

THE GREAT TROWSER HOAX - PART ONE

*So you think your Federal issue trousers are authentic, eh?
Well, you'd best hang onto your instep straps!*

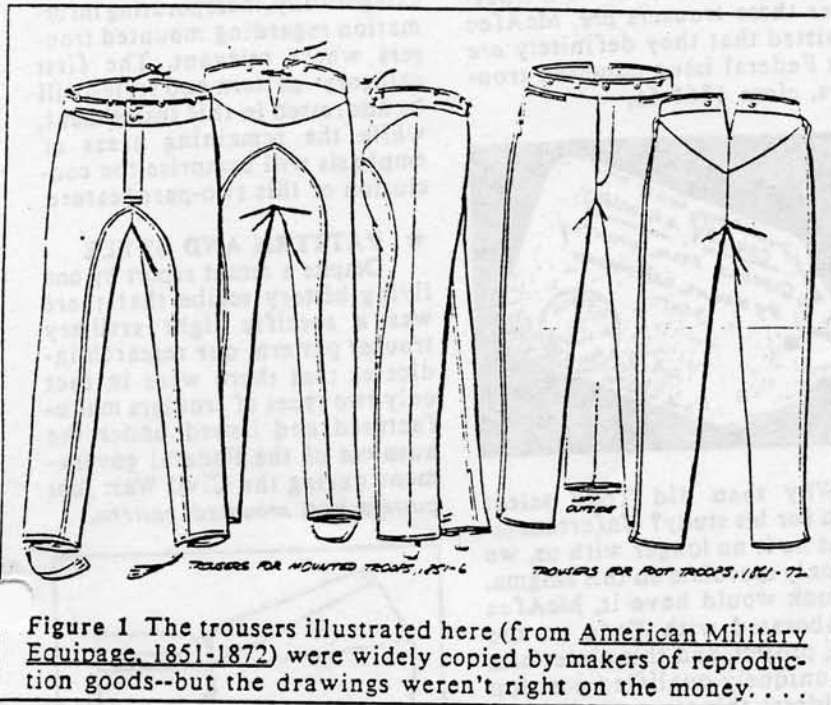


Figure 1 The trousers illustrated here (from American Military Equipage, 1851-1872) were widely copied by makers of reproduction goods--but the drawings weren't right on the money. . . .

by Nick Nichols & Ken Smith

AUTHORS' NOTE: *The data used to prepare this article represent the culmination of over a year of comprehensive research during which time the authors consulted relevant primary sources (QM manuals, trade texts, contracts, correspondence, etc.), select scholarly secondary sources, and a host of recognized authorities on Civil War uniforming. Additionally, over 50 original specimens (about evenly divided between mounted/foot pattern, and government depot/contractor manufacture) were surveyed in detail with similarities and differences being carefully recorded and tabulated.*

The authors caution the reader that the information contained herein applies exclusively to trousers produced and issued under the aegis of the Federal government circa 1861-65, and does not necessarily hold true for state issues, private purchase examples, or other variants.

A Myth in the Making

From an economy and simplicity standpoint, it would seem logical that the mounted trouser pattern used during the Civil War would have differed only slightly from its foot-style counterpart,

and despite the scarcity of that precious commodity (logic) in most bureaucracies, the authors found this to be the case. Indeed, mounted trousers were nothing more than foot-pattern trousers to which reinforced seating and

instep straps had been added. This premise was unhesitatingly confirmed by all of the authorities we consulted, and was further borne out by our survey of original artifacts.

With the exception of a few minor details (which will be scrutinized in due course), all Federal issue mounted trousers were of like pattern. This is because they were copied by government clothing depots and private contractors from sealed pattern pieces produced under the guidance of the Army Clothing Establishment at Schuylkill Arsenal exclusively for this purpose (a sealed pattern piece was among the authors' survey sampling).

Why then do the vast majority of reproduction Civil War mounted trousers in use today look so different from the dismounted-pattern pants?

The answer to this mystifying question can be traced directly to Frederick P. Todd's monumental treatise, American Military Equipage, 1851-1872.

The appearance of this ambitious, broad based reference work in 1974 coincided neatly with the genesis of the authenticity movement in Civil War reenacting; in fact, it is no exaggeration to state that its publication was largely responsible for creating the environment that prodded hobbyists to pursue authenticity and thus begin the transition from reenactor to interpretive historian.

Original examples of bona fide Civil War mounted trousers are about as rare as hen's teeth, so when the initial installment of this multivolume series made its debut--replete with a description and accompanying illustrations of mounted trousers--manufacturers of reproduction uniforming heaved a collective sigh of relief and confidently drafted

their patterns on this seemingly unimpeachable source.

Fly in the Ointment

Curiously, the mounted trousers featured in Todd's book are distinctly different from the "Trousers for Foot Troops" illustrated alongside them: The mounted trousers are high waisted with a very wide two-button waistband, they have but one full-size pocket (of the placket-facing type) let into the waistband seam, and the slim, or "pegged," legs are devoid of the cuff vent present in the foot-pattern example (Fig. 1). Is this beginning to sound like a description of *your* trousers?

As we had already established that mounted trousers were simply reinforced foot-pattern trousers, this incongruous state of affairs was beginning to set off alarm bells in our heads. These conflicting signals raised two perplexing questions:

❖ What was the provenance of the trousers Frederick Todd had examined and described?

and

❖ Why did he select this particular specimen to represent typical Civil War mounted trousers when they clearly are not?

Ferretting Out the Facts

Todd himself facilitated our sleuthing considerably by indicating that the trousers he had examined were located in the West Point Museum collection. We contacted curator Michael J. McAfee in hopes that he could shed some light on this puzzle.

He informed us that the trousers had been donated to the museum in the 1960s by noted collector Stanley J. Olsen, and that they bear no markings whatsoever--save a modern paper label attached by Olsen which reads: "Civil War Cavalry & Artillery. Differs from infantry by having reinforced seat."

This is dubious provenance at best, so we solicited McAfee's professional opinion regarding a tentative identification.

Based on the unusual style details, material and construction techniques of the "mystery pants," McAfee said he'd render an educated guess that they actually predate the Civil War period--possibly by as much as 15 years (and in all fairness to Mr. Todd, the caption to the Woodbridge illustrations states: "Trousers for Mounted Troops, 1851-6"). Whatever these trousers are, McAfee insisted that they definitely are *not* Federal issue mounted trousers, circa 1861-65.



Why then did Todd select them for his study? Unfortunately, as he is no longer with us, we can only speculate on this enigma. As luck would have it, McAfee collaborated with Todd on the AME project, and this places him in a uniquely qualified position to address this stumper: "[These particular trousers] were chosen only because they were readily available," asserted McAfee, "and neither Todd nor Woodbridge felt their unique construction details were significant. In other words, they were just another pair of mounted trousers in their eyes." (emphasis ours)

Due to this oversight, authenticity-conscious interpretive historians must now go back to the drawing board, reevaluate the nature of Federal issue mounted trousers based on reliable data, and reequip themselves accordingly. Hopefully, we can be of some help in the "reliable data" dept.

From Myth to Reality

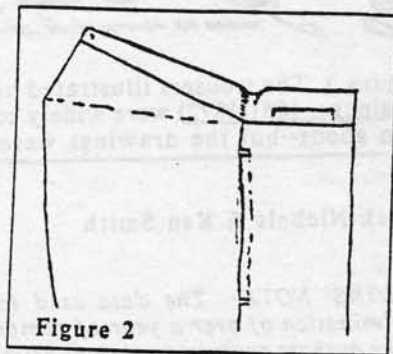
Since mounted trousers were just a variation of foot trousers, it would seem to be a simple matter for living history haberdashers to make the necessary

adjustments to their existing dismounted trouser patterns; but, unfortunately, most repro foot trousers embody gross errors in the areas of pattern and style colors and materials, construction details and techniques, and sizing and fit (*is that all?*).

