

The earliest recorded example of an issue winter cap was the gray wool forage cap authorized in 1820 and described as designed to "be worn so as to cover the greater part of the face and jaws, which is considered to be important in cold climate. Actually in this particular instance protection was admittedly secondary to appearance as evidenced in the change to the 1825 pattern. While

this last model made no provision for protection against bad weather, the leather forage cap, which replaced it in 1833 (replaced by another pattern in 1839), had in the dragoon model (but not that for other troops) a flap in the rear, which could be let down some 6 inches to protect the neck. All troops were prescribed a band of fur to be attached to the bottom and tied in front.403 There was no such provision for the dress caps. All three types of the 1839-1851 forage caps had "capes" attached to the rear as integral parts which provided some protection against cold.464 The all-purpose cap adopted in 1851 did have a cap cover, which was to extend down onto the shoulders 10 inches below the lower edge of the cap and tying under the chin; but this was to be of a "suitable water proof material," which indicates a rather dubious value as protection against cold. 465 The forage cap and "Army" hat adopted in 1858 made no provision for such protection.

Just prior to the Civil War General W. S. Harney's winter campaign in the Oregon and Washington Territories and the Mormon Expedition brought some relief in the form of "great coats with capotes or hoods" and "caps with ear pieces (old pattern forage or last pattern cap)." 460 During the Civil War the only strictly protective wear issued in any bulk were mittens. 461 The Woodhull Report of 1868 made several very pointed recommendations in regard to winter headgear, which were not followed in the 1872 uniform change. 468

Sometime between 1865 and 1870 a total of 304 "fur caps" (not otherwise described) turned up on inventory in the Philadelphia Depot and remained there unissued at least through 1873, despite the fact that during the same period considerable numbers of buffalo overshoes and buffalo overcoats were procured and issued.409 In 1876 a board of officers convened to consider certain proposed uniform changes and recommended the issue of seal skin caps and gauntlets. This was approved for troops serving at "extreme northern posts" when recommended by the department commander concerned, to be issued at the rate of two per five year enlistment and to be charged to the individual at contract prices (Figure 55).470 The caps were to be made of "wool seal skin, with ear flaps, cape, and vizor, according to pattern" with a "lining of Turkey red chintz, padded with cotton wadding." 471 The first contract was let on 22 June 1876 with



FIGURE 55.—Muskrat fur cap, model 1876. (Drawing by Donald W. Holst, adapted from illustration in QM Specification No. 6, 12 March 1879, RG 92, NA.)

Edmund R. Lyon of Philadelphia for 2000 caps and the next cost of clothing list carries them at a cost of \$2.78 to the soldier. A total of 6158 were purchased during fiscal year 1877, and 6250 were issued. Almost immediately the seal skin was found to become brittle after being wet and following a short trial a switch to a model of muskrat skin was made. Specifications were drawn and the first contract was let with Edward S. Mawson & Son of Philadelphia on 14 September 1878 for 2500 at \$.841/2 each.

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE.

Specifications for Muskrat Caps.

To be made according to standard sample, of muskrat skin, with ear-flaps, cape, and visor, according to pattern. Lining of brown chintz or silesia, padded with cotton wadding.

Sizes same as for dress and forage caps. Adopted March 12, 1879.

M. C. MEIGS, Quartermaster General, But. Major General, U.S.A.⁴⁷⁸

This model was successful and appreciable numbers were procured and issued during the next few years.⁴⁷⁷

In 1884, in an economy move, caps made of surplus tentage, waterproof, dyed brown, and lined with heavy blanket material were substituted for the fur caps. These were made up at clothing depots and issued gratuitously with the same stipulations regarding geographical area as in the case of the fur models (Figure 56). They were considered warmer than those of fur.⁴⁷⁸

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE.

SPECIFICATIONS FOR CANVAS CAPS.

Material.—To be made of 6-ounce cotton duck, dyed brown, lined with light blanket cloth next the duck, and with light-colored cotton jean in the inside; to have two buttons on the cape to button at the throat, and one vest size, brown "lasting" button on the top for finish. The visor and edges bound with 3/4 brown cotton tape.

Style.—Scull cap with extension, forming a cape reaching to the shoulders and meeting in front, covering the throat, and buttoning together with two buttons. A visor of the same material bound with ¾ brown cotton tape sewed on the forehead (to be worn up or down as desired), and having hook and eye to fasten it when turned up.

Workmanship.—To be cut and made in conformity with

the sealed standard sample adopted this date. Adopted April 17, 1884.

S. B. HOLABIRD,
Quartermaster-General, U.S.A.470

In 1886 a scarlet wool lining was substituted for the "cotton jean" in the interest of warmth. Beyond this there was no significant change. The next year the Secretary of War approved the issue of fur caps in place of canvas whenever requisitioned. Thenceforward the fur cap gradually replaced the canvas and in 1902 was comprehensively described. The cap gradually re-

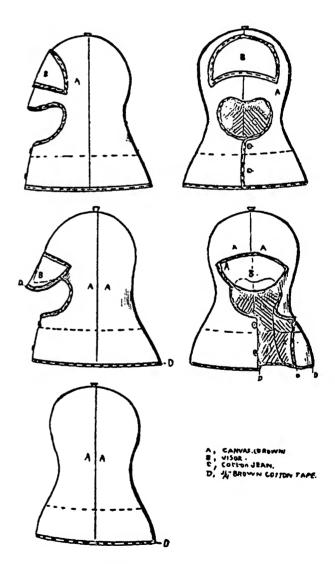


FIGURE 56.—Canvas winter cap, model 1884. (Drawing from QM Specification No. 109, 17 April 1884, RG 92, NA.)

WAR DEPARTMENT,
QUARTERMASTER GENERAL'S OFFICE.

Specifications for Muskrat Fur Caps.

Material.—Fur portion to be of full furred and seasoned trapped muskrat skins (winter or spring skins only), thoroughly dressed with butter or oleomargarine, and cleaned with white or yellow sawdust (no alum or vitriol or other chemicals to be used), each skin to be sufficiently large to admit of the half crown being cut in one solid piece, except one small additional piece is allowed at each side to make required width. The lining to be of good quality brown sateen, counting about one hundred and twenty (120) threads to the inch of warp and two hundred (200) threads to the inch of filling, sustaining a tensile strength of not less than thirty-six (36) pounds both in the warp and the filling: the sateen weighing about two and one-fourth (21/4) ounces to the linear yard, thirty-six (36) inches wide. Interlining of good quality cotton wadding in the body of the cap, with an interlining in the cape and ear-laps of furniture hair cloth, medium weight, as shown in the sealed standard sample, counting about sixty-two (62) threads to the warp and forty-two (42) threads to the filling.

Measurements.—Height of crown to be about seven (7) inches on the pelt, full in the circular slant, as shown in the sealed standard sample. The greatest depth of the ear-laps to be about five (5) inches, continuing around the cap,

forming in the back a cape of about three (3) inches, with a visor in the front, properly shaded, its greatest depth being about two and three-fourths (234) inches; the fur composing this section of the cap embodying no more piecing of the fur than is shown in the sealed standard sample. At the top of each ear-lap a black tape string about nine (9) inches long and one-half (1/2) inch wide for the purpose of extending over the crown of the cap and tying to hold the ear-laps and capes in position. The lining and interlining of the body of the cap to be quilted in block pattern, as shown in the sealed standard sample, not less than twelve (12) stitches to the inch; the joining of the body of the cap to the lining thus prepared to be neatly and securely sewed with about six (6) stitches to the inch. The ear-lap and cape to have an interlining of furniture hair cloth to give that portion of the cap stability, and applied as shown in the sealed standard sample.

The above measurements and descriptions based on size seven and one-eighth $(7\frac{1}{8})$, all other sizes to be in proportion.

To be like and equal the standard sample in every particular.

Adopted August 25, 1902, in lieu of specifications of March 12, 1879 (No. 6), which are canceled.

M. I. LUDINGTON, Quartermaster General, U.S. Army.

THE INDIAN SCOUT CAMPAIGN HAT

In 1866 the Congress in reestablishing the peace-time Army authorized the President "to enlist and employ in the Territories and Indian country a force of Indians, not to exceed 1000, to act as scouts, who shall receive the pay and allowances of cavalry soldiers, and to be discharged whenever the necessity for their employment is abated"⁴⁸³ As of October 1868 there were 412 such scouts in the service.⁴⁸⁴ Over the years these scouts were enlisted for periods varying from three months to six years, the greater majority being for six months (this latter period later becoming the allowable maximum) and receiving in addition to pay and allowances forty cents a day extra if they furnished their own horse and horse equipment.⁴⁸⁵

In the late winter of 1889–1890 Lt. E. W. Casey, 22d Infantry, commanding a company of scouts at Fort Keogh, Montana, conceived the idea of a distinctive uniform for the scouts to attract them to the service and improve morale. When the concept was approved, Casey submitted his recommendations in detail including a variant campaign hat, hat cord, insignia, overcoat, and guidon, plus a distinctive facing for the issue dress coat. The

Secretary of War approved and directed the Quartermaster General to initiate procurement. The hat and trimmings were described in Circular No. 10, Headquarters of the Army, 11 August 1890:

Fatigue Hat

Of black felt, brim 3½ inches wide, crown 3½ inches high; brim to be well stiffened.

Hat Cord

Of white worsted cord, one strand of scarlet, terminating in two tassels 1¼ inches in length, same color and material as the cord.

Hat Ornament

Two arrows crossed, to be made of nickel or some white metal, 3 inches in length, the letters U.S.S. in the upper intersection.

Samples were prepared and approved and the Schuylkill Arsenal was directed to contract for a total of 400 men. The first contract for the hats was let with W. H. Hurlbut of New York for 400 at \$1.24 each. Edward Eicks of New York contracted to supply a like number of hat cords at \$.101/2 each and J. H. Wilson of Philadelphia to furnish the hat ornaments, 400 at \$.25 each. The first issues were made in November (Figure 57). As tension increased over the Ghost Dance troubles



FIGURE 57.—Indian scout campaign hat.

(which came to a head at Wounded Knee Creek) an increase in the enlistment of scouts was anticipated and the Quartermaster General directed the procurement of uniform items to equip an additional 800, with consideration to be given to any items then unissued. Horstmann of Philadelphia was awarded a contract for 577 hats at \$1.40 each.

The following spring with the Indian troubles resolved, the number of scouts was directed to be dropped to a total of 150 in all departments, and in 1899 to 75. In the uniform change of 1902, the distinctive hat and overcoat for scouts was dropped.⁴⁰¹

Two specimens of the hat have been examined, both from the War Department Collection and in unissued condition. They conform to specifications within close tolerances and both carry the maker's label "W.H. Hurlbut/Contract/Sept. 29th 1890./737 Broadway, New York" on the inner side of the 1¾-inch brown leather sweat. The edge of the brim carries three rows of stitching and the black silk band measures ¾ inches. The one hat cord in the National Collections also conforms to specifications. The only insignia examined is an admitted reproduction, asserted to have been made from an original. It also conforms. The specification describing this latter also describes the helmet front plate for scouts as being that "prescribed for mounted men with the device (crossed arrows) in lieu of the number," that is, on the shield. Helmet side buttons were also to carry the crossed arrows.

THE CHAPEAU, 1859-1936

Although the "chapeau," "chapeau bras," or "chapeau de bras," as it was variously called, had been a standard item of military headgear since the turn of the 19th century, it was not authorized in the 1851 uniform change. As a concession to the ranking officers of the service, however, general officers and colonels holding the brevet rank of general were allowed to continue wearing their chapeaux on ceremonial occasions and when not serving with troops. 102 In 1858 a chapeau was reauthorized for general wear, and this time for field officers as well as those of the general staff. In December 1859 a new style of chapeau came into being, the 1858 order being modified "to permit all officers of the General Staff, and Staff Corps, to wear, at their option, a light French chapeau, either stiff crown or

flat $\,$. officers below the rank of field officers to wear but two feathers." 491

No more detail was given over the years in the regulations and no specifications were drafted intil 1912. Still there is no doubt that the form, following the French as it did, was much lower than formerly. This is borne out by an illustration in the 1864 Schuyler, Hartley, and Graham, *Illustrated Catalogue* (Figure 58). The 1872 and later regulations carry only the notation "according to pattern." The only other mention of the chapeau was in the 1873 general order which stated that it was to "be worn with the front peak turned slightly to the left, showing the gilt ornaments upon the right side."

In 1877 Horstmann Bros. catalog depicts a "cha-



FIGURE 58.—1864 chapeau. (From Schuyler, Hartley, & Graham, Illustrated Catalogue, 1864.)



FIGURE 59.—1877 chapeau. (From Horstmann Bros. & Co., Illustrated Catalogue, 1877.)

peau—U.S. Army—Staff" (Figure 59) with a somewhat lower fan than that in the Schuyler, Hartley, and Graham catalog and which closely approximates the chapeau in the illustrated 1881 regulations. (Figure 60). 498 This lower fan form continues in the illustrated 1888 regulations, in an 1897 W. A. Raymold catalog, and in the illustrated 1907 regulations. In these latter three, however, there are two distinct changes from the earlier models which carry on through: the loop (which carries the insignia) becomes noticeably more narrow and shorter and the black silk cockade, which backs the loop changes from round to eliptical. 490

The only official description came very late, in 1912.

13. Chapeau.—To be of black silk plush having a rosette of black silk, elliptical in shape, about 5 inches long and 3 inches wide on right side in center, slanting forward; in the center of this to be a strip of gold lace, the coat of arms of the United States in gold or gilt bullion embroidered on

the upper end; the lower end to have one large gilt coat button, all to be surrounded by gold or gilt embroidery ½ inch in width. To have over center of chapeau two black ostrich plumes extending down to end of chapeau in rear. To have in both front and back a tassel consisting of five each, large and small, gold or gilt bullions about 3 inches long, to have on each side a ½ inch black corded silk ribbon running diagonally from ball of tassel to center of chapeau, the ends fastened under sweat leather about ½ inches apart. 500

In the absence of precise descriptions and scaled illustrations of the pre-1912 models, we are fortunate in having at hand a number of biographical specimens, the use-dates of which can be accurately bracketed. The 1859 model is best typified by that owned by Major General George B. McClellan who resigned from the Army in 1864. This particular specimen (Figure 61) could hardly have been worn prior to 1859 since McClellan was an officer in the Corps of Engineers in 1851 when the chapeau was discontinued and his model 1840



FIGURE 60.—1881 regulation chapeau. (From Horstmann Bros. & Co., Illustrated Catalogue, 1877.)



Corps of Engineers chapeau is also in the National Collections. The 1859 specimen measures 181/2 inches in overall length, the right fan 6 inches high, the left 61/2. The gold braid loop is 61/2 by 21/2 inches on a round black silk cockade 41/2 inches in diameter. The lining is of brown silk and carries the maker's label "St. Nicholas Hotel/No. 519 B'way/New York/Warnock & Co." The sweat is of brown leather. The specimen folds flat and is very similar to the Schuyler, Hartley, and Graham illustration. Others of this model match it closely in all details.

A number of biographical specimens of the lower fan pattern, which seems to have come into vogue 1877–1881, are in the National Collections and all are very similar to one another in measurements and conformation. The average is $17\frac{1}{2}$ inches long overall with the right fan 5 inches high and

the left 51/2. The gold braid loops, however, vary from 41/2 to 51/2 inches in length and from 2 to 21/2 inches in width. The eagle on the loops of the majority of them is the 1872 cap eagle in metal. The chapeaux formerly belonging to Generals Sherman and Sheridan are of particular interest in that they carry, instead of the loop and eagle, the cockade ornament prescribed for general officers in the 1832 regulations, although of slightly reduced dimensions in accordance with the reduced dimensions of the chapeaux: "gold rays emanating from the eagle 21/2 inches computing from the center, terminating in 24 silver stars." ⁵⁰² The eagle in the center of the rays in these two cases is an embroidered cut-down version of the 1858 hat eagle.

The version described in the 1912 specifications is best typified by that formerly owned by Major General William Crawford Gorgas, Assistant Sur-



geon 1880 and Surgeon General 1914-1918 (Figure 62). It conforms closely to the 1877–1881 models in overall measurements and conformation, although the loop is somewhat smaller than that prescribed, being 41/2 by 2 inches. The eagle is in gold embroidery. The sweat is of brown leather and the lining is black silk with the maker's label "S.N. Meyer/1231 Pa. Ave. N.W./Washington/D.C." The specimen folds flat.

It is interesting to note that of all the chapeaux examined that date from 1859 onward, less than 10 percent have a "stiff crown," that is, are "form fitted," as opposed to "flat."

Although for all intents and purposes it died with the United States' entry into World War I, the chapeau was not finally and officially dropped as an item of officers' dress until 1936. General Order No. 49, War Department, 28 April 1917, and General Order No. 63, War Department, 15 May

1917, suspended the wear of dress uniforms except at White House functions. These orders superceded the uniform regulations published in Special Regulations 41 and 42, War Department, 15 August 1917 (which, although of a later date, merely described the uniform), which authorized the chapeau and described it in detail. General Order No. 86, War Department, 3 July 1919, rescinded regulations prescribing dress uniforms for both officers and enlisted personnel. Dress blues as described in Special Regulations 41 and 42 cited above were reauthorized, however, on an optional basis in 1929 by Circular 5, War Department, 26 January 1929. Circular 66, War Department, 15 October 1936 rescinded Circular 5 of 1929 and substituted new tentative regulations for dress blues, which were formalized in Army Regulation 600-38, War Department, 17 August 1938. This latter did not mention a chapeau.

THE 1895 FORAGE CAP

The forage cap adopted in 1895 had a short and somewhat strange history. There is no doubt that a change in undress headgear was needed. The 1872 "chasseur pattern" offered but slight protection from the weather and was too shallow to sit firmly on the head. A change was made, but the result was never popular.

As to styling the change marked an end to French influence and in a sense a return to the British.⁵⁰³ Although the pattern might be said to be a natural progression from the 1825 American model, in ac-

tuality its origin probably lies more with the caps worn by several British regiments in the 1850's, which the U.S. Navy seems to have copied in its 1864–1866 uniform change.⁵⁰⁴ Whatever the origin, the model was popular in certain civilian circles, becoming almost standard wear in the last quarter of the century by trainmen, streetcar operators, and baseball players.

During the 1870s, 1880s, and into the 1890s agitation in the army for a change continued, sometimes with drawings and even samples of proposed

caps being submitted. In several cases the War Department had samples prepared by the Quarter-master General for circulation in the Army for comment and the *United States Army and Navy Journal* carried frequent discussion on the subject.⁵⁰⁵

Then in 1889 the Secretary of War approved a new cap for the enlisted personnel of the Signal Corps very similar to that adopted for all branches six years later. This move apparently was in line with the desire of the Chief Signal Officer to set the Corps off as an elite entity. At the time the total for signal enlisted men was set by law at 470, with appropriation actually made for only 315.505 The general order authorizing and describing the cap was revoked two years later and there is no evidence in the record that sealed samples were ever prepared or that the cap was ever procured and issued.505

As late as the first two months of 1895 there had been no decision regarding a change in cap despite the number of samples submitted and the serious consideration given the matter. Then on 13 March "an informal" board of officers was appointed to consider "the advisability of a change." Two days later the board submitted its report recommending the change and describing the new cap in detail. This was approved and illustrated specifications were published the following September. The change was to be effective for officers 1 July 1895 and 1 January 1896 for enlisted personnel. The cost of the issue item was set at \$.67 without insignia (Figure 63). 500

Quartermaster Specification No. 367, adopted 5 September 1895, described the cap:

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE

Specifications for Forage Caps.