For the sake of clarity, we will address these problem areas categorically, incorporating information regarding mounted trousers where relevant. The first category--pattern and style--will be addressed in this installment, while the remaining areas of emphasis will comprise the conclusion of this two-part feature.

★ PATTERN AND STYLE

Despite a recent report by one living history scribe that there was a specific light artillery trouser pattern, our research indicates that there were in fact only two types of trousers manufactured and issued under the auspices of the Federal government during the Civil War: *foot pattern* and *mounted pattern*.



Trousers of the first type were issued to all infantry and heavy artillery troops (along with, presumably, any ancillary arms not habitually mounted--i.e. engineers, etc.). Trousers of the second variety were issued to cavalry and light artillery troops. There is no documentary evidence of which we are aware to support the theory that there was a third distinct pattern designed exclusively for the use of light artillerymen (or any other branch of the army, for that matter).

Understand that this does not preclude contractor variations, alterations performed by individ-

ual soldiers, or isolated aberrations implemented by certain government depots. In fact, Civil War researcher Earl J. Coates

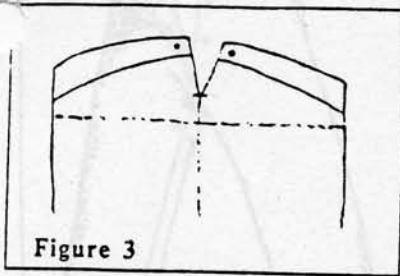


Figure 3

claims to have unearthed documentation of commanders ordering unit-wide modifications to issue garments to help foster unit integrity and enhance esprit de corps; also, it would appear that some trousers produced late in the war at the St. Louis depot sported a belted-back style of adjustment (this novelty will be addressed in greater depth in Part II of the present study).

The Worst of the Worst

Of all the bogus details incorporated into reproduction trousers, the most egregious is the arrangement of the yoke seam above the seat.

This seam is typically rendered as a deep, pronounced 'V'; and when original trousers are viewed laying seat-up on a flat surface, this interpretation seems reasonably accurate. But this is simply an illusion created by the lack of a human form to fill the pants out, for this seam is actually nothing more than a horizontal extension of the front waistband seam. (George Woodbridge committed this *faux pas* in drafting his illustrations, which presumably explains why it is being so widely perpetuated on reproduction trousers.)

The triangular shape of the fabric pieces positioned above the yoke seam causes the waistband to make an upward turn at the side seam; oblique enough, in fact, to produce a pucker in the waistband at this point (Fig. 2). When viewed on a 3-dimensional form, the yoke seam appears almost straight across the back, while the waistband rises

up in an inverted 'V' (Fig. 3). The result is that the trousers range from 2 1/2 to 3 inches higher in back. This feature--along with the inward rake of the material above the yoke--facilitates a better fit at the small of the back and prevents gapping when a jacket is worn.

Note that while the yoke seam is not always positioned in such a way as to create a direct extension of the front waistband seam (it is occasionally situated as much as several inches lower), these two seams are *always* parallel (Fig. 4).

Data collected from our examination of original specimens refute the contention that the relative placement of the yoke seam to the front waistband seam correlates to trouser size (as has been reported in a widely-read reenactor's newsletter); more likely, the varied relative location of these seams resulted from a frugal pattern cutter's efforts to economize by making maximum use of the available cloth.

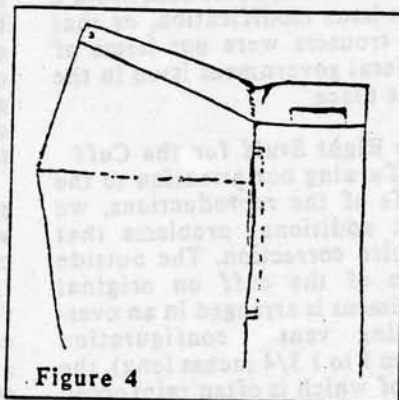


Figure 4

Another detail relating to the waistband which is blatantly incorrect on reproductions is that the waistband itself is the same width all the way around the trousers. On original examples, the waistband--which is generally 1 1/2 to 2 inches wide in front--begins to narrow at the side seam, ultimately tapering down to a scant 3/4 to 1 inch in width in the middle of the back.

Throwing Another Curve

Now that we've straightened out this business about the yoke

seam, we regretfully have to throw our own sabot into the works by revealing that there was a common variation in the arrangement of the back of the trousers that didn't incorporate a yoke seam at all!

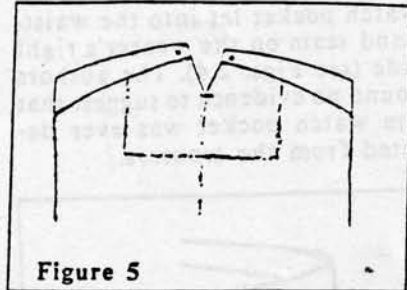


Figure 5

This unusual configuration involved insetting a fabric insert between the seat and waistband. The insert sometimes takes the shape of a square or rectangle, sometimes a pentagon (Figs. 5,6); in both cases the size and shape of the insert varies considerably, indicating that whatever its source, this pattern was far from being standardized.

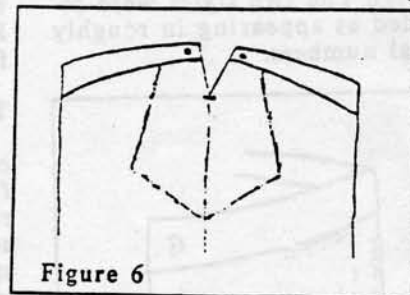


Figure 6

Little is known about this oddball pattern except that there are enough extant examples to suggest that it was something more than a seamstress' boo-boo.

Communication is a two-way street--we try to bring you interesting reading, and we sure appreciate your input. Apparently, you like what you see . . . but keep those cards and letters coming in! Address your comments to: *Civil War Cavalry Review*, P.O. Box 8263, Fort Collins, CO 80526-8003.

Pockets, Pockets, Pockets. . .

The interpretation of pocket styles, too, warrants attention. The pattern established by the Quartermaster Department and rendered official via the Schuylkill Arsenal sealed pattern pieces featured two full-size pockets let into the side seams and a watch pocket let into the waistband seam on the wearer's right side (see Figs. 2,4). The authors found no evidence to suggest that the watch pocket was ever deleted from the trousers.

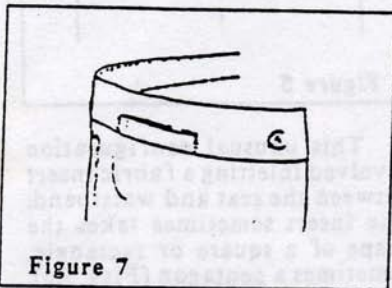


Figure 7

Two methods of finishing the watch pocket were observed, however: with and without a separate placket facing (Figs. 7, 8 respectively). The two styles were recorded as appearing in roughly equal numbers.

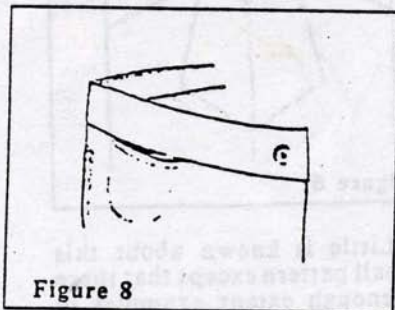


Figure 8

Regarding the style of the full-size pockets, the authors found the simple side seam style to be universal with a single glaring exception: Advanced collector and eminent historical artist Don Troiani reported that a Schuylkill Arsenal-marked example in his collection features the so-called "mule ear pockets". After a very careful inspection, Troiani insisted that this feature did not appear to be a soldier's modification, but rather that it seemed to have been incorporated into the trousers at the time of manufacture.

One possible explanation for this deviation from the norm is that "mule ear pockets" (called "French pockets" during the period, and occasionally corrupted to "frog pockets" in deference to a popular ethnic slur) were in fact specified by regulation for use on the trousers of the Marine Corps (Fig. 9).

French pockets can also be identified in many period images, but we may reasonably assume that these examples constitute a post-issue modification, or that the trousers were not items of Federal government issue in the first place.

The Right Stuff for the Cuff

Turning our attention to the cuffs of the reproductions, we find additional problems that require correction. The outside seam of the cuff on original specimens is arranged in an overlapping vent configuration (from 1 to 1 3/4 inches long), the top of which is often reinforced through the addition of a small piece of lining material.

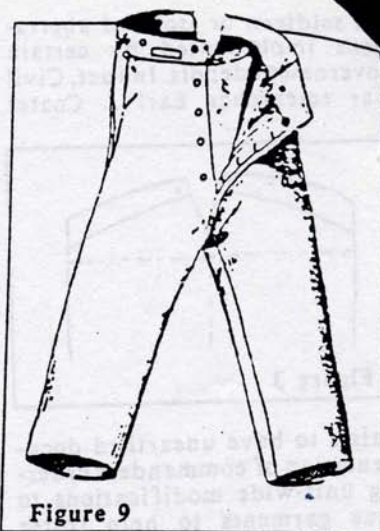


Figure 9

The cuff itself is almost always finished with a separate piece of facing material (from 7/8 to 1 5/8 inches wide). This strip is sometimes mated to the bottom edge of the trouser leg with a butted seam, though more commonly the raw edge of the trouser leg is turned up and topstitched with the facing then being whipstitched into place, all of its edges left raw. It is worthy of note that since this facing was generally cut from scrap, it is often mismatched in color to the trousers.

We feel obliged to correct a statement regarding the cuff style which appeared in another publication. In the article in question, the author professed that the front of the cuff should be contoured to follow the convex arch of the boot in what he termed "a universal feature of 19th century trousers." We were informed by Donald E. Kloster,

a curator of the Division of Armed Forces History of the Smithsonian Institution, that this gracefully-sculpted style (which, incidentally, is referred to as "sprung bottoms") is associated with a later period (ca. 1880s); further, as it would prevent the trousers from breaking over the boot top, it would render the cuff vent superfluous.

All of the original specimens we examined had square-cut cuffs with overlapping vents.

Strapping 'Em Down

As a corollary to the cuff discussion, we would be remiss if we failed to address the instep strap of the mounted pattern trousers. Some modern pundits suggest that since extant specimens of Civil War mounted trousers are almost always devoid of the button-in instep straps, this accessory must have been used only rarely. By this same logic it would follow that since none of the original trousers we examined had suspenders attached to them, these gee-gaws too must

have been but rarely employed. The authors would take issue with both statements.

Anyone who has spent much time in the saddle clad in Civil War-style trousers will attest to the utilitarian value of instep straps. And while it is true that there is limited photographic evidence of their use in the field, the length and fullness of Civil War trousers probably serve to obscure these functional appendages from view in many images.

We were unable to establish any hard and fast details regarding the physical nature of the instep straps as issued, however we did record the following conflicting facts: One pair of trousers we examined still bore its well-used instep straps, and these were simply pieces of light-weight leather dyed black on the grain side and fitted with key-hole shaped incisions to accommodate the buttons in the cuff (note that these narrow straps had only one buttonhole on each end, while the trousers have two buttons on each side).

On the other hand, Michael McAfee recounted that in a particularly well-focused image he had seen, a trooper's crossed leg revealed that his instep straps appeared to be constructed of the same material as the trousers.

Seat of the Pants

The final topic we'll cover under the Pattern and Style sub-heading is that of the reinforced seating on mounted trousers. Again, there appears to have been little standardization in terms of the shape of the seating--some examples are nicely rounded at the top while others are decidedly pointy. Also, occasionally the reinforcing rises high enough to overlap the yoke seam, though more commonly it does not.

The finishing of the edges of the reinforcing is another area where exceptions to the rule can be found. The Rule, in this case, was that a row of topstitching followed the outline of the seating, about 1/4-inch in from the edge. The edge itself was left raw and whipstitched down.

The exceptions are found on contractor-made trousers; more specifically, those which reflect a higher quality of tailoring across the board. In these instances--and again we stress their rarity--the reinforcing is applied in the usual way but the raw edges are turned under and topstitched close to the edge.

Finally, as a concession to creature comfort, the portion of the seam allowances which were under the reinforcing fabric were turned away from the inside of the garment.

Next time, we'll wind up our study by taking a closer look at colors and materials, construction details and techniques, and sizing and fit--don't miss it!

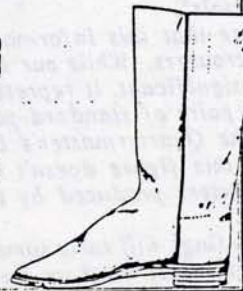
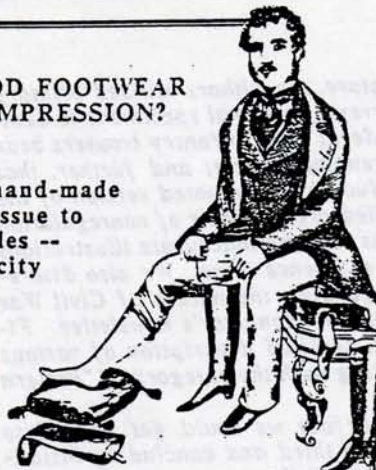
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The authors would like to extend their sincere thanks to Messrs. Coates, Kloster, McAfee, Stamatelos, and Troiani for their generous assistance in the collection of data for this article.

THE GREAT TROWSER HOAX - PART TWO

This in-depth, groundbreaking study continues to expose the shortcomings of the "authentic" reproductions through a detailed examination of the Real McCoy.



by Nick Nichols & Ken Smith

In the first installment of this feature, the authors utilized primary source material and an exhaustive survey of original specimens to demonstrate that current reproduction Federal issue infantry trousers bear only a passing resemblance to the genuine article; and further, that the pattern commonly used for reproducing the mounted version of the issue trousers is based on a misidentified pre-war pair of nonregulation styling. We then traced these problems to some inaccurate illustrations and dubious data in a highly touted reference tome. We also discredited several erroneous statements regarding the nature of Civil War trousers recently reported in a well-known reenactor's newsletter. Finally, the authors began a systematic, detailed description of various aspects of the original trousers, beginning with the category of "Pattern and Style."

As more data has come to light before we could get Part II to press, we now find it necessary to add a third and concluding installment (we promise!) to this saga. In the following pages, we'll wrap up our comments regarding the "Pattern and Style" area of focus and dive head-first into "Colors and Materials".

The authors would like to reiterate that this information relates exclusively to standard Federal issue trousers. While our sampling of approximately 50 artifacts is indeed significant, it represents but an infinitesimal fraction of the 7,756,795 pairs of standard-pattern trousers purchased from contractors by the Quartermaster's Department from May 1861 - October 1865 (and this figure doesn't include the hundreds of thousands of pairs of trousers produced by the government clothing depots!).

So while we're confident that our findings will raise some eyebrows, we're also aware that it certainly isn't the last word on the subject.

★ PATTERN AND STYLE

By 1820, the democratization of clothing in America was well under way. Responding to a growing clamor for fashionable and affordable ready-made garments, the custom tailor began to adopt certain mass-production techniques, forsaking his artistic system of individual marking for a more standardized set of measuring rules predicated on mathematical principles. Such universal methods led to the scaleable pattern drafting systems which produced the proportional garments used by the U.S. Army of the mid-19th century.

But sizing is only one aspect of pattern drafting; style is another important consideration, and one which has been largely ignored by the makers of reproduction uniforming.

The trouser pattern drafting system employed early in the century (when broadfall trousers were in vogue) involved styling the component parts in relation to a fixed reference line that corresponded to one of the garment's seams--this is called the *fall line* system. An alternate system for drafting trouser patterns has been documented in use as early as 1828. This method revolved around a central vertical reference line, hence the name the *plumb line* system.