Cloth.—To be made of dark blue cloth, wool-dyed indigo, unless otherwise authorized by the purchasing officer; to be fifty-four (54) inches wide; to weigh not less than fourteen (14) ounces to the linear yard; to contain sixty-two (62) threads to the inch in the warp, and fifty-eight (58) threads to the inch in the filling; to be capable of sustaining a strain of not less than thirty-two (32) pounds to the inch in the warp, and twenty-eight (28) pounds to the inch in the filling; the cloth to be well sponged without refinishing, before being made up into caps.

Band.—The band to be one and one-half $(1\frac{1}{2})$ inches wide, formed by the material of the body of the cap, between two welts, each welt at top and bottom projecting one-eighth $(\frac{1}{2})$ inch, the bottom welt being one-eighth

($\frac{1}{16}$) inch above the base of the cap; the band to be strengthened by a strap of strong split leather, about one-sixteenth ($\frac{1}{16}$) inch thickness all around, and two and one-quarter (2 $\frac{1}{16}$) inches wide, sewed in between the sweat band and the body of the cap with the lining of the cap between the two.

The height of the cap to be three and one-quarter $(3\frac{1}{4})$ inches all around; the seam around the top without a welt and neatly stitched on each side; the diameter of the top from right to left to be six and one-half $(6\frac{1}{2})$ inches, and from front to back seven and five-eighths $(7\frac{5}{8})$ inches.

Visor.—To have a slanted visor of patent enameled leather, black above and green underneath, about one-eighth (1/8) inch thick, and bound with black patent leather to a depth of about three-sixteenth (3/16) inch, neatly stitched; the width of the visor from the lower edge of the cap to the inner edge of the binding at its widest part to be one and three-quarters (13/4) inches, and the entire visor to be moulded to shape.

Trimmings .-- A small regulation button on each side immediately behind the ends of the visor for chin straps; the side buttons to be fire gilt; the chin strap to be made of good enameled leather in two parts, each part about ten (10) inches long and one-half (1/2) inch wide, fitted with a stout fire gilt slide on the end of the under part, and a leather keeper on the end of the upper part, through which the end finished to a point will project about one-half (1/2) inch, to permit the strap to be adjusted at will; the sweat leather to be of Belgian leather, about one and seven-eighths (17/8) inches wide, turned on the upper edge and properly cemented; the lining of strong black satin, cut and shaped to the inner body of the cap, the crown of the lining to be made with an interlining of black muslin of good quality, there being an interlining of hair cloth of good quality, cut and shaped to the entire inner portion of the crown of the cap, extending from the top to the lower edge of the body of the cap between the band and stiffening and the body. Each cap to have four (4) black metal eyelets for ventilation, two (2) on each side, placed above the band, the center of each eyelet to be about five-eighths (%) inch from the upper seam of the cap and one and one-half $(1\frac{1}{2})$ inches apart from each other. Each cap to be finished with a loop of black Mohair or worsted braid not less than oneeighth (1/8) inch wide, and securely fastened under the sweat leather at the back of same.

The above specifications based on cap size 7½. Materials, workmanship, and finish to conform to standard sample.

Adopted September 5, 1895, in lieu of Specifications of April 12, 1892 (No. 324), which are hereby canceled.

GEO. H. WEEKS,

Assistant Quartermaster-General, U.S. Army, Acting Quartermaster-General.⁵¹⁰

This first model proved defective in several respects, which resulted in a revised pattern of heavier cloth, lighter and nonshrinkable lining, and better workmanship, with the price, rather than rising, dropping to \$.57.511

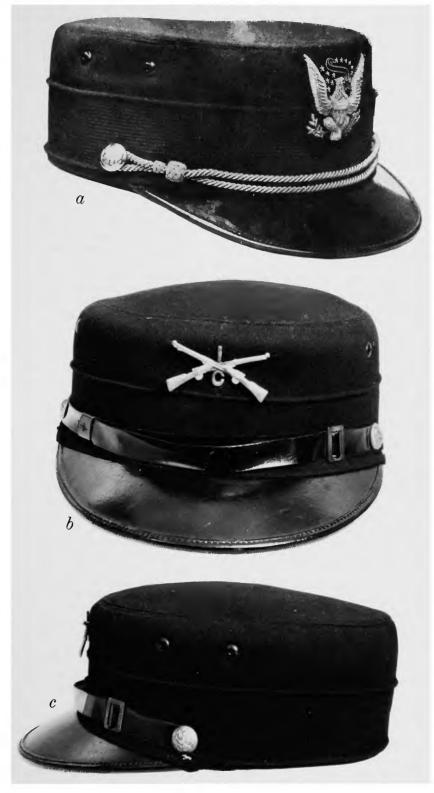


Figure 63.—1895 forage caps: a, officers (from 1895 Regulation); b, c, enlisted men.

In 1896 a distinct improvement was made in the composition of the cap ornaments. Where they had been die struck from sheet brass and fastened to the cap by means of wires soldered to the reverse, they were now to be struck from solid brass and attached by means of a brass screw with washer and nut.⁵¹² This being the first really comprehensive description of a group of headgear insignia, the specifications are included below.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE.

Specifications for Cap Ornaments.

Material.—The devices to be made of solid bronze, struck in one piece, by sharp keen dies, free from all imperfections. The numbers and letters are also to be struck from solid bronze and attached to the device by means of hard solder, the number above and the letter below, except where otherwise designated, supported on the back by an extra piece of bronze also hard soldered to the device. At the back of each device there shall be an attachment, to connect the device with the body of the cap, consisting of a brassthreaded post, about one-half (1/2) inch long, over which is passed a brass washer about five-sixteenth (5/16) inch in diameter, and the whole attachment made secure to the cap by a thumbscrew about one-half (1/2) inch in diameter, concave, and a hollow threaded post about one-quarter (1/4) inch deep, in the center, to fit over the threaded post above described.

All ornaments to be shaped so as to fit the oval surface of the cap, and to have soldered to the backs thereof two (2) sharp needle points about three-sixteenth ($\frac{3}{16}$) inch long, for the purpose of holding the ornaments securely in position on the cap.

Infantry Device.—To consist of two (2) rifles crossing cach other at a point equidistant from the butts and muzzles, the muzzles pointing upward and the hammers upward. Length of rifle about two and five-eighths (25%) inches; distance between the extreme points of the muzzles about two and one-quarter (21/4) inches, and between the butts about two (2) inches. All to be thoroughly gold plated and burnished, and to admit of an assay of not less than 4.84 grains of gold to each dozen ornaments.

Artillery.—To consist of two (2) cannons crossing each other at the trunnions, muzzles upward; length of cannons about two and one-eighth $(2\frac{1}{8})$ inches; distance between the muzzles about one and seven-sixteenths $(1\frac{7}{16})$ inches, and between the cascabels about one and seven-eighths $(1\frac{7}{8})$ inches. All to be thoroughly gold plated and burnished, and to admit of an assay of not less than 5.06 grains of gold to each dozen ornaments.

Cavalry.—To consist of two (2) sabers crossing each other at the center, representing two cavalry sabers in scabbards, with hilts and edges upward. The extreme distance between the guards to be about two and three-eighths (23%) inches, and between the points of the scabbards about two and three-eighths (23%) inches. Each ornament

to be thoroughly gold plated and burnished, and to admit of an assay of not less than 3.52 grains of gold to each dozen ornaments.

Engineers.—To consist of a castle, representing an ancient castle with three towers. The height of the center tower to be about seven-eighths (%) inch; side towers about one and one-eighth (1%) inches; battlements between towers about five-eighths (5%) inch; width at base about one and six-eighths (1%) inches: at top of side towers about one and three-quarters (1%) inches. The letter to be attached to the top of the center tower. The whole to be thoroughly gold plated, satin finished, and burnished, as shown in the standard sample, and to admit of an assay of not less than 10.03 grains of gold to each dozen ornaments.

Post Quartermaster Sergeant.—To consist of a wreath representing two (2) olive branches, held together at the base by a loop and knot, turning upward and bending in an oval shape approaching each other at the top. The distance between the two points of the wreath to be about one (1) inch; the extreme outside measurement across the wreath about two and five-eighths (25%) inches; extreme height about one and one-half (11/2) inches. To have in the center of the wreath a silver-plated key and quill pen, crossing each other and supported by a silver-plated bar extending from side to side of the wreath; the key, quill pen, and bar to be silver plated on white metal, and hard soldered to the wreath. The wreath to be thoroughly gold plated, satin finished, and burnished, as shown in the standard sample, and to admit of an assay of not less than 9.24 grains of gold to each dozen ornaments.

Signal Corps.—To consist of a wreath, representing two (2) olive branches, held at the base by a loop or knot, turning upward and bending in an oval shape approaching each other at the top. The distance between the two points of the wreath to be about one (1) inch; the extreme outside measurement across about two and five-eighths (25/8) inches; and the extreme height to be about one and one-half $(1\frac{1}{2})$ inches. To have in the center of the wreath two (2) crossed signal flags, with a torch in the center standing perpendicularly, all soldered to and resting on a crossbar extending from side to side of the wreath and hard soldered to same. The signal flags, torch, and bar to be silver plated on white metal. The wreath to be thoroughly gold plated, satin finished, and burnished, as shown in the standard sample, and to admit of an assay of not less than 9.24 grains of gold to each dozen ornaments.

Commissary Sergeant.—To consist of a wreath, representing two (2) olive branches, held at the base by a loop and knot, turning upward and bending in an oval shape approaching each other at the top. The distance between the two points of the wreath to be about one (1) inch; the extreme outside measurement across about two and five-eighths (25%) inches, and the extreme height to be about one and one-half (1½) inches. To have in the center of the wreath a silver-plated crescent, cusps pointing upward, supported by a silver-plated bar extending from side to side of the wreath, and firmly hard soldered to same; the crescent and bar to be silver plated on white metal. The wreath to be thoroughly gold plated, satin finished, and burnished, as shown in the standard sample, and to admit of an assay

of not less than 9.24 grains of gold to each dozen ornaments.

Hospital Steward.—To consist of a wreath, representing two (2) olive branches, held together at the base by a loop and knot, turning upward and bending in an oval shape approaching each other at the top. The distance between the two points of the wreath to be about one (1) inch: the extreme outside measurement across the wreath about two and five-eighths (2%) inches, and the extreme height about one and one-half (11/2) inches. To have in the center of the wreath a Geneva cross, the extreme measurements of which shall be about seven-eighths (1/8) inch, and each arm to measure about five-sixteenth (5/16) inch in width, supported by a silver-plated bar extending from side to side of the wreath and firmly soldered to same. The cross to be silver plated and highly burnished, and the wreath thoroughly silver plated, as in the standard sample, and to admit of an assay of not less than 44 grains of silver to each dozen

Hospital Corps.—To consist of a Geneva cross, the extreme measurement of which shall be about seven-eighths (%) inch, and each arm to measure about five-sixteenth (5/10) inch in width. To be heavily silver plated on white metal and highly burnished. To admit of an assay of not less than 10.84 grains of silver to each dozen ornaments.

Ordnance.—To consist of a shell and flame. The diameter of the shell to be about three-quarters (3/4) inch, and the height of the flame from the upper edge of the shell to be about seven-eighths (1/8) inch. The greatest width of the flame to be about one (1) inch. The whole to be thoroughly gold plated, the shell burnished, and the flame satin burnished, as shown in the standard sample, and to admit of an assay of not less than 4.62 grains of gold to each dozen ornaments.

Field Musicians.—A device representing an old-style bugle with circular crook, and cord slung three folds around the lower part, terminating in two tassels on one side and one tassel on the other side. The height across crook to be about one and one-eighth (1½) inches, and the width from mouthpiece to outer edge of the bell about two (2) inches. The number to be placed in the center of the circle on a bar extending from side to side and hard soldered to the under side of the bugle, and the letter to be placed above the number and hard soldered to the upper turn of the center of the bugle. The whole to be thoroughly gold plated and highly burnished, and to admit of an assay of not less than 3.3 grains of gold to each dozen ornaments.

Band Musicians.—To consist of a lyre the full height of which shall be about one and one-half $(1\frac{1}{2})$ inches, and its greatest width about seven-eighths $(\frac{7}{8})$ inches, made in accordance with the pattern of the standard sample, and silver plated on white metal, satin finished, and burnished, as shown in the standard sample. To admit of an assay of not less than 25.53 grains of silver to each dozen ornaments.

Trumpeter of Gavalry.—Same as described for cavalry devices.

The regimental sergeant majors of artillery, infantry, and cavalry, and the regimental quartermaster sergeants of artillery, infantry, and cavalry; the battalion quartermaster sergeant, and the battalion sergeant major, engineers; the

saddler sergeants, cavalry, and the chief trumpeters, cavalry; the principal musicians, infantry and artillery; and the chief musicians, artillery, cavalry, and infantry, are the same as the cap ornaments herein before described for artillery, infantry, cavalry, and engineers, except that in each case the letter is omitted.

The U.S. Mint Assayer in all cases to determine the amount of gold or silver.

All numbers or figures to be one-half $(\frac{1}{2})$ inch long, and all letters Roman capitals one-half $(\frac{1}{2})$ inch long.

The ornaments to be like and equal to the standard samples in every particular.

Adopted January 13, 1897, in lieu of that part of the specifications of March 10, 1892 (No. 318), having reference to Forage Cap Ornaments.

C. G. SAWTELLE,
Quartermaster-General, U.S.A.511

In 1899 electrician sergeants were authorized "a symbol representing forked lightning" of German silver enclosed in a wreath of dead or unburnished gilt metal, and in 1901 the "Geneva Cross" of the Hospital Corps was changed to a modified Maltese cross of German silver, ½ by ½ inches. 14 One further addition was the badge for the enlisted men of the Army Service Detachment at West Point adopted in 1900, the letters "Q. M. D." in white metal within a wreath of unburnished gilt metal. 1516

The 1898 uniform regulations authorized under undress caps "white linen caps" for both officers and enlisted men for wear at Fort Monroe, Jackson Barracks, Key West, Washington Barracks, Fort Barrancas, and Sullivan's Island. Nothing was said about the pattern or insignia.516 Actually approval for a "white cap, with removable canvas portion such as is worn at the Artillery School" for wear at Key West was granted in 1896.517 Then in 1900 "white linen caps, conforming to pattern in the Office of the Quartermaster General" were authorized for officers "during the warm season if authorized by post commanders." No ornaments were to be worn on the front of the caps, but cap cords were prescribed: for general officers, of gold lace about 3/4 inch wide; for general staff and staff corps, of gold bullion 1/8 inch in diameter; and for line officers, silk cord, 1/8 inch in diameter of the color of the arm of service. No mention was made of the caps for enlisted personnel.518

A number of specimens of the 1895 model, other than the white pattern, which can be attributed to the regular Army, have been examined and all generally conform to the specifications. No examples of the "white linen" model have come to the author's attention.⁵¹⁰ Despite the illustrated specifications, manufacturers of the officer's models, both blue and white, tended to diverge from the set pattern, especially in the angle of the visor.⁵²⁰ The solution of this problem was left unrecorded, perhaps due to the urgency of the conflict in Cuba and the Philippines and the 1902 uniform change. In regard to the enlisted models, a number of examples have been examined which definitely do not conform to specifications and do not carry the required name of contractor and contract date and the "Q. M. D." designation. Apparently these were prepared for sale to militia units and possibly quasimilitary and civilian bands.

Reaction to the cap was hardly favorable, much appearing in the *United States Army and Navy Journal*. An editorial in an April issue more or less set the pattern. "The new forage cap is in the position of a foundling left on a doorstep, no one

seems willing to assume responsibility for its paternity. The military goods dealers are willing to sell it, but without exception they rail at it, and some of its sharpest critics are members of the board to whom its selection was committed."521 Most other comments followed along this same line: "dull, heavy, clumsy effect"; "a square top arrangement, a cross between a bicycle cap and a car conductor's cap"; "baseball cap"; "a cross between the cap of a sleeping car porter and that now worn by naval officers"; "conspicuously barren of military smartness."522 On the other side of the fence was Lt. Hugh D. Wise, 9th Infantry, who wore the cap during a bicycle ride from Madison Barracks. New York, on Lake Ontario, to Governor's Island in New York Harbor and was "enthusiastic" about it, saying it was "comfortable" and "did not once fall off."523 Perhaps it was just as well that the 1902 change brought relief as soon as it did.

Appendix

MAKERS OF HEADGEAR

The chronological listing below contains the names of firms that were awarded contracts to make headgear by the War Department during the period 1855–1901. As of 1808 the Congress required the Secretary of War to furnish a complete listing of all contracts made by his office with civilian firms during each calendar year. This information was published in House or Senate documents for most years, a regrettable exception being the period 1862–1865, and can be readily located under "Army Contracts" for the appropriate year in Ben. Poore's A Descriptive Catalogue of Government Publication of the United States, September 5, 1774—

March 4, 1881 (Senate Misc. Doc. No. 67, 48th Cong., 2d Sess.) (Washington, Government Printing Office, 1885). After 1881 listings are not regular, although the Annual Report of the Quartermaster General carries them 1884–1889.

The listing of a firm's name is not proof that it actually produced headgear, for some never fulfilled their contracts, but for the most part these names represent actual makers. The location of the manufacturies are given where known. The numerals following the model hats listed indicate the number of items contracted for; question marks indicate that number of items is not known.

Year				Yea	r		
contract		Type of	Number of	contract		Type of	Number of
award	ed Firm	headgear	headgear	award	ed Firm	headgear	headgear
1855	Henry Fisher	Cavalry hats	2,000	1864	Murphy & Griswold, N.Y.	Forage caps	32,500
1857	W. J. McCoy	Cavalry hats	3,500	1864	L. J. & I. Phillips	Forage caps	100,000
1858	John G. Snyder	Army hats	16,500	1864	Murphy & Griswold, N.Y.	Army hats	100,000
1859	R. H. Jackson	Army hats	8,000	1864	Murphy & Griswold, N.Y.	Forage caps	100,000
1859	W. J. McCoy	Army hats	5,000	1864	L. J. & I. Phillips	Forage caps	200,000
1860	W. C. Dare, Phila.	Army hats	15,000	1864	Murphy & Griswold, N.Y.	Forage caps	100,000
1861	Golding & Dunlap	Forage caps	2,000	1864	George Hoff, Phila.	Forage caps	150,000
1861	L. J. & I. Phillips ¹	Forage caps	2,000	1864	A. W. Adolph	Forage caps	7,200
1861	Meyberg & Hellman	Forage caps	10,000	1864	W. C. Dare, Phila.	Lt Arty caps	1,452
1861	L. J. & I. Phillips	Forage caps	2,000	1864	Adolph & Keen	Army hats	30,000
1861	David Woodruff	Forage caps	10,000	1864	Adolph & Keen	Forage caps	3,000
1861	Brooks & Brother	Forage caps	10,000	1864	L. J. & I. Phillips	Forage caps	28,000
1861	A. W. Adolph	Army hats	40,000	1864	L. J. & I. Phillips	Forage caps	12,000
1861	W. C. Dare, Phila.	Army hats	40,000	1864	George Hoff, Phila.	Forage caps	200,000
1861	George Hoff, Phila.	Forage caps	20,000	1864	Murphy & Griswold, N.Y.	Forage caps	100,000
1861	S. D. Walton, Phila.	Forage caps	10,000	1864	James T. Fulton	Army hats	150,000
1861	James H. Prentice	Army hats	50,000	1864	Murphy & Griswold, N.Y.	Army hats	100,000
1861	Nathan Seely	Army hats	50,000	1864	Thompson, Goodrich	Forage caps	50,000
1861	L. J. & I. Phillips	Forage caps	31,852	1864	L. J. & I. Phillips	Forage caps	150,000
1861	Harris Rothstein	Forage caps	36,000	1864	Thompson, Goodrich	Forage caps	36,000
1861	C. B. Camp	Forage caps	3,030	1864	Adolph & Keen	Army hats	100,000
1861	C. B. Camp	Forage caps	900	1864	Julius Sheldon	Forage caps	50,000
1863	Murphy & Griswold, N.Y.	Army hats	35,000	1864	George Hoff, Phila.	Forage caps	200,000
1863	Thompson, Goodrich	Army hats	20,000	1865	L. J. & I. Phillips	Forage caps	50,000
1863	B. Meyberg	Army hats	20,000	1867	Horstmann Bros., Phila.	Lt Arty caps ²	
1863	H. W. Duryea	Army hats	20,000	1872	P. Herst, Phila.	Campaign ha	ts 9,000
1863	Baldwin & Dodd	Forage caps	40,000	1872	Horstmann Bros., Phila.	Cavalry and A	rty
1864	L. J. & I. Phillips	Forage caps	3,200		•	Helmets	9,000
1864	L. J. & I. Phillips	Forage caps	40,000	1872	P. Herst, Phila.	Campaign hat	s 10,000
1864	Murphy & Griswold, N.Y.	Forage caps	40,000	1872	Bent & Bush, Boston	Dress caps	18,000
1864	Shethar & Nichols	Army hats	50,000		•	· -	-

¹Name appears as both L. J. & J. and L. J. & I. Phillips.

²Several small groups; number not stated.

Yea	r			Yea	r		
contra		Type of	Number of	contra		Type of N	Iumber of
award		headgear	headgear	award			headgear
1070	D D . D .	_	90,000	1006	Horstman Bros., Phila.	Forage caps	20,400
1872	Bent & Bush, Boston	Forage caps	28,000	1886		Cork helmet	6,000
1874	P. Herst, Phila.	Campaign hat		1886	Chas. F. Lehmann, N.Y.	Helmets	1,000
1874	C. W. Walton, Phila.	Forage caps	10,000	1886	Raymold & Whitlock, N.Y.	Campaign hats	12,004
1874	Bent & Bush, Boston	Dress caps	10,800	1886	J. S. Isaacs, N.Y.	Muskrat caps	5,000
1874	Bent & Bush, Boston	Helmets	8,500	1886	Lyon Bros., N.Y.	Forage caps	24,000
1874	L. J. Phillips	Forage caps	10,000	1887	M. L. Kottshofski, N.Y. Horstmann Bros., Phila.	Forage caps	10,000
1875	Horstmann Bros., Phila.	Dress caps	3,125	1887	-	Cork helmets	2,000
1875	Horstmann Bros., Phila.	Helmets	160	1887	J. H. McKenney, N.Y.	Helmets	1,500
1875	C. W. Walton	Forage caps	30,000	1887	Raymold & Whitlock, N.Y. Raymold & Whitlock, N.Y.	Campaign hats	17,000
1876	Edmund R. Lyon, Phila.	Sealskin caps	2,000	1887	•	Campaign nats	17,000
1878	Charles F. Bush, Boston	Helmets	800	1887	Van Alstyne & Keck,	Muskrat caps	2,500
1878	Charles F. Bush, Boston	Dress caps	1,540	1000	Johnstown, N.Y.	Forage caps	10,000
1878	P. Herst, Phila.	Forage caps	6,000	1888	B. Y. Pippey, N.Y. Benj. M. Whitlock, N.Y.	Campaign hats	5,000
1878 1878	D. L. Kottshofski, N.Y.	Forage caps	24,000	1888		Muskrat caps	7,000
1878	Horstmann Bros., Phila.	Helmets	1,500	1888	Lyon Bros., N.Y. B. Y. Pippey, N.Y.	Forage caps	23,500
1878	J. H. Wilson, Phila.	Dress caps	150	1888	Horstmann Bros., Phila.	Forage caps	11,000
1878	Edmund R. Lyon, Phila. Edward S. Mawson	Dress caps	1,550	1888	Benj. M. Whitlock, N.Y.	Helmets	5,000
1878		Muskrat caps	2,500	1888		Cork helmets	2,000
1878	P. Herst, Phila. Horstmann Bros., Phila.	Forage caps Helmets	40,000 1,000	1888	Chas. F. Lehmann, N.Y. W. H. Hurlbut, N.Y.	Campaign hats	10,000
1878	C. H. Tenney	Campaign hat	•	1888	W. H. Hurlbut, N.Y.	Campaign hats	5,000
1879	Baldwin & Flagg	Campaign hat		1889	Horstmann Bros., Phila.	Forage caps	10,000
1879	J. H. Wilson, Phila.	Dress caps	2,500	1889	Benj. M. Whitlock, N.Y.	Helmets	1,000
1879	Horstmann Bros., Phila.	Forage caps	14,250	1889	W. H. Hurlbut, N.Y.	Campaign hats	1,200
1879	Edward S. Mawson	Muskrat caps	5,000	1889	Horstmann Bros., Phila.	Forage caps	18,168
1879	C. H. Tenney	Campaign hat	•	1889	B. M. Whitlock, N.Y.	Cork helmets	2,000
1880	Horstmann Bros., Phila.	Cork helmets	500	1889	Chas. F. Lehman, Brooklyn	Cork helmets	1,600
1881	Apple & Co.	Cork helmets	6,000	1889	Horstmann Bros., Phila.	Helmets	4,506
1881	Horstmann Bros., Phila.	Forage caps	25,000	1889	B. M. Whitlock, N.Y.	Helmets	5,000
1881	Horstmann Bros., Phila.	Cutting down	25,000	1889	B. M. Whitlock, N.Y.	Campaign hats	10,000
1001	Troisumann Droot, Tima.	1872 helmet	s ?	1889	B. M. Whitlock, N.Y.	Campaign hats	7,996
1881	John M. Kennedy	Muskrat caps	3,000	1889	E. R. Lyon, N.Y.	Muskrat caps	5,000
1881	Raymold & Whitlock, N.Y.	Helmets	16,000	1889	J. R. Michael, N.Y.	Muskrat caps	2,500
1881	C. H. Tenney	Campaign hat	•	1889	Lyon Bros., N.Y.	Muskrat caps	2,500
1882	Horstmann Bros., Phila.	Forage caps	30,000	1890	W. H. Hurlbut, N.Y.	Campaign hats	6,000
1882	Raymold & Whitlock, N.Y.	Helmets	15,000	1890	B. Y. Pippey, N.Y.	Forage caps	4,97 8
1882	Raymold & Whitlock, N.Y.	Cork helmets	5,000	1890	Horstmann Bros., Phila.	Forage caps	10,000
1883	Lyon Bros	Muskrat caps	6,000	1890	Chas. F. Lehman, Brooklyn	Cork helmets	1,000
1883	Henry V. Allien, N.Y.	Cork helmets	6,000	1890	B. M. Whitlock, N.Y.	Helmets	2,500
1882	Hirschberg	Forage caps	30,000	1890	B. M. Whitlock, N.Y.	Helmets	5,000
1883	Raymold & Whitlock, N.Y.	Helmets	18,000	1890	B. M. Whitlock, N.Y.	Campaign hats	4,150
1883	C. H. Tenney	Campaign hat		1890	Ridabock & Co., N.Y.	Cork helmets	3,000
1884	Wm. A. Wheeler, N.Y.	Forage caps	12,000	1890	Horstmann Bros., Phila.	Indian scout	0,000
1884	Hirschberg & Co., N.Y.	Forage caps	35,000		, 	campaign ha	ts 577
1884	Raymold & Whitlock, N.Y.	Helmets	2,500	1890	W. H. Hurlbut, N.Y.	Indian scout	13 377
1884	Raymold & Whitlock, N.Y.	Campaign hat	-			campaign ha	ts 400
1885	W. H. Hurlbut, N.Y.	Campaign hat		1891	Horstmann Bros., Phila.	Helmets	2,000
1885	B. Y. Pippey, N.Y.	Forage caps	15,000	1891	Horstmann Bros., Phila.	Campaign hats	•
1885	Horstmann Bros., Phila.	Cork helmets	4,993	1891	Edmund R. Lyon, N.Y.	Muskrat caps	2,000
1885	Jacob S. Issacs, N.Y.	Campaign hat		1891	B. Y. Pippey, N.Y.	Forage caps	10,000
1885	Hirschberg & Co., N.Y.	Forage caps	15,000	1891	B. Y. Pippey, N.Y.	Campaign hats	-
1885	Charles Lehman, N.Y.	Cork helmets	5,000	1891	Edmund R. Lyon, N.Y.	Muskrat caps	5,000
1885	J. H. McKenney, N.Y.	Cork helmets	4,000	1891	Horstmann Bros., Phila.	Cork helmets	2,000
1885	Raymold & Whitlock, N.Y.	Helmets	6,000	1891	Horstmann Bros., Phila.	Helmets	2,500
1885	J. S. Isaacs, N.Y.	Campaign hat	-	1900	Marc Sternberg, N.Y.	Forage caps	2,300
		1 -3	- ,	,		,	•

List of Abbreviations

AAG Assistant Adjutant General **AAQM** Acting Assistant Quartermaster

Adjutant General AGAGO Adjutant General's Office AQM Assistant Quartermaster

AQMG Assistant Quartermaster General

AR Army Regulation

Artillery Arty

CCF Consolidated Correspondence File, Records of the Quarter-

master General

C.E. Corps of Engineers

CG of P Commissary General of Purchases

Cloth. Estab. Clothing Establishment, Schuylkill Arsenal, Philadelphia,

Pennsylvania

Div. of Mil. Hist. Division of Military History, Smithsonian Institution

G.O. General Order

Headquarters of the Army HQ of A

LR Letters Received Letters Sent LS MC Microcopy MS Manuscript

MSK Military Storekeeper

National Archives, Washington, D.C. NA

No date n.d. No pagination n.p. No volume n.v.

OAC & E Office of Army Clothing and Equipage, Philadelphia Depot

OOMG Office of the Quartermaster General

Quartermaster QM

QMD Quartermaster Department **OMG** Quartermaster General Register of Letters Received Reg. LR

Record Group RG Secretary of War Sec. War Surgeon General's Office SGO

Special Order S.O.

Topographical Engineers T.E. United States Military Academy **USMA** United States National Museum USNM

WDWar Department

Notes

See "References" for complete citations. See "List of Abbreviations" for explanations of initials.

¹ Act of 3 March 1855. See John F. Callan, *The Military Laws of the United States*, pp. 435-436.

² G.O. No. 4 WD, 26 March 1855, RG 94, NA. The cap of course was the 1851/1854 pattern. See Howell and Kloster, "United States Army Headgear to 1854," pp. 59-68. The 1851 uniform regulations had changed the color of dragoon facings from yellow to orange.

³ S.O. No. 58 WD, 9 April 1855, RG 94, NA.

"Report Made by Officers of the 1st and 2d Regts. of Cavalry . ," 19 July 1855, AG, Letters Received (hereafter cited as LR), RG 94, NA. The report, as originally written, stated that the hat was "to be made according to the pattern furnished, with the exception of the crown, which should be flat." In the final version, the statement regarding the flat crown was lined out and the words "with the exceptions to be noticed" substituted. (There is a copy of this final version dated 24 July 1855 in Office of the Chief of Ordnance, RG 156, LR, NA.)

⁵ Endorsement on above. Actually there is evidence that Davis actively considered some sort of a campaign hat for the two cavalry regiments and in the May previous had directed that the Philadelphia Depot prepare a sample hat, albeit of a rather radical design, and forward it to him. On this, see Maj. H. C. Wayne to Maj. Geo. Crosman, commanding the Philadelphia Depot, 3 May 1855, CCF (Caps), RG 92, NA.

^o Jessup to Crosman, 26 July 1855, Letters Sent (hereafter cited as LS), Office of the Quartermaster General (hereafter cited as OQMG), Clothing, RG 92, NA.

⁷ This contract is in OQMG, CCF (Hats), RG 92, NA. The price quoted did not include trimmings.

⁸ G.O. No. 13 WD, 15 August 1855, RG 94, NA.

"Contract with Henry Fisher, 3 August 1855, in CCF (Hats); Crosman to QMG, 25 August 1855, Register of Letters Received (hereafter cited as Reg. LR) Clothing; both RG 92, NA. Regarding the voltiguer hat with chin strap and buttons, see Howell and Kloster, "United States Army Headgear to 1854," pp. 54-55, and Maj. D. D. Tomkins, Phila., to St. John Burr & Co., New York, 7 May 1847, Office of Army Clothing and Equipage (hereafter cited as OAC & E) LS, RG 92, NA.

¹⁰ Babbitt to Jessup, 3 June 1857, OQMG, Reg. LR, Clothing, RG 92, NA.

¹¹ See Howell and Kloster, "United States Army Headgear to 1854," pp. 56, 64-65.

12 Ibid., p. 50 and note 129.

¹³ Col. Timothy Andrews to Col. R. Jones, The Adjutant General, 6 April 1847, OQMG, LR, Clothing, RG 92, NA.

"Howell and Kloster, "United States Army Headgear to 1854," p. 54.

¹⁵ There are numerous references to this. See among others Viele, Following the Drum, p. 224; BANDEL, Frontier Life

in the Army, 1854–1861, p. 124; Lowe, Five Years a Dragoon, p. 105; PARKS, General Edmund Kirby Smith, p. 90; Dubois, Campaigns in the West, 1856–1861, p. 114; Kip, Army Life on the Pacific, pp. 121–123.

¹⁶ Floyd to J. Clancy Jones, 30 April 1858, Secretary of War Reports to Congress, vol. 9, pp. 222–223, Records of the Office of the Secretary of War, RG 107, NA.

¹⁷ Lt. Col. Chas. Thomas, Asst. QMG, to Crosman, 7 February 1856, OQMG, LS, Clothing, RG 92, NA. It is possible that the hat was made by Warnock & Co., hatters of New York City, for in 1875 Warnock in a letter to the Philadelphia Depot stated: "We have furnished the patterns since 1853 but have never been favored with an order." Warnock & Co. to Col. Rufus Saxton, 9 July 1875, in CCF (Proceedings), RG 92, NA.

¹⁸ Sumner's Report on Trip to Europe, microfilm M-567, roll 506, frame 0172, AG, LR, 1854, RG 94, NA.

¹⁹ 4 October 1854, Decision Book No. 1, OQMG file reference, B 6, 36 S 848, RG 92, NA.

²⁰ Jesup to Crosman, 6 October 1854, OQMG, LS, Clothing, RG 92, NA.

²¹ Proceedings of a Board of Officers, 25 January 1858, and correspondence appended thereto, AG, LR, RG 94, NA. These measurements are also given in G.O. No. 3 WD, 24 March 1858.

²² Jesup to Capt. Thomas Wood, Ft. Leavenworth, 2 December 1858, OQMG, LS, Clothing, RG 92, NA.

²³ Capt. F. J. Wood, 1st Cav., to Jesup, 15 January 1859, OQMG, Reg. LR, Clothing, RG 92, NA.

²⁴ Maj. W. H. Emory, 1st Cav., to Jesup, 31 July 1859, OQMG, Reg. LR, Clothing, RG 92, NA.

Regulations for the Uniform and Dress of the Army of the United States, June 1851, from Original Text and Drawings in the War Department (Philadelphia, William H. Horstmann and Sons, 1851). This particular copy is in the U.S. Army Military History Research Collection, Carlisle Barracks, Pa., and the broadside carries the legend "Volunteer Uniform Caps" (although, as can be seen in Figure 1, the hat itself is labeled "U.S. Cavalry Hat") and "Drawn and Engraved by Pupils of the Philadelphia School of Design for Women." A check of the archives of the Moore College of Art, the descendent organization of the above. proved negative. A similar plate picturing the "U.S. Cavalry Hat" is in Regulations For the Uniform of the United States Army, Navy, Marine Corps, and the Volunteer Militia of the Several States. The plate is unnumbered and carries the legend "Robert Weir, Military and Civic Costumer, Boston, F. Hedge, Wood Engraver." The whole Weir publication is essentially a pirated edition of the Horstmann 1851 regulations cited above.

²⁶ Jesup to Thomas, Phila., 6 March 1858, 17 March 1858; Jesup to Col. W. de Raasloff, Washington, 19 March 1858; all OQMG, LS, Clothing, RG 92, NA. Col. H. K. Craig to Capt. R. H. K. Whiteley, New York Arsenal, 17 February 1858, Office of the Chief of Ordnance, Letters to Ordnance Officers, RG 156, NA.

²¹ The Tojhusmuseet catalog reference is "F.H. IV (46) Amerika 1858; 1898/1902, side 82-83."

²⁸ These acorns are in distinct contrast to the tassels on the ends of the hat cord prescribed for the 1858 pattern.

²⁹ Jesup to Recruiting Officer, Ft. Moultrie, S. C., 27 August 1855 and 6 October 1855, both in OQMG, LS, Clothing, RG 92, NA.

³⁰ Col. R. Jones to Jesup, 23 August 1855, AG, LS, RG 94, NA.

³¹ On the 1851-1854 eagle, see CAMPBELL and HOWELL, American Military Insignia 1800-1851, p. 29.

³² U.S. WAR DEPARTMENT, General Regulations for the Army, p. 155. The best representation of this eagle is in U.S. WAR DEPARTMENT, Regulations for the Uniform and Dress of the Army, plate 18. Both of these sources picture the eagle with his head turned to the heraldic left.

³³ By law all Army contracts were listed in Executive Documents of the Senate or House of Representatives. Only two contracts for cavalry hats are so listed, one with Henry Fisher, 3 August 1855, for 2000 and one with William J. McCoy, 6 April 1857 for 3500. See Exec. Doc. No. 7, Senate, 34th Congress, 1st Session, and Exec. Doc. No. 31, Senate, 35th Congress, 1st Session. Both actual contracts exist: that with Fisher in CCF (Hats), RG 92, NA, and that with McCoy in Army Contracts, Diplomatic, Legal, and Fiscal Division, RG 217, box 30, 1857, NA.