The plumb line system lent itself well to the "peg-top" trouser style so popular with the gentlemen of the 1850s and '60s. As the predominant drafting system for fashionable civilian attire of the Civil War era, one might assume that the plumb line system was also used in designing the military trousers under discussion here. But when studying military fashion, one must delve into the generations preceding that under

consideration to isolate the source of a particular item. In reality, the pattern of the issue trousers of the 1860s represent a gradual evolution from those worn in the 1840s. Details were modified and refined, but the basic pattern remained unchanged.

It is therefore reasonable to conclude that the pattern of the Federal issue trousers, circa 1861-1865, was probably drafted using the outdated fall line system. This gives the trousers a very distinctive "look." Unfortunately, most makers of reproduction Civil War garments, whether consciously or otherwise, use the plumb line pattern drafting system, and the resulting trousers never look quite right.

The Same Old Same Old

Since the publication of Part I of this study, some new data has surfaced regarding the unusual pentagonal insert configuration which had been mistakenly identified as a "Western pattern" by some interpretive historians.

Sandra Altman of Past Patterns informed us that she had seen this interesting configuration on a pair of trousers whose provenance dates them in 1830s. And while traveling east for the Wilderness event, one of the authors examined a pair of linen trousers at the Cavalry Museum at Fort Riley, Kansas, which are believed to be circa 1830s-'40s--these too had the pentagonal insert.

Finally, Ms. Altman brought an additional source to the authors' attention: A passage from C. Willett and Phyllis Cunningham's *Handbook of English Costume in the Nineteenth Century* states:

"From c.1825 to c.1840 in woollen materials the upper part of the back of the trouser had a pentagonal insertion sometimes as much as 12" across and 13" deep; after c.1830 this was gradually reduced to half that size...."

So it would appear that this unaccounted for pattern variation was merely a carryover from earlier times; the specific reason for its appearance in Federal issue trousers remains to be discovered.

Paper Chase

When contracting with outside sources of manufacture, the Quartermaster's Department attempted to preserve the integrity of the patterns it had established by supplying the contractors (as well as the other army clothing depots) with "pattern pieces": finished examples of the garment which were used by the contractors in drafting their in-house patterns. Theoretically, the pattern pieces were not supposed to establish standards regarding workmanship or materials, but complaints registered by contractors on these grounds occasionally prompted QM officials to replace the offending pattern piece.



In 1863, a Sterling, Massachusetts tailor named Ebenezer Butterick revolutionized the garment industry when he transferred complicated tailor's plates to inexpensive paper for mass distribution. Butterick's brainchild was an instant success; paper patterns embodied a great stride toward the standardization of style, and further rendered scaled sizing easily accomplished

by the average seamstress.

Reacting to innovation with commendable alacrity, the Quartermaster's Department contracted with a Philadelphia firm in 1864 to produce lithographed paper patterns for army uniforming. Little is known about the nature of these handy guides, but we do know that they were intended to supplant the pattern piece approach to uniform standardization. The QM Dept. planned to distribute the paper patterns to all of its manufacturing depots, and logic would dictate that they would have been provided to contractors as well.

But whether they ever made it that far is debatable. The evidence is intriguing, if only circumstantial.

First, it should be noted that the data drafted for the paper patterns was concurrently slated for inclusion as "tailor's plates" in a handbook for quartermasters then under preparation. For some unknown reason, publication of this desperately needed manual was suspended, and while a complete copy of the text was recently discovered in the form of a printer's proof, the tailor's plates were nowhere to be found (the tale of this ill-fated manual will be further investigated in due course).

Curiously, not a single specimen of the paper patterns is known to exist today. As a final teaser, consider that if paper patterns--every one of them identical--had indeed been distributed to the depots, the trousers cut from them should be reasonably consistent in sizing if nothing else, yet our survey of late-war Schuylkill Arsenal examples belies this deduction.

The "Case of the Ephemeral Patterns" begs for further investigation by historical sleuths more worthy than we.

Authenticity by Design

At this point in time, we are pleased to report that one (and only one) firm is in the process of producing a historically accurate pattern for Federal issue trousers.

The authors were able to compare notes with the patternmaker to our mutual benefit, and the CWCR also received a pre-release prototype of the pattern for review (see "Sutler's Tent" in our next issue).

★ COLORS AND MATERIALS

The Revised Regulations of the Army of the United States, 1861 established the color of enlisted men's trousers as being dark blue (with the exception of light artillery units, who--for reasons that are difficult to divine--were authorized to wear sky-blue trousers at this time).

With the army expanding at a mindboggling, exponential rate, sky-blue was adopted as the new trouser color service-wide on December 16, 1861 (per G.O. 108), primarily because it was cheaper to produce. In reality, the trousers which were hastily assembled or purchased off-the-shelf during that initial frenzied period of chaotic mobilization were comprised of a wild hodge-podge of hues, fabrics and styles (see "One Leg at a Time" elsewhere in this issue). But by the time sky-blue had been identified as the trouser color standard, the supply problems had largely subsided, and for all intents and purposes sky-blue can be considered the universal color of Federal issue trousers, circa 1862-'65.

It stands to reason that the government would want a sturdy material for its army trousers; a fabric that was up to the rigors of military service. As kersey had been employed in this capacity since the middle of the pre-

vious century, the army adopted a "why fix it if it ain't broke" attitude, and kersey wool cloth continued its long reign.

To reinforce the point that sky-blue kersey was the established standard for Federal issue trousers, consider that during the course of the war, the primary U.S. Quartermaster's Depots at New York, Philadelphia and Cincinnati collectively purchased nearly 15 million yards of the stuff. Of course, this material was also used to produce greatcoats, but that's still an awful lot of sky-blue kersey!

The kersey used in the manufacture of Federal issue trousers and greatcoats was a stout, coarse woolen (as opposed to *worsted*) cloth with a twill weave, moderate nap and crisp *hand* (feel). More specifically, a recent analysis of a sample swatch of original material performed by the Philadelphia College of Textiles & Science revealed that it is a 2/2 twill (two warp yarns passing over and under two filling, or *weft*, yarns with an offset progression which creates a diagonal line, or *wale*). In its present state, the material weighs 14.37 ounces per square yard, but according to Gerald R. Marvin, Jr., of the PCT&S, its original weight would have more likely been between 15 and 16 ounces.

The raw wool used to produce the yarn from which this kersey was woven was of a utility grade possessing a high volume of *kemp* (coarse, stout hairs). The yarn itself was spun very fine (small diameter), with a tight twist. None of these features--the pre-

sence of kemp, the fine size and tight twist--are to be found in yarns commercially available in this country today.

Several elements contribute to the crisp hand of the period sky-blue kersey: These include all of the qualities of the yarn detailed above plus a dense thread count (40X34) and the use of indigo dye (the indigo molecule has the unique property of increasing the stiffness of the wool to which it is applied). Such a fabric is termed *boardy* in the textile industry, and based on our observations, the authors feel this is an apt description.

The sky-blue color of Civil War kersey was achieved through the application of organic indigo dyestuffs. Army regulations of 1857 state that the color was to be composed of "white and light blue mixed, commonly called sky-blue mixture." But with the re-adoption of sky-blue trousers in 1861, it would appear that the "mixture" had given way to a process of either dyeing the wool in the stock, yarn or piece. (In the period, textiles were cataloged by the *piece* rather than the *bolt*, the length varying with the type of fabric.) This conclusion is supported by observation of original artifacts. We may further speculate that piece dyeing was the most common method employed by army contractors, as it was by far the least expensive technique.

The use of natural indigo dyes yielded a strikingly brilliant, deep blue cloth -- substantially

continued on page 30

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TROWSER HOAX - from 12

darker than the typical commercial fabric utilized by most makers of reproduction uniforming. The color also differs in that wool dyed with natural indigo bears an almost imperceptible green cast (this attribute varies in intensity according to the pH of the dye bath).