³⁴ Just when and by whom this hat was first called the "Jeff Davis" or "Hardee" is unknown.

³⁵ See Bvt. Maj. J. H. Carleton, 1st Dragoons to AG, 27 June 1857, enclosing ltr. Bvt. Lt. Col. John B. Magruder, 1st Arty., 23 June 1857; Lt. Col. Philip St. George Cooke to AG, 1 August 1857; both in AG, LR, RG 94, NA; Lt. A. J. Donelson, commanding the Company of Sappers, Miners, and Pontoniers, to Col. J. G. Totten, Chief Engineer of the Army, 26 June 1857, AG, LR, re USMA, RG 94, NA. All of these communications were brought to the attention of the Secretary of War.

³⁶ Col. Alexander's original letter has not been found, but a gist of its contents with a brief of the endorsements is contained in AG to Jesup, 2 February 1858, OQMG, Reg. LR, Clothing, RG 92, NA. The special order was included with the board report itself.

³¹ Proceedings of a Board of Officers, appended to Lt. R. Jones to AG, 9 February 1858, AG, LR, RG 94, NA.

38 Ibid.

³⁰ The report was submitted on 9 February and two days later Jesup wrote Col. Thomas in Philadelphia that since it was probable that a hat for the Army was to be adopted very shortly, he was to defer contracting for more cap bodies (for the 1851-1854 cap) until further notice. See Jesup to Thomas, 11 February 1858, OQMG, LS, Clothing, RG 92, NA.

⁴⁰ May to Cooper, 19 March 1858 and 21 March 1858, both appended to "Proceedings of Board of Officers" [note 37], Cooper to May, 11 March 1858, AG, LS, RG 94; Cooper to Jesup, 11 March 1858, OQMG, Reg. LR, Cloth-

ing, RG 92; Cooper to Thomas, Phila., 25 March 1858, AG, LS, RG 94, all NA.

⁴¹ G.O. No. 3 WD, 24 March 1858, RG 94, NA.

¹² See page 2.

⁴³ Contract with John G. Snyder, 30 July 1858, in Army Contracts, RG 217, NA. This is the first instance of detailed written specifications being furnished a contractor by the Quartermaster General found by the author. It was not until 1876 that detailed specifications of Quartermaster items were published in printed form.

"In 1859, the Russian Hare component dropped from 4 to $3\frac{1}{2}$ ounces, and the Scotch Coney rose from $1\frac{1}{2}$ to 2 ounces. See Contract with Wm. J. McCoy, 29 March 1859, CCF (Hats), RG 92, NA. In 1865 these components were prescribed as " $3\frac{1}{2}$ ounces prime Russia hair, and one ounce of best Scotch coney." See Quartermaster Manual, 1865, MS in RG 92, NA. This manual was never published.

⁴⁵ G.O. No. 13 WD, 30 November 1858, RG 94, NA.

⁴⁶ G.O. No. 7 WD, 24 June 1858, RG 94, NA.

⁴⁷ There are numerous letters of transmittal and acknowledgment for requisitions for hats in OQMG, LS, Clothing, RG 92, NA.

48 Maj. E. S. Sibley, Asst. QM in Washington, to Thomas, 11 June 1858, OQMG, LS, Clothing; Jesup to Thomas, 13 October 1858, LS, Clothing; both RG 92, NA.

⁴⁹ Quoted in Sibley to Thomas, 2 November 1859, OQMG, LS, Clothing, RG 92, NA.

⁵⁰ Sibley to Capt. T. J. Wood, 1st Cav., 1 November 1859, OQMG, LS, Clothing, RG 92, NA.

⁵¹ Endorsement on letter from Maj. W. S. Emory, 1st Cav., to Jesup, 31 July 1859, OQMG, LS, Clothing; Sibley to Thomas, 24 September 1859, OQMG, LS, Clothing; both RG 92, NA. Although not so stated, this probably applied to the Regiment of Mounted Riflemen as well.

⁵² United States Army and Navy Journal, 14 November 1863, p. 180; 18 April 1868, p. 554; 1 February 1868, p. 377.

⁵³ Ibid., 14 November 1863, p. 180. Indeed, in 1864 the Quartermaster General wrote that there was "scarcely any demand" for them. See Meigs to I. T. Fulton, Washington, 3 November 1864, OQMG, LS, Clothing, RG 92, NA.

⁵⁴ United States Army and Navy Journal, 28 September 1867, p. 90.

⁵⁵ Ibid., 9 November 1867, p. 186; 28 March, p. 506.

⁵⁶ WOODHULL, A Medical Report upon the Uniform and Clothing of the Soldiers of the U.S. Army, 15 April 1868 (hereafter cited as the "Woodhull Report").

⁵⁷ For the Andrews model, see "Woodhull Report" and Howell and Kloster, "United States Army Headgear to 1854," pp. 54-55.

58 Miller, Photographic History of the Civil War.

⁵⁰ G.O. No. 13 WD, 30 November 1858, RG 94, NA.

60 G.O. No. 13 WD, 15 August 1855, RG 94, NA.

61 G.O. No. 3 WD, 24 March 1858, RG 94, NA.

62 Both general orders in RG 94, NA.

⁶³ Uniform Regulations for the Army of the United States 1861. In regard to this latter, however, it should be pointed out that some details in these photographs are inaccurate.

⁶⁴ Uniform Regulations for the Army of the United States 1861, paragraph 1488; Quartermaster Manual 1865.

⁶⁵ On this, see OQMG, LS, Clothing, for latter half of 1858 and 1859, RG 92, NA.

⁶⁶ Uniform Regulations for the Army of the United States, 1861, paragraph 1488.

⁶⁷ The 2d Dragoons were redesignated the 2d Cavalry on 3 August 1861, the 2d Cavalry becoming the 5th. The 1861 uniform regulations, which do not mention the Dragoons, placed the regimental number of the Cavalry in the upper angle of the crossed sabers.

⁶⁸ Illustrated Catalogue of Arms and Military Goods, p. 48.
 ⁶⁹ Ibid.

⁷⁰ U.S. WAR DEPARTMENT, Regulations for the Uniform and Dress of the Army, plates 6, 14, 15.

ⁿ On this, see Howell and Kloster, "United States Army Headgear to 1854," p. 59.

⁷² On 3 August 1861, the 1st and 2d Dragoons and the Regiment of Mounted Riflemen were redesignated the 1st through the 3d Cavalry respectively, with the then 1st and 2d Cavalry becoming the 4th and 5th. Although no mention of the revival of the trumpet has been found in orders, the insignia is listed in statements of cost of clothing for the period along with a letter and number. See G.O. No. 23 WD, 30 November 1859, RG 94, NA.

The bugle in Illustrated Catalogue of Arms and Military Goods is on an oval $3\frac{1}{2} \times 2\frac{3}{8}$ inches with the bugle $3\frac{1}{4}$ inches wide and $1\frac{1}{2}$ inches across the loop; the sabers are on an oval $3\frac{7}{8} \times 2\frac{1}{2}$ inches with the sabers $3\frac{1}{8}$ inches long. These same insignia in the 1851 regulations are only slightly smaller. Of the documented specimens mentioned, the bugle is on an oval $3\frac{3}{4} \times 2\frac{3}{8}$ inches with the bugle $3 \times 1\frac{1}{4}$ inches, the crossed sabers on an oval $3\frac{3}{4} \times 2\frac{1}{4}$ inches with the sabers 3 inches long.

⁷⁴ Churchill to Sec. of War Davis, 27 February 1854, AGO file No. B 136, 1844, RG 94, NA.

¹⁵ Col. T. T. Fauntleroy, C.O. 1st Dragoons, to Col. Samuel Cooper, The Adjutant General, 30 October 1854, in U. S. Army Commands, Hq. 1st Dragoons, LS, 25 October 1849–9 October 1863, RG 98, NA.

¹⁰ Donelson to Totten, 4 February 1857, file No. M.A. 1574, AG, LR, re USMA, RG 94, NA; U.S. WAR DEPARTMENT, "Stations of Engineer Units Regular Army 1846–1937," p. 2. Donelson commanded the Company from 14 February 1851 until 13 March 1858. See Youngberg, History of Engineer Troops in the United States Army 1775–1901, p. 76.

¹⁷ Delafield to Totten, 9 February 1857, and covering endorsements, filed with Donelson to Totten, 4 February 1857 [note 76].

¹⁸ Totten to Delafield, 3 April 1857, AG, LS re USMA, RG 94, NA. Just what "the desired modifications" were are unknown.

¹⁰ Donelson to Totten, 26 June 1857, AG, LR re USMA, RG 94, NA.

No Totten to Jesup, 10 July 1857, OQMG, Reg. LR, Clothing, RG 92; Totten to Delafield, 15 July 1857, Records of the Office of the Chief of Engineers. RG 77, LS; Jesup to Capt. E. S. Babbit, Phila., 14 July 1857, OQMG, LS, Clothing, RG 92; all NA. The total of but 150 caps to be made may seem low, but as of 1 January 1856, there were but 150 enlisted men authorized the Corps of Engineers. See U.S.

WAR DEPARTMENT, Official Army Register for 1856.

⁸¹ No contracts for forage caps are listed in the contract lists in Executive Documents of the Senate or House of Representatives in the period 1857-1860. See also note Capt. Geo. Gibson, MSK, Phila., to Major Henry Wayne, asst. QM, Phila., 18 December 1857, CCF (Uniforms), RG 92, NA.

⁵² Donelson to Totten, 26 June 1857, AG, LR re USMA, RG 94, NA.

⁸³ Donelson to Totten, 4 February 1857, AG, LR re USMA, RG 94, NA.

⁸⁴ Jesup to Col. Chas. Thomas, asst. QM at Phila., 20 January 1858, OQMG, LS, Clothing, RG 92, NA. These engineer troops were a part of the Company of Sappers at West Point transferred west to participate in the Mormon Expedition.

ss Donelson to Totten, 26 June 1857, AG, LR re USMA, RG 94, NA.

so On this, see Malibran, Guide u l'usage des artistes et des costumiers, p. 305, and Margerand, "Les coiffures de l'armee francaise," in Revue, No. 3, (June 1909), esp. Etat Major General, plate 8: fig. 6. Both Malibran (p. 305) and Margerand (p. 26) quote the Description du 8 Octobre 1845, which gives the diameter of the cap as varying from 120 mm at top to 140 mm at the bottom and the height in front as 120 mm and the height in rear as 160 mm.

87 Frank Leslie's Illustrated Newspaper, 4 April 1857, p. 268.

States Military Academy at West Point, New York, vol. 2., p. 111.

⁵⁹ Donelson at least made an official offer to help get the manuscript in shape for the printer. See Donelson to AG, 29 September and 1 October 1857, in AG, LR, RG 94, NA. And as commanding officer of the engineer unit at the Academy, he would have been closely associated with Mc-Clellan in the construction of the batteries.

⁹⁰ Report of the Secretary of War, Communicating the Report of Captain George B. McClellan, p. 248.

⁵¹ Capt. Geo. Gibson, MSK, Schuylkill Arsenal, to Maj. Henry Wayne, Asst. QM, Phila., 18 December 1857, CCF, box 1169, RG 92, NA.

⁹² French to Cooper, 11 August 1858, AG, LR, 102-F-1858, RG 94, NA.

⁹³ Normal practice would have sent the letter with the caps to the Secretary of War, with endorsements both ways and the Secretary's decision. If he had approved the suggestion, the letter would then have gone, through the AG, to the Quartermaster General (QMG) with an endorsement indicating the action to be taken.

⁵⁴ Jesup to Thomas, 12 November 1858, OQMG, LS, Clothing, RG 92, NA.

⁹⁵ Thomas to Jesup, 15 November 1858, OQMG, Reg. LR, Clothing, with endorsement, RG 92, NA. The orange was for dragoons as prescribed in the 1851 regulations. The cap actually received the Secretary of War's authorization on 29 November. See Jesup to Thomas, 30 November 1858, OQMG, LS, Clothing, RG 92, NA.

⁹⁶ Jesup to Thomas, 1 December 1858, OQMG, LS, Clothing, RG 92, NA.

⁹⁷ Jesup to Thomas, 8 December 1858, OQMG, LS, Clothing, RG 92, NA.

98 Jesup to Commanding Officer, Ft. Laramie, 11 April 1859, LS, Clothing, RG 92, NA.

⁰⁹ G.O. No. 13, WD, 30 November 1858, RG 94, NA.

¹⁰⁰ Uniform Regulations for the Army of the United States, 1861, pp. 13, 14.

¹⁰¹ Jesup to Thomas, 16 December 1858, OQMG, LS, Clothing; Maj. Henry Wayne, acting QMG, to Thomas, 4 January 1858, OQMG, LS, Clothing, both RG 92, NA. In regard to the absence of specimens with the colored welt, it must be remembered that as of 1 January 1859 the Army's authorized enlisted strength was but 11,859, with many units understrength. See U.S. WAR DEPARTMENT, Official Army Register for 1859, p. 41.

102 Jesup to Cooper, 8 December 1858, OQMG, LS, Clothing, RG 92, NA. G.O. No. 23 WD, 30 November 1859, RG 94, NA. In February 1859 the QMG contracted for 2500 yards of "dark blue cloth for caps." See Contract with G. V. Fox, Agent, 24 February 1859, in Exec. Doc. No. 22 (House of Reps.), 36th Congress, 1st Session. One of the first contracts for forage caps was let to Harris Rothstein, New York, 31 October 1861, for 36,000 "forage caps with cotton glazed covers and capes" at \$.70. See Exec. Doc. No. 101 (House of Reps.), 37th Congress, 2nd Session. Forage cap covers first appeared in cost of clothing lists in 1862, listed at \$.18. See G.O. No. 202 WD, 9 December 1862, RG 94, NA.

¹⁰³ G.O. No. 4 WD, 26 February 1861, RG 94, NA.

¹⁰⁴ United States Army and Navy Journal, 12 September 1863, p. 36.

¹⁰⁵ Ibid., 14 November 1863, p. 180.

¹⁰⁶ Ibid., 4 January 1868, p. 315; 28 March 1868, p. 506;8 August 1868, p. 810.

107 Woodhull Report, p. 5.

¹⁰⁸ Quartermaster Manual, 1865, pp. 11-12.

109 All from the War Department collection, National Museum of History and Technology, Smithsonian Institution.

¹¹⁰ Jesup to Thomas, 1 December 1858, OQMG, LS, Clothing, RG 92, NA.

"There is another such green cap in the collections of the Milwaukee County Historical Museum that carries black rubber chin strap buttons with the regulation line eagle impressed on the obverse and "Goodyear's P-T. N.R. Co." on the reverse. See Madaus, "Notes on the Uniform of Berdan's Sharpshooters," pp. 56-58. Similar rubber buttons also appear on a pattern "Berdan" coat in the national collections.

¹¹² The two units were organized progressively by company from September through December 1861. See Dyer, A Compendium of the War of the Rebellion, vol. 3, pp. 1716–1717.

¹¹³ Lt. Col. Schuyler Hamilton, Military Secretary to Gen. Scott, to Berdan, 14 June 1861, in U.S. WAR DEPARTMENT, The War of the Rebellion, series 3, vol. 1, p. 270.

¹¹⁴ Thos. Scott, Asst. Sec. War, to Berdan, 13 August 1861, Sec. War, LS, Military Affairs, RG 107, NA.

¹¹⁵ See OQMG, LS Clothing, July-December 1861, RG 92, NA, for numerous examples of this. In fact, there are several instances where the QMG stated that volunteer units could be authorized special uniforms "the cost not to

exceed that of the Army Uniform." See OQMG to Depot QM, Phila., 6 August 1861, OQMG, LS, Clothing, RG 92, NA.

¹¹⁶ Bruce, Lincoln and the Tools of War, pp. 108-113.

¹¹⁷ Meigs to Maj. D. H. Vinton, Asst. QM at New York, 21 and 23 September 1861, OQMG, LS, Clothing, RG 92, NA. As an example of Berdan's apparent influence, the knapsacks were procured from Tiffany's at \$3.75 each plus a 2½ percent commission for the supplier, while the regulation knapsacks were being bought on contract for an average of less than \$2.00. The leggings, which were not an item of regulation issue in any form, cost \$2.25 a pair.

¹¹⁸ STEVENS, Berdan's U.S. Sharpshooters, p. 5. See also photograph of Sgt. James W. Staples on p. 133. The first record of ordered issue to the 1st and 2nd Regiments of the U.S. Sharpshooters included 1100 ostrich feathers, although the units were not issued hats that normally carried such feathers. See Sibley (for Meigs) to Vinton, 12 November 1861, OQMG, LS, Clothing, RG 92, NA.

¹¹⁰ Vinton to Meigs, 25 November 1861 and Berdan to Meigs, 17 December 1861, both in OQMG, Reg. LR, Clothing, RG 92, NA. Whether or not Martin Brothers made these first caps is unknown, as no contract for such or for the green uniforms has been found. In August of 1861, George Hoff & Co. of Philadelphia, who made the sealed sample, contracted to make 20,000 forage caps, but the contract clearly states that they were to be of "indigo blue wool dyed cloth." See contracts made by Hoff in Branch E, Regular Supplies, Contracts, Box 98, RG 92, NA.

¹²⁰ Perry (for Meigs) to Gen. Rufus Ingalls, Chief QM, Army of the Potomac, 12 January 1864, OQMG, LS, Clothing; Capt. A. G. Robinson (for Meigs) to Crosman, 18 February 1864, OQMG, LS, Clothing; both RG 92, NA.

¹²¹ See Howell and Kloster, "United States Army Headgear to 1854," pp. 24, 45.

122 Ibid., pp. 60-61.

¹²⁹ Jesup to Thomas, Phila., 20 January 1858, OQMG, LS, Clothing, RG 92, NA.

See G.O. No. 14 WD, 9 December 1858; G.O. No. 23
 WD, 30 November 1859; G.O. No. 95 WD, 5 November 1861; G.O. No. 202 WD, 9 December 1862; all RG 94, NA.

¹²⁵ See Exec. Doc. 101, 37th Congress, 2nd Session, House, esp. contract with Harris Rothstein, 31 October 1861.

¹²⁶ G.O. No. 202 WD, 9 December 1862, RG 94, NA.

¹²⁷ MILLER, The Photographic History of the Civil War, vol. 3, p. 279. In this connection, however, it must be remembered that the cover was a wet weather item and the photography of the time precluded good pictures on dark, rainy days.

¹²³ U.S. WAR DEPARTMENT, ARQMG, 1865, pp. 208-209. ¹²⁹ See Howell and Kloster, "United States Army Headgear to 1854," p. 60 and fig. 49.

¹³⁰ See Donald, *Divided We Fought*, p. 15. The original sketch is in the collections of the Library of Congress.

vol. 3, p. 115; Cunliffe, Soldiers and Civilians, p. 6; The American Heritage Picture History of the Civil War, p. 106.

¹³² BILLINGS, Hardtack and Coffee, pp. 305-306.

¹³³ COGGINS, Arms and Equipment of the Civil War, p. 14. Although Coggins quotes directly, he does not give his

source. The description of a havelock given in STEVENS, Berdan's U.S. Sharpshooters, p. 5, is completely at variance with the generally accepted definition of the term.

¹³⁴ On this, see OQMG, LS, Clothing, 1861-1865, RG 92, NA.

¹³⁵ For the contracts, see Exec. Doc. 84, 38th Congress, 2d Session, House; U.S. WAR DEPARTMENT, ARQMG, 1864.

¹³⁶ U.S. WAR DEPARTMENT, ARQMG, 1865, pp. 209, 211.

¹³⁷ As regards the officers, it must be remembered that the 1861 uniform regulations, paragraph 1494 stated: "Commissioned officers may [italics added] wear forage caps of the same pattern" [as the enlisted men], so there was no compulsion to wear the issue item. For enlisted men wearing the "McClellan," see BILLINGS, Hardtack and Coffee, p. 307. Just when and by whom this cap was first called the "McClellan" is unknown.

¹³⁸ For comparison, see Illustrated Catalogue of Arms and Military Goods, p. 48.

¹³⁹ On this, see Margerand, "Les coiffures de l'armee francaise," in *Revue*, No. 3 (June 1909), plate 8: figs. 4, 5, 7, 8. Unfortunately, Margerand's text gives no measurements for these particular caps.

140 Topp, in his Cadet Gray (p. 73), speaks of the "blue Chasseur model" as having been adopted in 1861. He seems to be in error as to the date of change. Photographs of members of the class of 1857 show cadets wearing both types. For the 1839 pattern see photograph of Cadet Samuel Ferguson, class of 1857. For the chasseur pattern, see photographs of Cadet William Sinclair, class of 1857 and W. Hemphill Bell, class of 1858, Cadet Orlando G. Wagner, class of 1859 and Cadet John Herbert Kelley, class of 1861 but resigned in 1860. Photographs in files of Smithsonian Institution. The 1857 USMA regulations merely describe the cap as "according to the pattern deposited with the quartermaster at West Point."

¹⁴¹ See *United States Army and Navy Journal*, 4 January 1868, p. 315, and 28 March 1868, p. 506.

¹⁴² United States Army and Navy Journal, 20 February 1869, p. 432. Also see advertisements in issues for 30 July 1870, 6 August 1870, and 13 August 1870.

143 HEITMAN, Historical Register and Dictionary of the United States Army, vol. 1, p. 444.

¹⁴¹ U.S. WAR DEPARTMENT, Regulations for the Uniform and Dress of the Army.

¹⁴⁵ Uniform Regulations for the Army of the United States, 1861, pp. 13-14; Quartermaster Manual, 1865, p. 15. Actually, the size of the letter for the forage cap is not given in either citation, the one-inch size being that given the letter for wear on the campaign hat.

146 Uniform Regulations for the Army of the United States, 1861.

¹⁴⁷ For details of the officers' insignia, see pp. 14 above.

¹⁴⁸ On this see Peladeau, "U.S. Sharpshooter Hat Insignia," Military Collector and Historian, vol. 19, no. 3 (Fall 1962), pp. 92–94.

¹⁴⁹ For this, see Madaus, "Notes on the Uniform of Berdan's Sharpshooters."

¹⁵⁰ For Kearny's order and that of the 1st Div., 9th Corps, see Wike, "The Wearing of Army Corps and Division In-

signia in the Union Army, 1862–1865." Wike does not cite the location of the first two orders, but has stated to the author that he copied them from the originals in the National Archives when he was employed there many years ago. For the Army of the Potomac order, see unnumbered circular, Army of the Potomac, 21 March 1863, in U.S. WAR DEPARTMENT, The War of the Rebellion, series 1, vol. 25, part 2, p. 152.

151 Ibid.

152 During the Civil War a number of "light" batteries were converted to "horse" artillery, with all personnel mounted, and grouped into "horse artillery brigades," which operated in direct support of cavalry operations. On this, see Dyer. A Compendium of the War of the Rebellion, vol. 3, pp. 1693-1709, and BIRKHIMER, Historical Sketch of the Organization, pp. 70-72. Actually, as late as 1942 the 82nd Field Artillery Battalion and the 61st Field Artillery Battalion, direct support elements of the 1st Cavalry Division, were "horse" units, or "animal mounted" as Army Regulations then called them, all personnel being individually mounted. On the other hand, as late as 1942 the 6th Field Artillery Battalion, then a G.H.Q. reserve unit, was "horsedrawn," or "animal drawn" as the regulations called it, with some personnel being individually mounted and the remainder riding the caissons and limbers. On the two modern terms, see AR 600-40, WD, 28 August 1941, RG 94, NA. Today the "field artillery," which accompanies the army in the field, includes materiel of very heavy calibers because of modern means of transportation.

¹⁵³ Unless otherwise stated, the material in this section is taken from Birkhimer, *Historical Sketch of the Organization*, pp. 54-74.

¹⁵¹ Ringgold to Jessup, 10 February 1839, OQMG, Reg. LR, Clothing, RG 92, NA; Ringgold to AG, 19 October 1839, AG Reg. LR, RG 94, NA.

¹⁵⁵ G.O. No. 36, HQ of A, 21 June 1839, RG 94, NA. Although the AG, in writing to Jessup in August 1844, stated that the Secretary of War had authorized red horse-hair plumes and bands in November 1842, in May 1841 the Commissary General of Purchases, Callander Irvine, had directed the Military Storekeeper at Philadelphia to issue to Ringgold's Company "C," 3d Artillery, 71 red horsehair plumes. See AG to Jesup, 5 August 1844, AG, LS, RG 94, NA; Irvine to Fayssoux, MSK at Philadelphia, Supply Orders Issued to QM and MSK at Philadelphia, 1813–1843, RG 92, NA.

¹⁵⁶ Uniform Board Report, 27 April 1844, AG Doc. File, B 136, 1844, Box 150, RG 94, NA. This report is very difficult to use; notations added on the margin, apparently by the Quartermaster General to whom it was routed by the AG, (to ascertain whether or not certain recommendations were approved) are almost illegible.

¹⁵⁷ Jesup to Judd, 11 April 1844, OQMG, LS, Clothing, RG 92, NA; Jesup to Scott, 13 April 1844, OQMG, LS, Clothing, RG 92, NA.

¹⁵⁵ The Ringgold uniform is discussed in depth in Klost-ER, United States Army Uniforms to 1854, vol. 3.

June 1859, OQMG, LS, Clothing, RG 92, NA; Col. Charles Thomas, Asst. QM at Phila., to Jesup, 22 April 1859,

OQMG, Reg. LR, Clothing, RG 92, NA.

¹⁰⁰ G.O. No. 54, HQ of A, 15 December 1845, RG 94, NA.

¹⁰¹ G.O. No. 1 WD, 30 January 1854; see OQMG, LS, Clothing, RG 92, NA, for the period 1854–1858 for numerous directives to the Philadelphia Depot for such issues.

¹⁶² Sibley (for Jesup) to Maj. H. C. Wayne, Asst. QM, Phila., 25 September 1857, OQMG, LS, Clothing, RG 92, NA.

¹⁶³ Jesup to Thomas, Phila., 25 October 1858 and 25 January 1859, both OQMG, LS, Clothing, RG 92, NA.

¹⁶⁴ Ibid.; Jesup to Thomas, Phila., 23 December 1858 and Jesup to Capt. Van Vliet, Ft. Leavenworth, 23 November 1858, both OQMG, LS, Clothing, RG 92, NA.

¹⁶⁵ See Jesup to Thomas, Phila., 29 January 1859, OGMG, LS, Clothing, RG 92, NA.

¹⁰⁶ G.O. No. 20 WD, 6 August 1860, RG 94, NA.

¹⁶⁷ See McBarron and Todd, "U.S. Light Artillery Companies, Dress, 1857–1872." The *Uniform Regulations of 1861* clearly stated: "For Companies of Artillery equipped as Light Artillery, the old pattern uniform cap, with red horsehair plume, cord and tassel."

¹⁰⁵ On this, see Thomas to Jesup, 22 April 1859, OQMG, Reg. LR, Clothing; Sibley (for Jesup) to Lt. H. W. Closson, 1st Arty., 20 June 1859, OQMG, LS, Clothing; Sibley (for Jesup), to Lt. Henry Benson, 2d Arty., 29 Sept. 1859, OQMG, LS, Clothing; all RG 92, NA.

¹⁰⁹ Sibley (for Jesup) to Thomas, 25 June 1859, OQMG, LS, Clothing, RG 92, NA.

¹⁷⁰ See note 166 and Sibley (for Jesup) to Thomas, 6 April 1860, OQMG, LS, Clothing, RG 92, NA. Whether the caps issued were the original 1851 pattern with the red band or the 1854 pattern with merely the red welt on the dark blue band is unknown.

¹⁷¹ LORD, Civil War Collector's Encyclopedia, p. 305. Unfortunately, Lord does not give his source in this instance.

¹⁷² Crosman to Capt. Martin, MSK, 24 September 1863, press copies of LS, Depot QM, Phila., RG 92, NA. The unit was apparently the "23d Independent Battery Light Artillery." See DYER, A Compendium of the War of the Rebellion, vol. 3, p. 1401.

¹¹² Capt. A. J. Perry (for Meigs) to Lt. Henry, 7 Nov. 1863, OQMG, LS, Clothing, RG 92, NA; *Uniform Regulations for the Army of the United States*, 1861, pp. 12-13.

¹⁷⁴ Perry (for Meigs) to Vinton, 11 December 1863, OQMG, LS, Clothing, RG 92, NA.

¹¹⁵ Vinton to OAC & E, Phila., Reg. LR, OAC & E, 14 December 1863, RG 92, NA.

¹⁷⁸ Statements of Clothing and Equipage on Hand or Due from Contracts, 1860–1864, RG 92, NA. There were 1195 on hand on 31 January 1864.

¹⁷⁷ Contract with Dare in Branch E, Regular Supplies, Contracts, Box 50, RG 92, and in RG 217; contract with Horstmann in Branch E, Regular Supplies, Contracts, Box 102, RG 92; all NA.

¹¹⁸ Statements of Clothing and Equipage on Hand or Due from Contracts, 1860–1864, RG 92; Registers of Contracts Relating to the Supplying of Clothing and Equipage, August 1862–November 1874, RG 92; both NA. Although these registers cover only the activities of the Philadelphia Depot,

no contract for these caps let by either the New York Depot or the Cincinnati Depot has been found. Although by law all Army contracts were to be reported to the Congress and published in executive documents, there are gaps in such during the Civil War period.

¹⁷⁰ For an excellent discussion of the contract system used during the Civil War, see RISCH, Quartermaster Support of the Army, pp. 338-357 and esp. p. 353.

¹⁸⁰ See OQMG, LS, Clothing, 1863-1864, RG 92, NA.

¹⁸¹ Meigs to Vinton, 27 April 1864, OQMG, LS, Clothing; Vinton to OAC & E, Phila., 29 April 1864, Reg. LR, OAC & E; both RG 92, NA. Why New Orleans requisitioned so many of these caps is unknown. As of June 1865, 1500 of them were reported as still being on hand at that depot. See U.S. WAR DEPARTMENT, ARQMG, 1865, p. 81.

¹⁸² Meigs to Crosman, 7 June 1864, OQMG, LS, Clothing, RG 92, NA.

¹⁸³ Crosman to Meigs, 8 June, 13 June, 1864, OQMG, Reg. LR, Clothing, RG 92, NA.

¹⁸⁴ G.O. No. 220 WD, 1 July 1864, RG 94, NA.

¹⁸⁵ Report of board of officers established by S.O. No. 31, HQ of A, 11 February 1862, AGO, LR, 216-B-1862, RG 94, NA.

¹⁵⁶ Illustrated Catalogue of Arms and Military Goods, p. 48.

¹⁵⁷ Although the introduction to Uniform Regulations for the Army of the United States, 1861, dates the photographs as 1861 or 1862, the dating error that was discovered some months after publication was corrected in an annotated note in Military Collector and Historian, vol. 19, no. 3 (Fall 1962), pp. 91–92.

158 Actually, the issues directed by OQMG were confined to elements of the 3d Arty at Ft. Trumbull, Conn., and of the 2d Arty at Ft. McHenry, Md., where the units were refilling depleted ranks. See Meigs to Vinton, NY, 15 August 1864; Meigs to Perry, Phila., 28 September 1864; Meigs to Col. Biggs, Phila., 23 November 1864; Meigs to Biggs, 13 and 17 December 1864; Meigs to Col. McKim, Phila., 7 April 1865; all OQMG, LS, Clothing, RG 92, NA. Regarding restrictions on issues of the cap, see Meigs to Maj. Fred Walker, Army of the Tennessee, 8 December 1864, and Meigs to Capt. Bowman, Baltimore, 17 December 1864, both OQMG, LS, Clothing, RG 92, NA.

¹⁸⁹ Exec. Doc. No. 84, 38th Congress, 2d Session, House; ARQMG, pp. 72-73, 85.

¹⁰⁰ Act of 28 July 1866, as quoted in SPAULDING, The United States Army in War and Peace, p. 340; G.O. No. 139 WD, 28 September 1865, RG 94, NA.

¹⁰¹ Act of 3 March 1869, and G.O. No. 6, HQ of A, February 1869, RG 94, NA.

¹⁰² On these issues, see OQMG, LS, Clothing, RG 92, NA for the period. For the prohibition on issue to other than mounted batteries, see Perry (for Meigs) to Col. Brooks, Ft. McHenry, Md., 29 October 1867, OQMG, LS, Clothing, RG 92, NA. There are numerous other references to this prohibition in OQMG, LS, Clothing, all the way to 1872.

¹⁰³ For these photos see *Military Collector and Historian*, vol. 15 (Spring 1963), p. 21, and vol. 16 (Summer 1964), p. 52.

¹⁸⁴ On this, see OQMG, LS, Clothing, RG 92, NA, for

the period 1865–1872 and annual reports of the Quarter-master General for the same period. In regard to a new artillery uniform, see Perry (for Meigs) to Lt. J. S. Totten, 3d Ind. Btry., OVM, 9 July 1868, OQMG, LS, Clothing, RG 92, NA.

185 Harper's Weekly, 8 June 1867, pp. 356, 358.

¹⁹⁶ U.S. WAR DEPARTMENT, 1866, pp. 109–111; Ibid., 1867, p. 538; Perry (for Meigs) to Bvt. Brig. Gen. C. G. Card, Ft. Leavenworth, 9 May 1868, OQMG, LS, Clothing, RG 92, NA states that the supply had been exhausted. Actually this is not quite accurate as to precise count, for ARSW, 1868 listed 841 on hand with 220 purchased. Since Perry was an experienced quartermaster officer, having headed up the clothing and equipage branch of OQMG for many years, it must be assumed that the caps on hand, not purchased during the year, that is 621, were either of the 1851–1854 pattern or unserviceable.

¹⁹⁷ See Perry (for Meigs) to Crosman, 16 December 1867, OQMG, LS, Clothing, RG 92, NA.

¹⁰⁸ Horstmann to QMG, 13 November 1867, OQMG, Reg. LR, Clothing; Perry (for Meigs) to Horstmann, 14 November 1867, OQMG, LS, Clothing; Horstmann to Perry, 15 November 1867, CCF (Caps); Perry (for Meigs) to Crosman, 11 December 1867 and 16 December 1867, OQMG, LS, Clothing; Horstmann to QMG, 16 December 1867, OQMG, Reg. LR, Clothing; Crosman to QMG, 19 December 1867, OQMG, Reg. LR, Clothing; all RG 92, NA. ARSW, 1867, pp. 878–879.

¹⁰⁹ Perry (for Meigs) to Col. Batchelder, New Orleans, 3 April 1868; Perry (for Meigs) to Gen. Card, Ft. Leavenworth, 9 May 1868; Perry (for Meigs) to Gen. D. H. Rucker, Phila., 3 February 1869; Perry (for Meigs) to Van Vliet, Phila., 24 May 1869; all OQMG, LS, Clothing, RG 92, NA.

²⁰⁰ Meigs to Van Vliet, Phila., 22 September 1871, OQMG, LS, Clothing, RG 92, NA. No contracts with Horstmann, or with anyone else for that matter for these caps has been found. But this is not strange in that during this period, when the Army was living on stocks of clothing left over from the war, small purchases of clothing and equipage were authorized "without the formality of a written contract." On this, see Meigs to Lt. Col. L. C. Easton, Phila., 26 June 1872 and Bingham (for Meigs) to Capt. Hoyt, Jeffersonville, 29 May 1871; both OQMG, LS, Clothing, RG 92, NA.

²⁰¹ Perry (for Meigs) to Gen. Card, Ft. Leavenworth, 9 May 1868, and Perry (for Meigs) to Col. Moore, Richmond, 11 May 1868, both OQMG, LS, Clothing, RG 92, NA.

²⁰² Perry (for Meigs) to Stiehl and McBride, NY, 2 September 1868; Perry (for Meigs) to Shannon, Miller, and Crane, NY, 3 September 1868; both OQMG, LS, Clothing, RG 92, NA. Exemplifying Horstmann's seemingly privileged position at the time, Perry stated in a letter to the firm: "The new hat or cap has not been announced in orders. When it is I will send you a copy." Perry (for Meigs) to Horstmann, 11 November 1868, OQMG, LS, Clothing, RG 92, NA.

²⁰³ United States Army and Navy Journal, 23 October 1869, p. 146; C. O. 1st Artillery, to AAG, 13 December

1869, Dept. of the East, AG, LR, M-619, RG 94, NA.

204 Ibid.

²⁶⁵ Meigs to Sec. War, 30 August 1872; Meigs to Capt. Hoyt, Jeffersonville, 4 September 1872; and Meigs to Easton, Phila., 4 September 1872; all OQMG, LS, Clothing, RG 92, NA.

²⁰⁰ Actually, a change in uniform was proposed for the Corps of Engineers in 1868 and pattern coat and trousers made up, but the projects went no further. See Perry (for Meigs) to Crossman, 13 April 1868, with endorsements, LR, Phila., RG 94, NA.

²⁶⁷ U.S. DEPARTMENT OF THE ARMY, ROTC Manual No. 145-720, p. 275.

²⁰⁸ For a listing of the stocks of clothing and equipage as of mid-1865, see U.S. WAR DEPARTMENT, ARQMG, 1865.

²⁰⁹ Ibid., 1870, pp. 8–9.

210 Ibid.

²³¹ Ibid.; U.S. WAR DEPARTMENT, ARQMG, 1871, pp. 9-11

²¹² LS, SGO, 3 August 1867, RG 112, NA.

²¹³ The printed report is in OQMG, CCF, box 1171 (Uniforms), RG 92, NA. Another copy is in the collections of the National Medical Library, Bethesda, Md.