Blue Skies in Repro-land

Much to our distress, we can categorically state that as of this writing, no reproduction sky-blue kersey even approaches the color and hand of the original.

This sad state of affairs is not too tough to grasp when one considers the difficulties involved with procuring the correct yarn, having it properly woven and dressed, and dyeing the resulting fabric with natural indigo.

The dyeing process alone constitutes a major problem, for not only is indigo relatively difficult to obtain and quite expensive, it is also a notoriously temperamental medium that re-

quires a highly-skilled craftsman to obtain satisfactory results.

As organic dye specialist Frederick H. Gerber put it in his practical handbook, *Indigo and the Antiquity of Dyeing*, "Even with . . . detailed instructions, . . . much will be determined by the skills of the indigo dyers. There are an almost infinite number of things that can go amiss . . ."

Presumably, it is the unstable nature of indigo dyeing which accounts for the wide range of hues the authors noted while surveying original trousers in the Smithsonian Institution in lots of over a dozen at a time. In addition to the shade varying in intensity, the green cast (produced by a high acid content) was equally inconsistent. Indeed, the "Woodhull Report" issued by the Office of the Surgeon General in 1868 registered the army's dissatisfaction with the situation by recommending that the government get into the textile business itself to "insure a uniformity in color . . . now so wanting."

We are aware of at least two purveyors of Civil War uniforming who claim to offer "authentic" sky-blue kersey--County Cloth (Charles Childs) and New Columbia (Joe Covais). In fact, Covais raves about his material (which, incidentally, he obtains from Childs) throughout his catalog: "New Columbia's sky-blue kersey is so true to the original fabric it's not even funny! This stuff is . . . so close that even the twist of the yarn has been duplicated."

Unfortunately, these wild claims are simply not true (with the exception, perhaps, of the phrase "it's not even funny!").

We have had a number of highly-qualified textile professionals examine the Childs/Covais kersey, and their findings are that this cloth is produced from yarn which has no kemp, and is neither as fine, nor as tightly spun as the original. This repro is notably thicker than the original kersey and also much more heavily napped; it would appear that the makers attempted to compensate for the crisp hand of the genuine article by making the copy thicker, with predictable results.

We attempted to contact both firms for clarification, and while Childs openly admitted that his product is synthetically dyed, he sidestepped questions about the twist of his yarn, thread count, and so forth. Covais was unavailable for comment (he would not return our phone calls).

All of the sky-blue kersey currently available is colored with aniline dyes, not indigo. These chemical compositions are cheaper and markedly less finicky than indigo, but they produce a blue color with a purplish hue, in contrast to the characteristic subtle green cast of indigo. Most importantly, they were not employed in the production of sky-blue kersey for the military during the period under study.

So don't be misled by marketing hype. If you're satisfied with a "reasonable facsimile" of sky-blue kersey, that's your business, but you have a right to know that that's what you're getting. X

PART III WILL APPEAR IN

THE NEXT ISSUE



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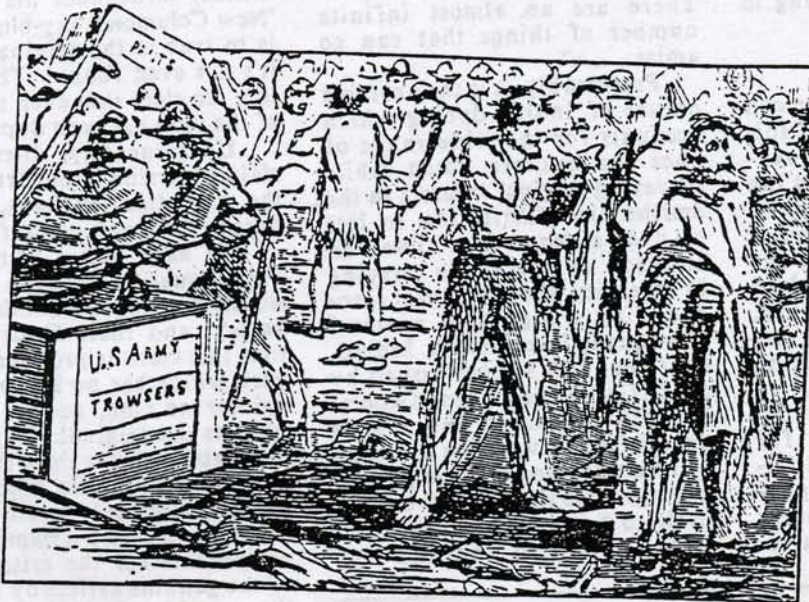
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THE GREAT TROWSER HOAX - PART THREE

With this, the final installment of the amazing trouser trilogy, we'll wrap things up by highlighting some interesting and often overlooked details.



by Nick Nichols & Ken Smith

If you've had the perseverance to stick with us through the first two installments of this study, you know we've already tackled the major categories of Pattern & Style and Colors & Materials with some eye-opening results. For our concluding offering, we will present some additional remarks on the peripheral materials and notions found in Federal issue trousers (lining materials, thread, buttons, and so forth), and then proceed to delve into the areas of Construction Details & Techniques and Sizing & Fit.

We again wish to thank the many people who so generously contributed to this research effort, and we sincerely hope that these data will trigger further investigation into this and other areas that are crying out for this type of serious evaluation.

You Know the Drill

In addition to the ubiquitous sky blue kersey, other materials used in the production of Federal issue trousers included the lining fabric, thread and buttons.

In all of the examples we surveyed, the waistband lining was unbleached cotton drill, while the pocket bags were made from either the same drill or unbleached muslin. The fly linings and the reinforcement piece commonly seen at the cuff vent were either unbleached drill or muslin, or

brown polished cotton/linen (these pieces are usually made of the same material). Occasionally, the reinforcement piece was cut from kersey scrap or even deleted altogether. Note also that the use of brown polished cotton was typically recorded on contractor-made specimens; arsenal-marked pieces rarely evinced this particular attribute.

The thread employed on the Schuylkill Arsenal-made specimens examined was a dark blue No. 30 linen (flax). This is a

multi-ply thread, and the number designation refers to the weight -- No. 30 is noticeably heavier than modern sewing thread, but lighter than "button & carpet" types. The dark blue color was achieved by dyeing the thread with a logwood substance. It is the use of this dye that is responsible for the thread-turning brown on extant original artifacts. This is borne out by the following quote from the August 1861 issue of *Scientific American* magazine:

"A regiment... lately returned after three months' service, and the blue coats of all the companies except one, seemed to be about as bright as they were on the day the men left. The exceptional company had not been in service over eighteen weeks, . . . and all coats of this company were [originally] new deep rich blue color, but they had become a dirty drab color on the shoulder and all parts that had been exposed to sun light. This cloth had been colored with logwood instead of indigo, and it was a fraud, as logwood can be applied for one-fourth the cost of indigo at the very most."

Finally, two modern studies have been published which establish through primary documentation and scientific analysis that the thread used was originally dark blue in color.

At least some of the thread used by contractors was probably the recently developed six-cord cotton machine thread which was undergoing constant improvement by various patentees during the 1860s, as one can find many contracts for such items as "Raleigh's dark blue thread," "Barbour's dark blue thread," "Dark blue patent thread," and simply, "No. 30 D.B."

It should also be noted that the *mercerization* process had been patented in 1853 by John Mercer, a calico printer. Mercerization, which is still in use today, improved the strength and luster of cotton thread, thereby rendering it more compatible with machine sewing.

Button, Button . . . Who's Got the Button?

The buttons used on issue trousers were a simple tinned iron, four-hole rimmed type. The thin metal halves of these two-piece buttons were die-stamped, with a cardboard core sandwiched in between.

One occasionally sees a japanned button of this type on issue trousers, as well as a similar variety (japanned or plain) with a distinctive stippled design on the face, but according to Donald Kloster of the Smithsonian Institution, these variants were probably replacements and very likely post-date the period. Such buttons, it should be noted, were indeed in general use on civilian clothing of the period, and might have been included in soldiers' housewives (sewing kits).

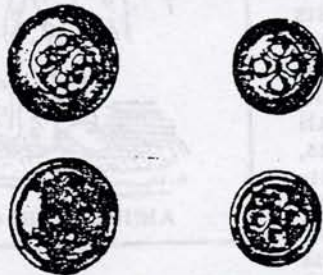
The cast pewter version of the issue button which has been widely reproduced and is commonly seen on repro trousers actually pre-dates the Civil War period, and had been supplanted by the stamped tin button by the 1860s.

The authors have documented an unusual phenomenon regarding the placement of suspender buttons on the trousers: Generally speaking, trousers of the foot pattern are fitted with four buttons to accommodate a rather simple style of braces (that is, one button to secure each strap end). Mounted trousers, on the other hand, almost always have *six* suspender buttons, apparently arranged to accept braces with an inverted "Y" setup on the front straps. (Both styles of suspenders were common in the period.)

This would seem to imply that the QM Department expected the horse soldiers to utilize a different type of braces than their dis-

mounted brethren, but as this practical accessory of dress did not become an item of issue until 1883 (which in itself is a baffling mystery), we are at a loss to explain this unusual set of circumstances. Perhaps there's a clue in the following excerpt from Charles Goodyear's *Gum Elastic and Its Varieties* (1855):

"This [suspenders] is one of those articles with which fashion has so much to do, and the choice among the different kinds depends so much upon the fancy of the wearer, as well as upon the real utility of the article, that it may be considered presumptuous in anyone to assert absolutely what kind is best."



The final item of consideration under this category is the material used in conjunction with the eyelets in the rear of the waistband to effect adjustment. Extant samples of this material are rare, but the few we were fortunate enough to document were quite similar: a medium-weight, two-ply twine of linen or possibly an inexpensive fiber such as sisal.

❖ CONSTRUCTION DETAILS & TECHNIQUES

For reasons which are examined in depth in "One Leg at a Time" (Vol. III, No. 2), all of the trousers (and other uniform parts) produced by the Clothing Establishment at Schuylkill Arsenal were entirely hand sewn --(858,822 pair in fiscal year 1865 alone!). Buttonholes and eyelets, too, were

hand stitched, regardless of the place of manufacture.

Examples produced by depots other than Philadelphia, as well as all those fabricated by contractors, revealed extensive use of the sewing machine. Machine-sewn areas are, however, generally confined to primary construction seams and some topstitching, with all finishing and detail work still performed by hand. For instance, even in those specimens which exhibited basic machine fabrication, pockets, linings and facings were all sewn by hand. Of all the original trousers surveyed, none revealed waistband or fly linings sewn in place by machine.

Where raw edges were in evidence (pocket/cuff/fly facings, etc.), they were almost always secured by small, tight hand-worked slipstitching. As we have already established, this method of finishing was the norm for the reinforced seating on mounted trousers, and this fact is supported by the following comment drawn from the Woodhull Report:

"In the garment as issued the saddle pieces [i.e. reinforced seating] should be turned in, and not left with the ragged edge which, with the present quality of cloth, rapidly frays out requiring the men to have them re-sewn at their own expense."

The quality of the stitching fluctuates rather wildly, and while most hand-worked running stitches are so fine as to be difficult to discern from those produced by machine, the actual machine-made running stitches are somewhat crudely executed.

Another construction technique which is rarely incorporated into reproduction garments, though frequently seen on original specimens, is that of "piecing."

As a matter of economy, it was the cutter's job to position the pattern pieces on the cloth in such a way as to minimize wastage. The result was that the diagonal wale of the kersey rarely lined up on contiguous pieces of the garment. Occasionally, when he couldn't quite get a particular

part out of the available cloth, the cutter would simply leave it to the seamstress to utilize scraps to "piece" in the missing material.

This technique was generally reserved for parts which reside in inconspicuous areas, such as facings or the fork (junction of the crotch seams), but it was also employed from time to time to remedy cutting problems in such highly visible places as the upper area of the seating on mounted trousers and the lower portion of the trouser leg when this piece was found to be several inches short. The offset positioning of the yoke seam on some trousers (see Part I, Figure 4) is actually a modified form of piecing.

Variations on a Theme

The variation of construction details on Federal issue trousers is virtually endless. This is not particularly difficult to grasp when one considers that in its glory days, the Schuylkill Arsenal alone employed between 8,000 and 10,000 seamstresses! Keep in mind that these women did all of their sewing in their homes, with no direct supervision whatsoever. And based on the constant demand for basic items of uniforming, it would be a gross sewing error indeed that would prevent an inspector from passing a completed pair of trousers.

To give you some idea of the kinds of variations we encountered during the course of our investigation, we will outline a few of them for you; we could very easily draft an article as long as this one exclusively on detail variations!

Our first example involves the shape of the corners at the ends of the waistband. Usually these are squared off, however, they are not infrequently observed being rounded (we have noted rounded corners on Schuylkill Arsenal specimens as well as those produced by contractors).

The placement of the waistband button is another area where a common variation exists. On numerous examples, this button and its corresponding buttonhole are situated below the midpoint,

leaving the waistband divided into roughly 2/3 to 1/3 proportions. Oddly, this off-center placement does not appear to be arbitrary, the result of a sloppy seamstress. Rather, it is consistent enough from specimen to specimen to indicate a conscious choice by the maker. We can only speculate on why such placement would be thought to be desirable.



A N°1 Man in a N° 4 Suit.

The number of fly buttons, too, varies. Generally, there are five (which is in keeping with the published list of materials), but in a few cases, we noted the presence of a four-button fly (and there appears to be no relationship between this number and the size of the trousers).

Other variations are clearly related to inattention to detail, or a contractor's attempt to economize. For example, on certain examples, the edges of the fly facing were left unfinished. Such raw edges were in fact the norm on the ends of the watch pocket facing, and we even examined one pair of trousers in which the top edge of the waistband had been left raw!

Some details are conspicuous by their absence: Occasionally, the reinforcement facing normally placed behind the rear vent is missing, and this also applies to

the facing in the cuff (both are exceedingly rare).

As a final example of detail variations, we noted that nearly all of the trousers surveyed devoid of the tailor's tacks commonly placed between the buttonholes on the fly facing of civilian trousers to prevent puckering. We say *nearly* all because one pair did indeed have these tacks, and another actually had a horizontal running stitch across the full width of the fly facing between each buttonhole.

If there's a lesson to be learned from the great diversity of detail variations encountered in our survey sampling, it's that the historian must never say "never!"

❖ SIZING AND FIT

According to the 1861 edition of the U.S. Army *Regulations*, "All trowsers [are] to be made loose, without plaits, and to spread well over the boot; to be re-enforced for all enlisted mounted men."

It might have been purely coincidental that baggy breeches were all the rage with fashion-conscious gentlemen of the period for they were also eminently practical for the military man. Not only did they offer a capacious environment for the performance of fatigue duties, they also made it a relatively simple task for the government to fit a wide range of anatomies with only four proportional sizes (quartermasters must have *loved* the innovative proportional pattern drafting systems!).

Issue trousers were manufactured in sizes 1 through 4, each category theoretically corresponding to a predetermined waist and inseam measurement ("predetermined", that is, by means of the pattern pieces provided by Schuylkill Arsenal). In reality, our investigation revealed that no two examples bearing the same size reference markings registered matching dimensions!

Some of these inconsistencies can be chalked up to human error, but others resulted from intentional mismarking by profit-conscious contractors bent on fraud (this theme is further de-

veloped in "One Leg at a Time"). Finally, as no standards or specifications of this type were published servicewide during the war, there is really no accurate way to determine what constituted a size 1, size 2 and so on.