²¹⁴ On the printing shop, see ASHBURN, A History of the Medical Department, p. 109. The Woodhull Report is assumed to have been printed there as it bears no imprint other than "Surgeon General's Office" and no trace of it has been found in the extant records of the Government Printing Office of the period (admittedly very sketchy) and there is no record of correspondence on the subject between SGO and the Superintendent of Public Printing. If it was printed by a private house, there is no evidence of such in either LS, SGO, or Reg. LR, SGO. It is impossible to determine if funds were expended for outside publication as the records of the 1st and 2nd Auditors of the Treasury Dept. for the period were destroyed by fire.

²¹⁵ ALTICK, Scholar Adventurers. This is "must" reading for any researcher, no matter what his discipline.

²¹⁶ During the period he was twice at West Point as a member of the medical examining board for incoming cadets, and in November 1867 was a member of a board to check on the ventilation of hospital tents. S. O. No. 286, HQ of A, 24 June 1867, RG 94, NA; SG to Woodhull, 23 August 1867, LS, SGO; SG to Woodhull, 25 November 1867, LS, SGO; both in RG 112, NA.

 217 ASHBURN, A History of the Medical Department, p. 109.

²¹⁸ Woodhull Report, p. 3.

²¹⁹ Ibid., p. 26.

²²⁰ Records searched in NA for these "backing" papers include: SGO, LS, Reg. LR., name and subject index LR, RG 112; AGO, LR, Reg. LR, name and subject index LR; personnel jackets of all named medical officers, all in RG 94; Inspector General, LS, Reg. LR, RG 159; Headquarters of the Army, LS, Reg. LR, RG 108; OQMG, LS, Reg. LR, CCF under names and subjects, all RG 92. In relation to this last, there is no evidence whatever that either OQMG or the Philadelphia Depot were consulted by Woodhull in the preparation of his report. Indeed, the QMG does not appear to have been forwarded a copy of the report until

October of 1870. See Meigs to AG, 3 June 1871, OQMG, LS, O AC & E, RG 92, NA. This communication had as an enclosure a letter SGO to QMG, 25 October 1870, in which a copy had been enclosed. A search of the archives of the Medical Museum of the Armed Forces Institute of Pathology and the National Library of Medicine proved equally barren. Outside of official repositories, some 20 boxes of Woodhull manuscript material in the collections of the Princeton University Library (Woodhull was an 1859 graduate) proved to contain only material relating to his undergraduate career. Further, although Woodhull was a prolific writer on medical and hygenic subjects throughout his career (he retired as Assistant Surgeon General) only this one time did he touch on the subject of the dress of the Army.

²²¹ It was this type of forage cap that McClellan recommended as a result of his inspection trip to Europe just prior to the Civil War. See p. 13 above and note 90.

²²² Woodhull must have corresponded directly and personally with Col. Andrews, et al., and with William R. Cole as there is no evidence of such in LS, or LR, SG, RG 112, NA.

²²³ S.O. No. 523, HQ of A, 18 December 1867. This was an action which Gen. Winfield Scott had repeatedly urged during the 1850s. See UTLEY, Frontiersmen in Blue, p. 39.

²²⁴ Sherman to AG, 28 January 1868, AG, LR, RG 94, NA. This draft was forwarded to the Secretary of War the next day. See Grant to Sec. War, 29 January 1868, HQ of A, LS, RG 108, NA.

²²⁵ Sherman to AG, 3 February 1868, AG, LR, RG 94, NA. ²²⁶ Sheridan to AG, 14 February 1868, AG, LR, RG 94, NA. This whole business of two men, as experienced as they were, completely revising Army Regulations in 11 days is of course ridiculous, as the 1871 Board, which finally undertook the job in depth, required many months.

²²⁷ SG to Gen. in Chief, 1 February 1868, SG, LS, RG 112; Barnes to HQ of A and endorsements, 1 February 1868, HQ of A, Reg. LR, RG 108; both NA. Just how and why the Surgeon General came to think that the Sherman Board was to consider clothing when it had been specifically set up to revise the Articles of War is unknown.

²²⁸ Sec. War to AG, 3 July 1871, AG, Reg. LR, RG 94, NA. The board was set up by S.O. No. 260, HQ of A, 3 July 1871.

229 Ibid.

²³⁰ Marcy to Sec. War, 14 September 1871, AG, LR, RG 94, NA. It is interesting to compare this statement with the contents in U.S. Department of the Army Pamphlet 355–10 (1947) regarding the introduction of the shade 44 green uniform after World War II. The pamphlet speaks of the issue of the olive drab uniform to displaced persons, foreign military forces under the military assistance program, and veterans upon discharge, plus the appearance of large stocks of the same in surplus stores, all having the effect of reducing the value of the "O.D." as the trade mark of the American soldier.

²²¹ Report of Board of Officers established by S.O. No. 31, HQ of A, 11 February 1862, AG, LR, RG 94, NA. This report is known only in manuscript form.

²³² AG to Marcy, 25 April 1872, AG, LR, RG 94, NA.

²²³ For the date of the report, see Meigs to Sec. War, 29 July 1872, AG, LR; for dissolution of the board, see Sec. War to AG, 26 June 1872, AG, Reg. LR; both RG 94, NA.

²³⁴ For these, see AG, LR, RG 94, NA. The actual final report of the board has not been found, unless the page proofs with comments mentioned above were submitted as such in the interest of speed.

²³⁵ Meigs to Marcy, 28 June 1872; Meigs to Marcy, 16 July 1872; Meigs to Easton, Phila., 9 August 1872; Meigs to Easton, 15 August 1872; all OQMG, LS, Clothing, RG 92, NA.

²³⁶ Meigs to Sec. War, 23 July 1872; Bingham (for Meigs) to Easton, 27 July 1872; both in OQMG, LS, Clothing, RG 92, NA.

²³⁷ CARMAN, British Military Uniforms, p. 141.

²³⁸ See Figure 14.

²³⁹ United States Army and Navy Journal, 20 February 1869.

²⁴⁰ G.O. No. 76 WD, 29 July 1872, RG 94, NA.

²⁴¹ In QM Contracts, RG 92, NA.

²⁴² Contract with Chas. F. Bush, 11 February 1878, Exec. Doc. No. 40, Senate, 45th Congress, 3d Session; contract with J. H. Wilson, 22 March 1879, Exec. Doc. No. 56, Senate, 46th Congress, 2d Session.

²⁶² G.O. No. 38 WD, 20 March 1873; G.O. No. 73 WD, 10 July 1873; G.O. No. 131 WD, 3 December 1874; all RG 94, NA.

²⁴⁴ Bingham (for Meigs) to Easton, Phila., 4 December 1872, OQMG, LS, Clothing, RG 92, NA; U.S. WAR DEPARTMENT, ibid., ARQMG, 1872, p. 60; 1873, p. 56.

²⁴⁵ Col. Dodge, C.O. 23d Inf., to AG, 19 October 1874, CCF (Uniforms); AG to QMG, 24 October 1874, and endorsements, OQMG, Reg. LR; both RG 92, NA.

²⁴⁶ See endorsements to AG to QMG, 24 October 1874; Meigs to Horstmann, 22 January 1875, OQMG, LS, Clothing; Horstmann to Meigs, 27 January 1875, CCF (Hats); both RG 92, NA.

²⁴⁷ Endorsements to AG to QMG, 24 October 1874; the draft general order is in CCF (Hats), RG 92, NA.

²⁶⁸ Untitled comments on "draft for General Order" by Capt. John F. Rogers, MSK, Phila. Depot. dated 9 June 1875, CCF (Hats), RG 92, NA.

²⁴⁹ Col. Saxton, Phila., to Meigs, 19 June 1875, OQMG, Reg. LR, Clothing, RG 92, NA; endorsements to AG to QMG, 24 October 1874, RG 92, NA. This board, headed by Bvt. Maj. Gen. D. H. Rucker, Asst. QMG, was set up by S.O. No. 264 WD, 27 December 1875, to review a variety of QMD matters; hereafter referred to as the Rucker Board.

²⁵⁰ This description was approved by Sec. War on 8 May 1876, in 2d Endorsement, to Capt. J. G. C. Lee to AG, 11 April 1876, OQMG, LR, RG 92, NA.

U.S. WAR DEPARTMENT, ARQMG, 1876, pp. 120–121.
 252 RG 92, NA.

²⁵⁹ 2d Endorsement to ltr. Col. Easton, Phila. to QMG, 25 November 1872, LS, Phila., RG 92, NA.

²⁵¹ Col. Easton, Phila., to Meigs, 14 December 1872, and endorsements, Phila., LS, CCF (Uniforms), RG 92, NA.

²⁵⁵ G.O. No. 38 WD, 20 March 1873, RG 94, NA.

²⁵⁶ G.O. No. 67 WD, 25 June 1873, RG 94, NA. This

general order did prescribe the "badge of corps" and "letter of company" for wear on the forage cap by infantry, artillery, cavalry, and engineers, but nothing was said of the dress cap.

²⁵⁷ G.O. No. 73 WD, 10 July 1873, RG 94, NA.

²⁵⁸ G.O. No. 8 WD, 8 February 1877, RG 94, NA.

²⁵⁰ G.O. No. 96 WD, 19 November 1875, RG 94, NA.

²⁶⁰ G.O. No. 21 WD, 20 March 1876, RG 94, NA.

²⁶¹ Specification in RG 92, NA.

²⁶² Meigs to Sec. War, 2 August 1872, OQMG, LS, Clothing, RG 92, NA.

²⁶³ United States Army and Navy Journal, 4 October 1873, p. 122.

²⁶⁴ U.S. WAR DEPARTMENT, AROMG, 1873, p. 56.

²⁶⁵ Asst. Surg. C. Ewen, to Post Adj., Baton Rouge, 10 March 1875, enclosed with letter Capt. C. Hale to AG; Col. Clitz, Ft. McKarrett, Texas, to AG, 5 March 1875; Col. Geo. Andrews, Ft. Davis, Texas to AG, 25 February 1875; Lt. Col. Whistler, Ft. Riley, to AG, 1 March 1875; Capt. C. E. Morse, 6th Inf., to AG, 15 March 1875; all AG, LR, RG 94, NA.

²⁶⁶ G.O. No. 76, HQ of A, 23 July 1879, RG 94, NA.

²⁶⁷ U.S. WAR DEPARTMENT, AROMG, 1882, p. 9.

²⁶⁸ The light artillery is referred to here in the same connotation as previously defined on p. 22; i.e., the mounted batteries as opposed to foot or fortress artillery.

²⁶⁹ "Specifications for Helmets," OQMG, 17 June 1876, RG 92, NA.

²⁷⁰ Mills, My Story, p. 180.

²⁷¹ PIETSCH, Die Formations and Uniformierungs, vol. 1, pp. 54-59.

²⁷² CARMAN, British Military Uniforms, p. 132; Journal for Army Historical Research, vol. 19 (1940), pp. 56-57. There is also evidence that a "Patent Leather Pickelhaub" was being either offered for sale to or being worn by volunteer militia units in the United States in the late 1850s. On this, see advertising broadside, "Volunteer Uniform Caps," referred to in note 25.

²⁷³ Hunt to AG, 13 March 1875, AG, LR, RG 94, NA.

³⁷⁴ Contract in Branch E, Regular Supplies, Contracts, RG 92, NA. This contract carries no specifications or description.

²⁷⁵ G.O. No. 73 WD, 10 July 1873; G.O. No. 38 WD, 20 March 1873; both RG 94, NA.

²⁷⁶ U.S. WAR DEPARTMENT, ARQMG, 1873, pp. 55-57. For difficulties with the facing cloth, see OQMG, LS, O AC & E. August 1872-February 1873, RG 92, NA.

²¹⁷ U.S. WAR DEPARTMENT, *ARQMG*, 1873, p. 60; ibid., 1874, p. 56, listed 13,660 as purchased and 8069 as issued.

²⁷⁸ These "cuts" were merely a reprint of the ½-scale lithographs illustrating the 1872 uniform regulations.

²⁷⁰ See p. 36 above and note 248.

²⁸⁰ RG 92, NA. It should be noted that the description of the "cords and bands" is virtually identical to that of the "cord and tassel" for the light artillery cap given in the 1865 Quartermaster Manual. See pp. 24–25.

281 RG 92, NA.

²⁸² Four contracts with Horstmann for helmets are listed in Executive Documents 3 October 1872 for 9000; 21 June 1875 for 160; 12 June 1878 for 1500; and 14 September 1878 for 1000.

²⁸³ Two contracts with Bent & Bush for helmets are listed in Executive Documents 12 October 1874 for 8500; and 11 February 1878 for 800.

²⁸⁴ Untitled comments on "draft for General Order" by Capt. John F. Rogers [note 248].

²⁸⁵ G.O. No. 67 WD, 25 June 1873, RG 94, NA.

²⁸⁶ U.S. WAR DEPARTMENT, ARQMG, 1873, p. 56.

²⁸⁷ Hunt to AG, 13 March 1875, AG, LR, RG 94, NA.

288 G.O. No. 6 WD, 29 January 1875, RG 94, NA.

²⁸⁹ U.S. SURGEON GENERAL, Circular No. 8.

²⁰ For these, see AG, LR, February-April 1875, RG 94, NA.

²⁹¹ Weighing by author. Meigs to Gen. of the Army, 8 December 1880, OQMG, LS, Clothing, RG 94, NA, gives weight of officer's helmet complete as 19½ ounces.

²² U.S. WAR DEPARTMENT, ARQMG, 1881, p. 73 states that they were cut down at a cost of \$6.50 per dozen. Actually, one contract was for \$6.00 per dozen and another for \$7.80 per dozen. See List of Contracts for the Purchase or Manufacture of Clothing and Equipage, 1880-1908, RG 92, NA. For the reissue, see U.S. WAR DEPARTMENT, ARQMG, 1881, p. 76. Whether or not Horstmann originally made the model that the firm cut down is unknown, but the ventilator is of the type used by Bent & Bush.

²⁹³ See pp. 19-21; also Bent & Bush and Polland & Leighton advertisements in *United States Army and Navy Journal*, esp. 20 February 1869 and 23 July 1870.

For the campaign hat, see pp. 31-33.

295 Woodhull Report.

²⁹⁸ Meigs to Easton, Phila., 15 August 1872, OQMG, LS, Clothing, RG 92, NA; Exec. Doc. No. 159, House, 43rd Congress, 1st Session.

²⁰⁷ G.O. No. 73 WD, 10 July 1873, RG 94, NA.

²⁰⁸ Bingham (for Meigs) to Easton, Phila., 3 February 1873, OQMG, LS, Clothing RG 92, NA. This directive was the first which specifically mentioned "new pattern" caps with covers.

²⁹⁰ On this, see particularly Col. Dodge, 23d Inf. to AG, 19 October 1874, CCF (Uniforms), RG 92, NA.

300 U.S. WAR DEPARTMENT, ARQMG, 1892, p. 97.

301 RG 92, NA.

³⁰² QM Specification Nos. 216, 5 January 1889, and 324, 12 April 1892, substituted black satin for silesia in the lining and both carried detailed specifications for the blue cloth, which the earlier ones had not done.

 $^{\rm 303}$ G.O. No. 102, HQ of A, 26 December 1883, RG 94, NA.

³⁰¹ Frederick Dent Grant who resigned his commission in 1881.

³⁰⁵ United States Army and Navy Journal, 29 March 1884, p. 11.

305 Although the wreath on the engineers officer's cap was prescribed as being of "laurel and palm," nothing was said of the composition of those of general and staff officer's caps. Of four examined, one general officer's, one engineer officer's, and two staff officers', the wreaths are all very similar and the arms are symmetrical, that is, either of laurel or palm, but not a mixture of the two.

³⁰⁷ From specimens examined, this meant superimposed on the intersection.

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⁸⁰⁸ See above, pp. 35-41.

³⁰⁹ G.O. No. 9, HQ of A, 27 January 1882, RG 94, NA. ³¹⁰ G.O. No. 79, HQ of A, 3 November 1883; G.O. No. 30, HQ of A, 14 April 1884; both RG 94, NA.

³¹¹ G.O. No. 77, HQ of A, 13 July 1885; G.O. No. 104, HQ of A, 3 October 1885; G.O. No. 6, HQ of A, 8 February 1888; all RG 94, NA.

³¹² G.O. No. 48, HQ of A, 6 July 1887, RG 94, NA. The "Geneva" cross is better known as the "Greek" cross, that is, a cross with arms of equal length.

³¹² G.O. No. 3, HQ of A, 15 January 1889, RG 94, NA. U.S. WAR DEPARTMENT, ARQMG, 1889, p. 314, describes the wreath to be worn with the crescent as like that worn by post quartermaster sergeants and hospital stewards, an obvious error as the former was to be of "dead or unburnished gilt metal" and the latter of "white metal." G.O. No. 3 clearly specifies the wreath to be of "unburnished gilt."

³¹⁴ G.O. No. 53, HQ of A, 23 May 1890, RG 94, NA.

315 G.O. No. 74, HQ of A, 20 August 1891, RG 94, NA.

²¹⁶ Despite this, the statement of clothing and equipage on hand at the various depots in the *ARQMG* for 1902 lists "Forage Cap Crossed Arrows," but nowhere lists the authorized crossed arrow device for the campaign hat. Both this latter and a crossed arrow "Helmet Eagle Device, Indian Scouts" are pictured in QM Specification 318, adopted 10 March 1892.

²¹⁷ The Secretary of War made this request in G.O. No. 6 WD, 29 January 1875. The responses are in AG, LR, RG 94. NA.

³¹⁸ Asst. Surg. G. M. Kober to Post Adj., Camp McDermit, Nev., 25 March 1875; Capt. C. E. Morse, 6th Inf., to AG, 15 March 1875; Col. Clitz, 10th Inf., to AG, 5 March 1875; all AG, LR, RG 94, NA.

²¹⁹ United States Army and Navy Journal, 18 May 1895, p. 625.

²²⁰ Lt. Col. L. P. Bradley, 9th Inf., to AG, 14 March 1875; Capt. C. Hale, 16th Inf., to AG, 12 March 1875; Col. Geo. Andrews, 25th Inf., to AG, 25 February 1875; all AG, LR, RG 94, NA; *United States Army and Navy Journal*, 2 February 1895, p. 373.

³²¹ A Capt. Andrews to editor, *United States Army and Navy Journal*, 14 April 1894, p. 572.

²²² Ibid., 1877, p. 73.

³²³ G.O. No. 76 WD, 29 July 1872, RG 94, NA.

³²⁴ See above pp. 29-33.

³²⁵ For an excellent discussion of the hat in some depth, see HUTCHINS, "The Army Campaign Hat of 1872," pp. 65-73.

¹³⁵ Meigs to Surgeon General, 24 April 1875, AG, LR, RG 94, NA; Meigs to Sec. War, 5 May 1875, CCF (Proceedings), RG 92, NA; Meigs to Col. Rufus Ingalls, 7 April 1875, CCF (Proceedings), RG 92, NA.

²²⁷ Meigs to Sec. War, 5 May 1875, CCF (Proceedings), RG 92, NA. Although written nearly three years after the adoption of the hat, this is an extremely valuable document in that it is described by Meigs as "a brief relative to Campaign Hats" compiled for the Secretary of War at the time the 1872 model was under very heavy criticism.

⁸²⁸ Although no authorization has been found for this par-

ticular noncontractual procurement, Meigs allowed small lots to be purchased without advertising for bids. See Meigs to Bent & Bush, Boston, 15 October 1873, OQMG, LS, Clothing, RG 92, NA. For Easton's previous correspondence with Herst, see Herst to Easton, 5 August 1872, CCF (Uniforms); Keen ("per P. Herst") to Easton, 14 September 1872, CCF (Uniforms); both RG 92, NA.

³²⁰ Easton to Meigs, 16 September 1872, CCF (Uniforms), RG 92, NA.

³³⁰ Endorsement by Meigs, 17 September 1872, on *Ibid*. [note 329].

³²¹ Contracts with P. Herst, Phila., 19 October 1872, 29 November 1872, and 12 October 1874, in QM Contracts; Col. Robert Allen (for Meigs), to Easton, 5 November 1872, OQMG, LS, Clothing; all RG 92, NA.

³²² G.O. No. 73 WD, 10 July 1872; G.O. No. 104 WD, 3 December 1872; G.O. No. 131 WD, 3 December 1874; all RG 94, NA.

³³³ Bingham (for Meigs) to Easton, Phila., 4 December 1872, OQMG, LS, Clothing, RG 92, NA.

334 The term "campaign" first appears officially in G.O. No. 80 WD, 9 August 1872, RG 94, NA.

335 See notes 247, 248.

³³⁶ Draft general order in note 247.

³³⁷ Copies of correspondence, with endorsements, relating to this controversy are in one file in CCF (Proceedings), RG 92, NA, together with the "brief" of the whole matter, dated 5 May 1875, prepared by Meigs for submission to the Secretary of War. See p. 56. Unless otherwise cited, all references are from these sources.

³³⁵ G.O. No. 6 WD, 29 January 1875, RG 94, NA. The Surgeon General's report was published by the U.S. Surgeon General, as *Circular No. 8*; Also in RG 94 and RG 112, NA.

³³⁹ These letters are in AG, LR, RG 94, NA. A large portion of them are currently filed with papers relating to the Army Equipment Board which met from 16 December 1878 to 31 March 1879 with Col. Nelson Miles as chairman, microfile 7721, AGO 1878, rolls 435–443, RG 94, NA.

³⁴⁰ See note 337.

^{att} The Acting QMG (for Meigs) to AG, 2 October 1875, in CCF (Proceedings) RG 92, NA. The board was set up by S.O. No. 264 WD, 27 December 1875, RG 94, NA. This is the same board referred to on p. 36 and note 249.

³⁴² Ingalls (for Meigs) to Rucker, 17 January 1876, OOMG, LS, Clothing, RG 92, NA.

³⁴³ Ingalls (for Meigs) to Capt. J. G. C. Lee, recorder of the Board, 27 January 1876, OQMG, LS, Clothing; Record of LR by Board, CCF 1061A (Proceedings); both 92, NA. There is no record in OQMG, Reg. LR, Clothing, of any answer prior to 1 January 1877.

³⁴⁴ The MS report is in CCF (Proceedings), RG 92, NA. ³⁴⁵ Meigs to Rucker Board, 11 May 1876, OQMG, LS, Clothing: Rucker to Meigs with endorsements and enclosures, 9 June 1876, CCF (Proceedings); both RG 92, NA.

³⁴⁶ Meigs to Rucker, 20 June 1876, OQMG, LS, Clothing, RG 92, NA; G.O. No. 107 WD, 31 October 1876, RG 94, NA.

²⁴⁷ Meigs to Lt. Chas. Cresson, AAQM, St. Louis Barracks, Mo., 14 September 1876; endorsement on ltr. Chief

QM, Dept. of Ariz. to Chief QM, Mil. Division of Pacific, 31 October 1876; Meigs to Chief QM, Mil. Div. of Mo., 31 October 1876; Meigs to Rucker, 7 April 1877; Meigs to Chief QM, Mil. Div. of Pacific, 2 June 1877; all OQMG, LS, Clothing, RG 92, NA.

³⁴⁸ AAG, Dept. of the Platte, to CO Ft. Sanders, Wyo., 5 October 1878, Ft. Sanders Document File, RG 393, Continental Commands, NA.

³⁴⁹ U.S. WAR DEPARTMENT, ARQMG, 1879, p. 64. A total of 3913 were so altered under contract at \$.15 each. See Entry for 14 July 1880 in List of Contracts for the Purchase or Manufacture of Clothing and Equipage, 1880–1908, RG 92, NA.

³³⁰ Bingham, Deputy QMG, to Rucker, Phila., 25 September 1879; telegram, Meigs to Rucker, 26 February 1881; both OQMG, LS, Clothing, RG 92, NA. Francis Bannerman's 1907 catalog offered unaltered 1872 pattern hats for sale for \$1.50.

²⁵¹ Col. Robert Allen, Act. QMG, to Col. Easton, Phila., 5 November 1872, OQMG, LS, Clothing; Bingham (for Meigs) to Capt. G. C. Smith, AQM, Ft. Union, N.M. Terr., 19 September 1874, OQMG, LS, Clothing, both RG 92, NA; G.O. No. 131 WD, 3 December 1874, RG 94, NA.

¹⁵² Col. T. P. Andrews to Col. Henry Stanton, AQMG, 10 March 1847, OQMG, LR, Clothing, RG 92, NA; Howell and Kloster, "United States Army Headgear to 1854," pp. 54-67.

³⁵³ See pp. 28-33; United States Army and Navy Journal, 9 November 1867, 28 March 1868.

to AG, 12 March 1875; Col. C. H. Smith, 19th Inf., Ft. Lyon, Col. T., to AG, 10 March 1875; Surg. A. A. Snively, Madisonville, La., to AG, 11 March 1875; Lt. Col. Whistler, CO, Ft. Riley, Kan., to AG, 1 March 1875; Lt. Wm. Wallace, 6th Cav., Ft. Lyon, Col. T., to post AG, Ft. Lyon, 5 March 1875; all AG, LR, RG 94, NA. These and many others were written in response to G.O. No. 6 WD, 29 January 1875, which asked for comments on clothing and equipment, and which were digested in U.S. Surgeon General, Circular No. 8; also in RG 94 and RG 112, NA.

 $^{\rm 355}\,\rm On$ the cork helmet and the 1881 dress helmet, see pp. 62–76.

³⁵⁵ Inspection Report dated 15 March 1882, in OQMG, LS, Clothing, RG 92, NA.

³⁵⁷ Rogers to Depot QM, Phila., 29 April 1882, in CCF (Hats), RG 92, NA.

²⁵⁸ Ingalls to Sec. War, 8 July 1882; Ingalls to Holabird, Phila., 17 July 1882; both OQMG, LS, Clothing, RG 92, NA.

³⁵⁹ A number of these reports favoring the drab hat are in CCF (Hats), RG 92, NA. See also Brig. Gen. S. B. Holabird, the QMG (he succeeded Ingalls on 1 July 1882) to Col. M. T. Ludington, Phila., OQMG, LS, Clothing, RG 92, NA; U.S. WAR DEPARTMENT, ARQMG, 1883, p. 56; Holabird to Sec. War, 18 October 1883; Holabird to Ludington, Phila., 24 October 1883; both in OQMG, LS, Clothing, RG 92, NA; U.S. WAR DEPARTMENT, ARQMG, 1884, p. 311.

360 Ibid., p. 371 and plate 4.

³⁶¹Ibid., pp. 336-7, 367; ibid., 1885, p. 282.

³⁶² See QM Specification No. 1145, approved, 23 January 1912, RG 92, NA.

³⁶⁵ QM Specification No. 251, 8 February 1889, RG 92, NA. This design is a star on all examples known to the author and is so called for in QM Specification No. 651, 29 January 1904.

³⁶⁴ QM Specification Nos. 365, 1 May 1875, and 426, 11 March 1897; both RG 92, NA.

³⁶⁵ QMG to Phila., 22 June, 24 July, 12 September, 1899, all Phila. Reg. LR, RG 94, NA; QM Specification No. 480, ²⁹ September 1899, RG 92, NA.

²⁰⁰ Horstmann & Co. to Phila. Depot, 13 December 1900; QMG to Phila. Depot, 24 December 1900; both Phila. Depot Reg. LR; QM Specification No. 533, 27 December 1900; all RG 92, NA; U.S. WAR DEPARTMENT, ARQMG, 1901.

³⁶⁷ QM Specification No. 651, 29 January 1904, RG 92,

³⁶⁸ See U.S. WAR DEPARTMENT, ARQMG, 1876-1898.

³⁰⁹ Decision of the Secretary of War, 25 February 1887, Cir. No. 2, HQ of A, 1887, RG 94, NA. As of 30 June 1887 there were 32,855 hat cords on hand. See U.S. WAR DEPARTMENT, *ARQMG*, 1888.

³⁷⁰ For example, in 1899, 363,121 were purchased and 88, 746 were issued. See ibid., 1900.

³⁷¹ QM Specification No. 470, 13 July 1899, RG 92, NA. ³⁷² QM Specification No. 476, 12 September 1899, RG 92, NA.

³⁷³ QM Specification No. 589, 17 November 1902, RG 92, NA. U.S. WAR DEPARTMENT, *ARQMG*, 1899, p. 97.

374 Ibid.

Those officers continued to wear the chapeau for dress. Several British mounted units had adopted a version of the helmet as early as 1843, some infantry units in 1876, with general issue to the whole British army authorized by War Office G.O. No. 40 of May 1878. See *Home Service Helmet 1878–1914*, p. 3.

³⁷⁷ S.O. HQ of A, 11 November 1878, RG 94, NA.

²⁷⁸ The proceedings of the board with many of the backing papers are in AG, LR, MC 666, rolls 435–443, RG 94, NA. The report of the board with comments thereon by the Chief of Ordnance, The Quartermaster General, and the General of the Army, together with the decisions of the Secretary of War was published as G.O. No. 76, HQ of A, 23 July 1879. General of the Army Sherman very definitely thought the board had overstepped itself in its wide coverage. See page 40 of the report, RG 94, NA.

³¹⁹ Col. R. S. Mackensie (for Miles) to AG, 16 December 1878; Miles to AG, 17 December 1878; both AG, LR, RG 94, NA.

³⁸⁰ Circular, HQ of A, 28 December 1878, RG 94, NA. Only a portion of the replies seem to have been included in the board proceedings.

³⁸¹ Capt. Fred Mears, 9th Inf., to Recorder of Board on Army Equipment, 23 February 1879, AG, LR, RG 94, NA.

³⁸² Allien was the manufacturer of the "White India Helmet" authorized for USMA Cadets in 1877 (see G.O. No. 121, HQ of A, 22 December 1877) and the somewhat similar experimental summer helmets issued to elements of the 9th Cavalry and the United States Artillery School at Fort

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Monroe, Va., in 1878. On these, see 7th Endorsement, 21 March 1878, to 1tr Capt. A. E. Hooker to AG, 26 January 1878; AG to C. O. Arty School, 14 June 1878; Lt. Chase, 3d Arty. to Maj. J. P. Sanger (recorder of the Miles Board) 22 March 1879; Gen. J. M. Schofield, West Point, to Meigs, 6 April 1878; all AG, LR, RG 94, NA. The watercolors are signed "F.L.M.[?] Eng. Dept., Cooper Institute, N. Y." and are in AG, LR, RG 94, NA. A search of the files of the Cooper-Hewitt Museum of Decorative Arts and Design, the descendent organization, revealed no further information on these paintings. For payment to Allien for the helmets and paintings, see Meigs to Rucker, Phila., 17 May 1879, OQMG, LS, Clothing, RG 92, NA.

³⁸³ MSK Rogers to Col. Miles, 27 March 1879, AG, LR, RG 94, NA.

³⁸⁴ Capt. J. P. Sanger to Meigs, 6 May 1879, AG, LR, RG 94, NA.

³⁸⁵ MSK Rogers to Col. Miles, 27 March 1879, AG, LR, RG 94, NA. The notes by Horstmann were appended to the above.

³⁸⁶ See CARMAN, Head Dresses of the British Army—Cavalry, esp. the numerous plates. Oddly enough, the Home Service Helmet adopted in 1878 for the entire British Army had side buttons of a "rose" pattern. See Home Service Helmet 1878–1914, p. 3.

³⁸⁷ Meigs to MSK Rogers, 9 May 1879, OQMG, LS, Clothing, RG 92, NA.

³⁸⁸ Meigs to Rucker, QM at Phila., 17 May 1879, OQMG, LS, Clothing, RG 92, NA.

³⁸⁹ Meigs to Sherman, 18 July 1879; Meigs to Rucker, 24 July 1879; both OQMG, LS, Clothing, RG 92, NA.

³⁰⁰ Sherman to Sec. War, 15 July 1879 with endorsement by Sec. War, 19 July 1879, AG, LR, RG 94, NA.

³⁰¹ This represented some 27 percent of the officers of the regular establishment at the time. See U.S. WAR DEPARTMENT, Annual Report of the Adjutant General, 1880.

³⁹² It was printed in full with considerable comment in the *United States Army and Navy Journal*, 20 November 1880, p. 314.

²⁰⁸ AG to Meigs, 16 November 1880, OQMG, Reg. LR, Clothing; Holabird (for Meigs) to Richer, Phila., 18 November 1880, OQMG, LS, Clothing; both RG 92, NA; U.S. WAR DEPARTMENT, ARQMG, 1881, pp. 72–3.

³⁸⁴ Rucker, Phila., to Meigs, 22 November 1880, OQMG, Reg. LR, Clothing; AG to Meigs, 2 December 1880, OQMG, Reg. LR, Clothing; telegram Meigs to Rogers 3 December 1880, OQMG, LS, Clothing; telegram Rogers to Meigs, 3 December 1880, LS, MSK, Phila.; all RG 92, NA.

³⁰⁵ Rogers to Allien & Co., 3 December 1880, LS, MSK, Phila., RG 92, NA. Allien & Co. had been paid for the blocks and dies, as well as the Miles Board samples. See Rogers to Rucker, Phila., 20 November 1880, LS, MSK, Phila., RG 92, NA.

²⁰⁶ Meigs to Sherman, 8 December 1880, OQMG, LS, Clothing, RG 92, NA.

³⁰⁷ Sherman to Meigs, 13 December 1880, OQMG, Reg. LR, RG 92, NA.

³⁹⁸ Telegram Meigs to Rogers, 9 December 1880, OQMG, LS, Clothing; telegram Rogers to Meigs, 9 December 1880, LS, MSK, Phila.; both RG 92, NA.

²⁰⁰ Rogers to Meigs, 16 December 1880, LS, MSK, Phila.; Meigs to Rucker, Phila., 28 December 1880, OQMG, LS, Clothing; both RG 92, NA.

400 In RG 94, NA.

⁴⁰¹ Meigs to Supervising Architect of the Treasury, 6 January 1881, OQMG, LS, Clothing, RG 92, NA. For distribution of the photos, see OQMG, LS, Clothing for January and February 1881 in RG 92, NA. The photographs are in Audiovisual Branch, NA.

⁴⁰² Meigs to Rucker, Phila., 9 January 1881, OQMG, LS, Clothing, RG 92, NA.

⁴⁰² Rogers to Meigs, 14 January 1881, OQMG, Reg. LR, Clothing, RG 92, NA.

⁴⁰¹ Meigs to Rogers, 17 January 1881, OQMG, LS, Clothing, RG 92, NA.

405 Unfortunately, the actual photograph of this enlisted model has not been found. See *United States Army and Navy Journal*, 22 January 1881, for a front view of Figure 46b.

⁴⁰⁶There were two similar but distinct patterns of the "tiger head," one on the specimens in the quartermaster photographs and the other on the Kilpatrick summer helmet (Figure 51).

⁴⁰⁷ See note 399.

403 See Figure 46a, c.

409 Rogers to Meigs, 25 January 1881 (two letters), LS, MSK and QM, Phila., RG 92, NA.

⁴¹⁰ Rogers to Horstmann, 26 January 1881, LS, MSK and QM, Phila.; Rogers to Meigs, 16 February 1881, LS, MSK and QM, Phila.; Rogers to Hartley & Graham, 7 February 1881, LS, MSK and QM, Phila.; Meigs to Rogers, 18 February 1881, LS, OQMG, Clothing; Meigs to Rucker, 19 February 1881, LS, Clothing; Rogers to Meigs, 8 March 1881, OQMG, Reg. LR, Clothing; Meigs to Gen. of Army, 8 March 1881, OQMG, LS, Clothing; Hq of Army to Meigs, 8 March 1881, OQMG, Reg. LR, Clothing; Rogers to Rucker, Phila., 24 March 1881, LS, MSK and QM, Phila., all RG 92, NA.

⁴¹¹ Rogers to Rucker, 11 March 1881, LS, MSK and QM, Phila., RG 92, NA.

⁴¹² See Meigs to Maj. R. Batchelder, San Francisco, 12 March 1881, OQMG, LS, Clothing, RG 92, NA.

⁴¹³ Rucker, Phila., to Meigs, 16 March 1881, OQMG, Reg. LR, Clothing; Meigs to Gen. of Army, 23 March 1881, OQMG, LS, Clothing; Gen. Holabird to Col. Ekin, 25 March 1881, LS, OQMG, Clothing; all RG 92, NA.

414 RG 92, NA.

415 RG 92, NA.

⁴¹⁶ See QM Specification No. 318, adopted 10 March 1892, RG 92, NA.

⁴²⁷ AG to Lt. J. S. Bishop, 15th Inf., 25 March 1881, quoted in *United States Army and Navy Journal*, 26 March 1881, p. 706.

⁴¹⁸ U.S. WAR DEPARTMENT, ARQMG, 1881, p. 73. See also Rucker to Meigs, 26 March 1881, OQMG, Reg. LR, Clothing; Meigs to Rogers, 29 March 1881, OQMG, LS, Clothing; both RG 92, NA. "Phototype" was the commercial term for the products of the photomechanical process technically known as "collotype." These "phototypes" were of exceptional quality. See Figures 48, 49.

⁴¹⁹ Meigs to Rogers, 19 April 1881, OQMG, LS, Clothing, RG 92, NA.

⁴²⁰ Meigs to Rucker, 28 April 1881, OQMG, LS, Clothing, RG 92, NA. The actual contracts were dated 5 May. These contracts specified that OQMG was to furnish the necessary dies and cutters. See contract with Horstmann dated 5 May 1881 in Branch E, Regular Supplies, RG 92, NA. There were of necessity four separate dies for the front plates, i.e., one for infantry, artillery, cavalry, and staff. Comparison of a number of these plates shows a few minor variations between the four in the basic design.

⁴²¹ Contracts with Raymold and Whitlock, 1 July 1882 and 4 June 1883, both in Exec. Doc. No. 83, Senate, 49th Congress, 1st Session. Chappelle, in his monograph "Brass Spikes & Horsehair Plumes" (p. 31), states that the earlier 1881 pattern helmets, especially those of the 1882 and 1883 contracts, "were blocked in much the same style as the model 1872 helmet." This is incorrect. This author has carefully examined 28 1881 enlisted models with contract dates running through the entire 21 years of the model's use, and there is no such blocking or variation as he states. Admittedly, the illustrations Mr. Chappell cites are misleading, primarily because the specimens in them are shown with the top pieces in place.