Erratic quality and inaccurate sizing of clothing were a constant source of aggravation for Col. Alexander J. Perry, the officer in charge of the QM Department's Second Division (responsible for overseeing the manufacture and issue of clothing and equipage). On October 19, 1865, Perry delivered a sober analysis of the situation to Gen. Meigs, offering some commonsense recommendations as well:

"The experience of the past war has developed the fact that exact uniformity of texture and quality of material and articles are in some respects not altogether practicable. The department will, however, from that experience, be enabled to arrive at exactly what the markets of the country can afford, and thereby determine such standards as are attainable by the majority of dealers, and at the same time equal to the requirements of the [army]. I recommend such modifications where they are necessary."

Apparently, Meigs was quite cognizant of the situation described by Col. Perry long before receiving this report; indeed, Meigs had placed Perry in charge of the Clothing Establishment at Schuylkill Arsenal over a year earlier to allow Col. George H. Crosman to focus his attention on one potential solution to the problem. In his annual report to the Secretary of War for fiscal year 1865, Meigs detailed the actions he had taken thus:

"Bvt. Brig. Gen. G.H. Crosman, who had been on duty in Philadelphia from the 30th of August, 1861, to the 24th of August, 1864, in charge of the Philadelphia depot and the providing of clothing and equipage, was then temporarily relieved by Col. A.J. Perry, chief of the division of clothing

and equipage. [Crosman] has since been engaged in preparing a manual of the service of the Quartermaster's Department, intended to fix the forms, sizes, and construction and qualities of the various articles of equipment which are supplied by the Quartermaster's Department, in order that the experience gained in all these details may not be lost, but may be at hand to instruct the officers of the department in future operations. The records and details of these models should be preserved."

Meigs' admonition regarding the importance of preserving these "records and details" is somewhat ironic, for while Crosman did in fact complete his assignment, the manual was never

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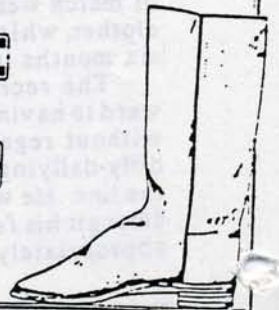
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published. The cancellation of this project remains a mystery, but fortunately a printer's proof of Crosman's *Quartermaster's Manual, 1865* somehow survived and was miraculously discovered in the manuscript holdings of the Smithsonian Institution some years ago. The authors are deeply indebted to Donald Kloster for bringing this invaluable reference to their attention and sharing relevant excerpts from the only known copy with them.

A table drawn from the *Quartermaster's Manual* are reproduced here for your interest. But we must caution the reader against overestimating the significance of these data. The figures can only be viewed as an ideal; they tell us that the Quartermaster's Department had established what it felt to be appropriate size parameters for trousers by late 1864, but as these standards were never published, they do not represent the sizes one observes in extant artifacts.

One final tidbit which seems to insinuate that Crosman's efforts came to naught is the following excerpt from the scathing postwar Woodhull Report: "The same article [of clothing] appears to vary in character at different posts Equally prominent is the shameful carelessness in the cut and make. It has even been suggested that the original standards have been lost, so far do the articles issued depart [from them]."

Fit To Be Tied

After detailing the contents of a soldier's marching kit in his practical handbook, *The Army Officer's Companion* (1862), West Point instructor Lt. William P. Craighill advised his readers that "All these [clothes] must be new, full, and well made. A fortnight of march wears out tightly fitting clothes, which would have lasted six months if made fuller."

The recruit could look forward to having his uniform issued without regard to his size; such dilly-dallying would only hold up the line. He was expected to swap amongst his fellows to acquire the appropriately sized garments.

Unfortunately, there's more than a grain of truth to the old saw that after the dust had settled, some poor little No. 1 man was destined to be holding a No. 4 suit, while his six foot tall comrade who had also secured garments marked No.4 found his contractor-made duds to be noticeably small on him!

Once he had managed to procure items whose single-digit size code approximated his own measurements, the soldier was forced -- indeed, he was *expected* -- to use his own ingenuity to obtain a better fit. According to Gen. August V. Kautz (*Customs of Service for Non-Commissioned Officers and Soldiers, 1864*):

"[The soldier] is provided with clothing, which he is expected to adapt to the best advantage to improve his military appearance, by the best means in his power. There is usually a tailor or two in the company or among the recruits," Kautz sagely advised, "who is excused from all duty possible, to fit soldiers' clothing for a moderate compensation."

This casual system of leaving men to the devices of the tailor in their unit (should they be lucky enough to have such a professional within their ranks) was generally a dismal failure. The Woodhull Report treated this subject at some length:

"Another point [of concern] is the regulation of the duties and charges of the company tailors. It is advised that they be employed in the same manner that the company saddlers and . . . blacksmiths now are, and inasmuch as the government professes to clothe the soldier, it

should do so in a complete manner. It is a species of fraud to compel him to adapt his uniform at his own expense. In practice, . . . the charges of [the company tailors] amount to extortion, form a very serious drain on resources of their comrades. Brevet Lieutenant Colonel Irwin, at Fort Riley, writes, 'the extravagant charges permitted to be made by company tailors -- three to five dollars for altering a pair of pantaloons, . . . should be peremptorily prohibited as it deters most of the men from having their clothing fitted' Assistant Surgeon M.K. Taylor. . . writes, 'the . . . expense to the men for these alterations has amounted . . . to five or six dollars. I speak of no fancy fitting, but of a necessary change to make the clothing fit decently and give the necessary soldierly appearance.'

If the Trousers Fit . . .

So the Civil War soldier was issued a pair of trousers in size 1,2,3 or 4, the consistency of their actual dimensions being far from reliable.

And while a No. 2 man would consider himself lucky to obtain a No. 2 pair of pants, on further investigation he might discover that he'd have been better off with the No. 3s he was issued in the first place!

This serio-comic disparity was in fact the norm and resulted in the average soldier being decked out in rather ill-fitting garments, to say the least. Oh, he was expected to "adapt" them "by the best means in his power" alright, but since this equated to subjecting himself to the semiofficially

continued on back cover

TROUSERS FOR CAVALRY AND FOOTMEN.—SIZES.

	No. 1.	No. 2.	No. 3.	No. 4.
Length of trousers,	41½ in.	42½ in.	43½ in.	44½ in.
do. leg seam,	31 "	32 "	33 "	34 "
Width of waist,	32 "	34 "	36 "	38 "
do. bottom,	20 "	20 "	20 "	20 "

TROWSER HOAX - from 16

sanctioned highway robbery perpetrated by the company tailor, he more often than not accepted his lot and wore his uniform sans alterations.

The Celluloid Hero Syndrome

Though it would simplify his task considerably, to our knowledge no maker of reproduction uniforms currently offers Federal issue trousers in four fixed sizes. Nor do many so-called "interpretive historians" hit the campaign trail sporting poorly-fitting attire.

This is completely unauthentic, but as long as there's money to be made selling bogus goods, you can't seriously expect the sutlers to upgrade their products. If you pay lip service to authenticity, but buy reproduction goods to satisfy your ego rather than your commitment to quality living history, then you have no one to blame but yourself for looking like a Celluloid Hero. The only way to effect a change in this vicious circle is to back up your demand for authentic gear by patronizing the folks who offer it.

Boys, you gotta hit 'em where they live!

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★ ★ ★

As co-authors of "The Great Trowser Hoax" article, we found that the revelations produced by our research had left us feeling dissatisfied with our reproduction of Federal trowers, and we were determined to find a way to "build a better mousetrap."

Ideally, we wanted trowers drafted on a correct pattern using museum-quality kersey assembled with the right thread, buttons and so forth. Thus was launched a quest that involved nearly two years of investigation, during which time we accumulated numerous period texts on spinning, weaving and dyeing techniques, and interviewed a plethora of dedicated craftsmen from coast to coast to determine the viability of such a project.