⁴²² G.O. No. 52, HQ of A, 14 June 1881, RG 94, NA.

⁴²³ An excellent cut-down version carrying this label is in the personal collection of Gordon Chappelle.

⁴²⁴ Information received from Dr. Byron Fairchild, Department of State, 13 March 1972 and in Heitman, *Historical Register*, vol. 1.

⁴²⁵ There is an extant photograph of Kilpatrick's bier in Valpariso surmounted by what appears to be a U.S. Army general officer's coat with elaborate nonregulation cuff and collar embroidery and this helmet. The matter of dress for diplomats was vague in this period, to say the least. Generally American diplomats wore what they wished, no matter what the Department of State said. An 1853 State Dept. circular stated that "simple citizen's dress" was preferred, but allowed discretion in individual cases to conform to the customs of the foreign nation concerned. The Act of 28 July 1866 (14 Stat 332) permitted a Civil War Union veteran to wear the uniform prescribed during the war, and a resolution of Congress in 1867 prohibited diplomats from wearing uniforms or official dress not previously authorized by Congress. Information from Department of State (Historical Dept.).

 $^{\mbox{\tiny 425}}$ G.O. No. 67, HQ of A, 28 September 1886, RG 94, NA.

⁴²⁷ U.S. WAR DEPARTMENT, Regulations for the Army of the United States, 1889, p. 207.

⁴²⁸ U.S. WAR DEPARTMENT, ARQMG, 1883, pp. 18, 56.

429 Capt. H. F. Kendall, "An Army Uniform."

⁴³⁰ Journal of the United States Cavalry Association, vol. 10 (June 1897), pp. 188-192, 192-195.

⁴³¹ For the Woodhull Report, see p. 28.

⁴³² For details on this, see pp. 52-57.

⁴⁰⁰ Meigs to Sir Edward Thornton, 6 March 1875, AG, LR, MC 666, roll 440, RG 94, NA.

⁴³⁴ Meigs to Sec. War, 13 March 1875, AG, LR, MC 666, roll 440, RG 94, NA. The origin of this helmet is somewhat uncertain. Written on the margin of the letter op-

posite the first mention of the helmet is the notation: "These samples were left at the QM Gnls. office in August 1869 by William A. Dr. (?) & Co. of Phila."

⁴³⁵ 1st Endorsement 18 March 1875, to Meigs to Sec. War, 13 March 1875 MC 666, roll 440, RG 94, NA.

⁴³⁶ Thornton to Meigs, 8 May 1875; Meigs to Thornton, 14 May 1875; both AG, LR, MG 666, roll 440, RG 94, NA. ⁴³⁷ Meigs to Sec. War, 19 May 1875, AG, LR, MC 666, roll 440, RG 94, NA.

⁴³³ 2d and 3d Endorsements, 1 June 1875 and 26 June 1875, to Ibid, Inote 4371.

⁴³⁰ Ingalls to Col. Robert Allen, San Francisco, 28 June 1875; Col. Van Vliet, Phila., to QMG, 4 October 1875 and 3d Endorsement; all in AG, LR, MC 666, roll 440, RG 94, NA.

⁴⁴⁰ There are a number of these comments appended to Lt. Col. C. A. Reynolds, Ft. Yuma, Cal. to Meigs, 30 June 1877, AG, LR, MC 666, roll 440, RG 94, NA.

⁴⁴ Capt. Hooker, 9th Cav., to AG, 26 January 1878, AG, LR, MC 666, roll 440, RG 94, NA.

⁴⁴² 6th Endorsement, 18 March 1878, to Hooker to AG, 26 January 1878; Meigs to Lt. Duggan, 10th Inf., 16 October 1878, OOMG, LS, Clothing, RG 92, NA.

⁴¹² 7th Endorsement to Hooker to AG, 26 January 1878 [note 441].

444 Bingham to Rucker, Phila., 9 April 1878; Rogers to Major Dana, Phila., 6 May 1878, and 2d Endorsement; both AG, LR, MC 666, roll 440, RG 94, NA; Gen. Schofield, West Point, to Meigs, 6 April 1878, AG, LR, RG 94, NA. These specifications were generally similar to, but somewhat more elaborate than, those for the original cadet model given in G.O. No. 121 WD.

⁴⁴⁵ Meigs to Rucker, 10 May 1878, AG, LR, MC 666, roll 440, RG 94, NA. The maker is unknown. No contract for the order appears in executive documents. They apparently were bought on an open order in the interest of speed and in view of the small amount involved.

⁴¹⁶ Col. Geo. Getty, Ft. Monroe, to AG, 21 May 1878, AG, LR, MC 666, roll 440, RG 94, NA. The cadets received the chin chains and the brass spikes in 1881. On this, see Todd, Cadet Gray, p. 71.

⁴⁴⁷ 4th Endorsement to Col. Getty to AG, 21 May 1878 [note 446]; AG to CO Arty. School, 14 June 1878, AG, LS, RG 94, NA.

⁴⁴³ U.S. WAR DEPARTMENT, ARQMG, 1878, p. 79; (ibid., 1879, p. 70. Although the statement of purchases and issues for FY 1879, in the latter citation, shows 251 cork helmets purchased and 250 issued (the extra one obviously being retained as a sample) the statement does not show that any chin chains and spikes were procured, although the metal fittings for other head gear are listed in detail.

⁴⁴⁹ QM Specification No. 2, adopted 5 May 1880, RG 92, NA. These specifications were drawn up expressly for the helmet to be issued the artillery school and were followed when the headpiece was approved for general issue. See Van Vliet (for Meigs) to Rucker, 15 May 1880, OQMG, LS, Clothing, RG 92, NA.

⁴⁵⁰ QM Specification No. 2, adopted 5 May 1880, RG 92, NA.

⁴⁵¹ U.S. WAR DEPARTMENT, ARQMG, 1884, plate 4.

452 Shafter to AG, 13 May 1880, AG, LR, RG 94, NA.

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⁴⁵³ Endorsement, 24 May 1880, to above [note 452]; copy in OQMG, LS, Clothing, under that date.

⁴⁵⁴ Meigs to Rucker, 31 May 1880; Meigs to Rucker, 28 May 1880; both OQMG, LS, Clothing, RG 92, NA; *United States Army and Navy Journal*, 19 June 1880, p. 951.

⁴⁵⁵ RG 94, NA; Exec. Doc. No. 51, Senate, 47th Congress, 1st Session; contract with Henry V. Allien, 29 May 1883, Exec. Doc. No. 83, Senate 49th Congress, 1st Session.

⁴⁵⁵ U.S. WAR DEPARTMENT, ARQMG, 1883, p. 56; United States Army and Navy Journal, 1 July 1882, p. 1109; Ingalls to Phila. Depot, 17 April 1882, OQMG, LS, Clothing, RG 92, NA.

⁴⁵⁷ See QM Specification No. 330, 5 August 1892, RG 92, NA.

⁶³⁸ U.S. WAR DEPARTMENT, ARQMG, 1899, p. 6; QM Specification No. 478, 23 September 1899, RG 92, NA. In this particular case there is a disparity between the contract dates stamped in the specimens examined and the adoption date of the specification, 4 March and 27 June 1899, and 23 September 1899. Since the specimens conform very precisely to the specifications it is reasonable to infer that the specifications had been drawn up some months before actual printed publication, a circumstance which often occurred.

⁴⁵⁹ QM Specification No. 500, 25 January 1900, RG 92, NA.

⁴⁶⁰ RG 94, NA.

⁴⁶¹ HOWELL AND KLOSTER, "United States Army Headgear to 1854," p. 22 and notes.

⁴⁶² On this particular, see Callendar Irvine to Sec. War, 25 April 1825, Commissary General of Purchases, LS, RG 92, NA. For a description of the 1825 pattern, see Howell AND Kloster, "United States Army Headgear to 1854," pp. 22-25.

⁴⁶³ Ibid., p. 38.

⁴⁶⁴ Ibid., pp. 40-53.

⁴⁶⁵ Ibid., pp. 60-61.

⁴⁰⁶ Jesup to Col. Thomas, Phila., 10 September 1858, OQMG, LS, Clothing, and numerous similar entries for 1859; all RG 92, NA. Other protective clothing during these campaigns included buffalo overshoes, worsted throat mufflers, and buckskin mittens lined with flannel and made to come up over the coat cuff.

⁴⁶⁷ U.S. WAR DEPARTMENT, ARQMG, 1865, pp. 65, 81.

468 See pp. 28-35 above.

⁴⁶⁹ On this, see U.S. WAR DEPARTMENT, ARQMG, 1871, pp. 51, 55; ibid., 1872, p. 57; ibid., 1873, p. 65. Apparently the 304 fur caps were issued during fiscal year 1874 as the inventories for that year omit any mention of them.

⁴⁷⁰ G.O. No. 39, HQ of A, 10 May 1876. The board was set up by S.O. No. 264, HQ of A, 27 December 1875; both RG 94, NA.

⁴⁷¹ QM Specification No. 7, adopted 23 May 1876, RG 92, NA.

⁴⁷² QM Contracts, RG 92, NA; G.O. No. 107, HQ of A, 31 October 1876; RG 94, NA.

⁴⁷³ U.S. WAR DEPARTMENT, ARQMG, 1877, p. 77.

⁴⁷⁴ Ibid., 1877, p. 26; ibid., 1878, pp. 79, 83.

⁴⁷⁵ Exec. Doc. No. 40, Senate, 45th Congress, 3d Session.

⁴⁷⁸ QM Specification No. 6, 12 March 1879, RG 92, NA.

 477 For this see U.S. War Department, ARQMG, 1878–1884.

⁴⁷⁸ Ibid., 1884, pp. 21, 382, 612.

479 Ibid., p. 681 and plate 6.

. ⁴⁸⁰ Ibid., 1886, pp. 186–187; QM Specification No. 175, 22 June 1886, RG 92, NA.

⁴⁸¹ G.O. No. 48, HQ of A, 6 July 1887, RG 94, NA; U.S. WAR DEPARTMENT, *ARQMG*, 1887, p. 213.

 $^{482}\,\mathrm{QM}$ Specification No. 580, 25 August 1902, RG 92, NA.

⁴⁵³ Act of July 28, 1866, "An Act to Increase and Fix the Military Peace Establishment of the United States," section 6.

484 U.S. WAR DEPARTMENT, ARSW, 1868, p. 731a.

⁴⁸⁵ Register of Enlistment of Indian Scouts; G.O. No. 38, HO of A, 28 March 1890; both RG 94, NA.

⁴⁸⁶ Casey to Sec. War, 3 June 1890, and endorsements, in AG, LR, RG 94, NA. The Secretary of War's approval was dated 19 July 1890.

⁴⁸⁷ QMG (thru Deputy QMG, Phila.) to QM Schuylkill Arsenal, 17 September 1890, LS, Deputy QMG, Phila.; QM, Schuylkill Arsenal to Deputy QMG, Phila., 29 September 1890, LR, Deputy QMG, Phila.; QMG, to Deputy QMG, Phila., 13 September 1890, Reg. LR, Deputy QMG, Phila.; all RG 92, NA. As of June 1890, there were a total of 383 scouts in the service, including 32 sergeants, and 26 corporals. U.S. WAR DEPARTMENT, ARQMG, 1890, p. 69.

⁴⁵⁸ Deputy QMG, Phila. to QM Schuylkill Arsenal, 29 September 1890, LS, Deputy QMG, Phila., RG 92, NA.

⁴⁶⁹ QMG to Deputy QMG, Phila., 21 November 1890, Reg. LR, Deputy QMG, Phila.; Deputy QMG, Phila., to QMG, 22 November 1890, LS, Deputy QMG, Phila.; both RG 92, NA.

⁴⁹⁰ QMG to Deputy QMG, Phila., 22 November 1890, LR, Deputy QMG, Phila.; Abstract of Proposals "Clothing for Indian Scouts" opened 8 December 1890, LR, Deputy QMG, Phila.; (Horstmann was the sole bidder); Horstmann to Deputy QMG, Phila., 10 December 1890, LR, Deputy QMG, Phila.; both RG 92, NA.

⁴⁹¹ G.O. No. 81, HQ of A, 17 July 1902, RG 94, NA.

⁴⁹² QM Specification 318, adopted 10 March 1892; RG 92, NA. Both the regulation and the specifications are very specific as to the crossed arrow badge being for the fatigue hat.

⁴⁰³ G.O. No. 31, HQ of A, 12 June 1855, RG 94, NA. For the chapeau 1800–1851, see Howell and Kloster, "United States Army Headgear to 1854," pp. 1–8.

⁴⁰⁴ G.O. No. 3 WD, 24 March 1858; G.O. No. 27 WD, 22 December 1859; both RG 94, NA.

495 On this, see Margerand, "Les Coiffeurs de l'armee français."

490 Illustrated Catalogue of Arms and Military Goods, p. 48. A photograph of General Winfield Scott and his staff taken in Washington in 1861 show all holding chapeaux, but, with the exception of Scott's, the details are unclear. Scott is definitely holding the earlier high fan model. See MILLER, The Photographic History of the Civil War, vol. 1, p. 170.

⁴⁰⁷ G.O. No. 67 WD, 25 June 1873. This requirement was repeated in later general orders.

498 Horstmann Bros. & Co., Illustrated Catalogue; U.S. WAR DEPARTMENT, Uniform of the Army of the United

States 1882.

⁴⁵⁰ U.S. QUARTERMASTER GENERAL, Regulations for the Uniform of the Army; Illustrated Price List of Officers' Uniforms and Equipments; W. A. Raymold ., Revised List, No. 300, for 1897; U.S. WAR DEPARTMENT, The Uniform of the Army of the United States, October 1, 1908, plate 20.

⁵⁰⁰ U.S.WAR DEPARTMENT, Specifications for the Uniform of the United States Army, January 25, 1912, p. 10.

⁵⁰¹ For this latter chapeau, see Howell and Kloster, "United States Army Headgear to 1854," pp. 5-7.

502 Ibid., p. 5.

⁵⁰³ On this, ibid., pp. 22-25, 40-53.

The British models are well illustrated by Roger Fenton's Crimean War photographs, in Gernsheim, Roger Fenton, Photographer of the Crimean War, plates 13, 39, 59, 60. For the U.S. Navy model, see Tily, The Uniforms of the United States Navy, pp. 128-155.

⁵⁰⁵ In addition to various editions of the *United States Army and Navy Journal*, for the period, see also Col. J. A. Hardie, the Inspector General, to General Townsend, the AG, 27 March 1871, AG, LR, RG 94, NA; U.S. WAR DEPARTMENT, *ARQMG*, 1884, 1890; Proceedings of Equipment Board, 1888–1894, entries for 23 and 26 December 1890, AG, LR, RG 94, NA.

⁵⁰⁶ G.O. No. 18, HQ of A, 16 February 1889 described the cap in detail. See also U.S. WAR DEPARTMENT, Annual Report of the Chief Signal Officer, 1889.

⁵⁰⁷ No specifications were published and there was no mention of the cap in the correspondence of the Quartermaster General during the period. The revocation was by G.O. No. 74, HQ of A, 20 August 1891.

the Office of the Secretary of War, LR, 12 March 1895, file no. 2138, RG 107, and OQMG, LR, 22 April 1897, file no. C.L./62931, RG 92; both NA. Approval of the change is in G.O. No. 22, HQ of A, 12 April 1895, RG 94, NA, and

the official description in QM Specification No. 367, approved 5 September 1895, RG 92, NA.

⁵⁰⁰ G.O. No. 22, HQ of A, 12 April 1895; G.O. No. 39, HQ of A, 21 June 1895; both RG 94, NA.

510 RG 92, NA.

⁵¹¹ U.S. WAR DEPARTMENT, ARQMG, 1896, p. 5; the changes were described in QM Specification No. 417, adopted 22 October 1896, RG 92, and the new price set by G.O. No. 37 WD, 12 June 1897, RG 94; both NA.

⁵¹² U.S. WAR DEPARTMENT, ARQMG, 1896, p. 5; ibid., 1897, p. 25; QM Specification No. 419, adopted 13 January 1897, RG 92, NA.

⁵¹³ QM Specification No. 419, adopted 13 January 1897, RG 92, NA.

⁵¹⁴ G.O. No. 80, HQ of A, 24 April 1899; G.O. No. 19, HQ of A, 21 February 1901; both RG 94, NA.

⁵¹⁵ G.O. No. 14, HQ of A, 12 February 1900, RG 94, NA. ⁵¹⁶ U.S. WAR DEPARTMENT, Regulations and Decisions Pertaining to the Uniform of the Army of the United States, note on page 13.

⁵¹⁷ Maj. J. R. Myrick to AG, 9 March 1896, and 5th and 7th Endorsements dated 23 and 31 March 1896, AG, LR, RG 94 NA

⁵¹⁸ G.O. No. 39, HQ of A, 2 April 1900, RG 94, NA.

⁵¹⁹ Those caps attributed to the regular army are either documented biographical specimens or are from the Quartermaster Museum at Schuylkill Arsenal in the War Department Collection.

⁵²⁰ ARQMG, 1897, p. 25. See also, especially for the visor angles: Ridabock & Co. [Catalog], p. 28.

⁵²¹ United States Army and Navy Journal, 20 April 1895, p. 551.

⁵²² Ibid., 20 July 1895, pp. 776, 779; 8 June 1895, p. 682;
⁴ May 1895, p. 589; 20 April 1895, p. 557.

⁵²² Ibid., 22 June 1895, p. 708.

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The bulk of the source material for this volume was found in the files of the several branches of the War Department that are on deposit in the National Archives, Washington, D. C. A majority of the material is in Record Group 92, Records of the Office of the Quartermaster General, which includes files of subordinate offices, particularly those of the Assistant Quartermaster General at Philadelphia and the Philadelphia Depot (also called the Schuylkill Arsenal), which was the largest single storage depot as well as the principal factory and procurement office for Army clothing.

As changes in the Army uniform had to be approved first by the Commanding General and ultimately by the Secretary of War, records of both offices (Headquarters of the Army, Record Group 108; Office of the Secretary of War, Record Group 107) are of great value.

Record Group 94, Records of the Adjutant General's Office, contains all the orders that formally authorized specific changes in uniforms and fre-

quently contains the reports of boards convened to discuss such changes. The letters-sent volumes contain additional information on the decisions of the Secretary of War on interpretation of existing orders of matters not deemed worthy of a formal order. Officers often wrote directly to the War Department giving their individual opinions regarding items of the uniform, these communications moving through the Adjutant General's office or terminating there.

Other record groups consulted were Record Group 77, Records of the Chief of Engineers; Record Group 98, Records of United States Army Commands; Record Group 112, Records of the Office of the Surgeon General, as the Medical Department constantly displayed an interest in the dress of the Army for reasons of health; and Record Group 159, Records of the Office of the Inspector General, for reports regarding suitability and durability of the uniform and general reaction to individual items.

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