After assimilating the data collected from period sources, hundreds of letters, telephone conversations, personal interviews and several trips to the Smithsonian Institution, we were able to nail down sources for an outstanding pattern (which is reviewed below), the stamped, tinned iron buttons, and the logwood-dyed wet-spun linen thread; but the primary ingredient -- sky blue kersey cloth of the proper thread count, weave, color, texture and hand -- continued to elude us.

As our research continued, leads multiplied like a virus in heat, and we doggedly pursued every last one of 'em. We were ultimately persuaded that the use of natural indigo dye would be a hit-or-miss proposition at best, and that even if we were success-

ful in obtaining the color we were after, the tradeoff would be a price tag so high it'd give us a nosebleed! As our spirits sank, our ever-broadening base of sources rubbed salt into the wound by revealing that synthetic "indigo" substitutes do not produce the color we were seeking.

The situation looked grim, and frankly, we were about to throw in the towel, for the inaccurate color of all repro sky blue kersey was a critical deficiency we were determined to correct.

About this time, one weaver we were consulting queried, "If your goal is to produce an accurate end-product, why are you so dead set against using synthetic dyes to achieve the correct color?" We patiently explained that synthetic "indigo" dyes produce a purplish cast rather than the subtle greenish hue characteristic of natural indigo-dyed kersey, and then babbled on about our unswerving commitment to Truth, Justice and the American Way.

Our problem, she said, was one of semantics; the color we desired could indeed be obtained synthetically, it just wouldn't be identified as "indigo" in the lexicon of today's textile industry.

Right. To say we were skeptical would be the height of understatement. But after comparing several hanks of woolen yarn to original sky blue kersey swatches and modern hand-dyed natural indigo yarn samples for color comparison, we finally narrowed it down and she wove up a sample that really knocked us out!

But there's more: Our weaver also noted that she could clearly see where the repro swatches we'd

shown her missed the boat regarding the weave, weight, hand and finish of the original cloth. She said she had foreign sources for yarn of the correct gauge, twist and kemp content that's even produced by the 19th-century mule spinning technique (and this factor *does* affect the hand of the cloth). She was confident that utilizing this yarn along with the data and original examples we had provided, she could create a reproduction that would address each of these problem areas to our satisfaction. She was right.

Eureka! The icing on the cake is that our kersey is being woven on an honest-to-goodness 19th-century powered loom, just like the original stuff. Folks, this here's *good* kersey!

The result of this considerable effort is a "Federal Issue Trowser Kit" currently being offered by Nichols, Smith & C° (a subsidiary of Heartland House) that comes with everything you need to assemble a pair of sky blue trousers, mounted or foot: the finest sky blue kersey produced in this century, cotton drill lining material (marked with the appropriate maker's and inspector's stamps), No. 30 logwood-dyed linen thread, stamped tin buttons in two sizes -- even the correct twine for the waist adjustment tie! The kit will also include a pattern and a detailed monograph on Federal issue trousers for your reference library based on "The Great Trowser Hoax" and some supplemental information.

You have two choices of maker: William Deering of Portland, Maine (a major contractor who produced uniform items under contract with government depots in both the east and the west), and the Schuylkill Arsenal of Philadelphia.

The original Deering trousers evinced extensive machine work, while our SA kit is being offered for the purist who wants to sew his trousers entirely by hand (as all examples produced by this depot were).

Our outstanding sky blue kersey will also be available as bulk yard goods for those of you who also want to upgrade your great-

coats, canteen covers, etc. -- or tackle a vest, a pair of zouave breeches, a Veteran's Reserve Corps' jacket, a Mexican War roundabout, or . . .

For pricing and ordering information, send a self-addressed stamped envelope to: Nichols, Smith & C°, P.O. Box 8263, Ft. Collins, CO 80526-8003.

- REVIEWS -

During the course of our trouser research we were delighted to discover that Sandra Altman of Past Patterns was coincidentally well along on a project to add Federal issue trousers to her growing line of period fashion patterns for men and women.



"Authentic" is probably the most abused word in the jargon of the living history/reenactment community, so it is particularly refreshing when one finds a purveyor of period possibles with the beef to back it up. As this applies to Past Patterns, we found that the firm really lives up to its motto: "The Historic Pattern Company Devoted to Accuracy."

Every garment is carefully researched to acquire data regarding detail variations, construction techniques, common materials, period of use, and so forth, and the resulting pattern is taken directly from an existing artifact to insure accuracy. This is not a "representative" or "generic"

pattern, it is a pattern which will produce a facsimile of a specific garment. No ifs, ands, or buts about it -- I like that.

Sandra graciously shared data with the authors of "The Great Trowser Hoax," and they were in turn more than willing to offer their assistance in fine-tuning her pattern based on their research. The result of this collaboration is a pattern for both mounted and foot trousers of undeniable historical integrity.

Authenticity in a pattern is a fine thing, but it's all for naught if the pattern isn't easy to decipher and simple to work with. Fortunately, Sandra is a thorough-going professional with tons of experience in period pattern drafting techniques. Over the years, she has developed an excellent method of presenting a pattern in such a way that even the rank amateur seamstress/tailor (How many hands did I see raised? I know mine was!) can suss it out with minimal effort.

Rather than facing the shock of opening an envelope and being confronted by nothing more than those nasty gigantic tissue sheets with the crazy little lines running all over them, the purchaser of one of Past Patterns' offerings will find one or more additional sheets that provide a good deal of information designed to simplify his or her life considerably.

In keeping with the company's proven formula, each pattern is accompanied by extensive background notes regarding the garment in general, and the pattern subject specimen specifically. This historical background material is footnoted, and augmented by a supplemental reading list; it would seem that Sandra clearly grasps that critical caveat of living history that the more you know about the period you interpret, the greater your desire to improve the accuracy of your "personal impression".

The historical notes included with this trouser pattern were written by Robert Huntoon; they are very accurate and informative, and provide an excellent companion piece to "The Great Trowser Hoax."

In addition to the historical notes, this pattern offers guidelines on the appropriate fabric and notions, and even includes an illustrated tutorial explaining every type of hand stitch employed in the construction of the particular garment (including handworked buttonholes). This background information makes one feel a bit more at ease with the garment in a conceptual sense, and renders the actual assembly much less intimidating.

Finally, the blow-by-blow construction notes are simply written and easy to understand, while the accompanying illustrations, too, are decidedly "user-friendly".

Before Sandra puts the final stamp of approval on any of her patterns, she retains a seamstress of average talent to assemble a garment from scratch using the pattern, so she can identify any rough spots that need ironing out (in fact, she prefers it if the "testers" have no previous experience whatsoever with the particular type of garment in question). To insure objectivity, these guinea pigs are never drawn from the personal friends pool.

Getting down to brass tacks, I can report that I hammered out a pair of mounted trousers using an early prototype of this pattern and only drooled on myself a couple of times during the entire process. This is no reflection on the functional utility of the product; it's just that my base primordial instincts seem to bubble to the surface when I try to construct a garment from a pattern. On the contrary, I think this is probably the first time I haven't ruined untold yards of material

and hurled the offending pattern into the tar pits of my trash receptacle to sooth my fevered, slightly bulging brow. (Gad, imagine what will happen when I discover fire!)

I found the notes regarding soldiers' field modifications to the basic issue trouser configuration particularly interesting, but if you want to alter your side-seam pockets into the so-called frog type (for example), I would recommend that you first complete the trousers *as issued*, then shanghai someone other than the individual who performed the basic assembly into undertaking the desired alteration -- this will yield a far more believable-looking field mod.

I would also like to note that the original trousers were only made in four sizes, and this pattern offers you a chart to help you determine which one of these most closely corresponds to your actual measurements. I would strongly advise you to stick with one of the legitimate four issue sizes, 'cause that's what *they* had to do. Don't take the easy way out, force yourself to deal with the lousy fit by using your own ingenuity; after all, that's what living history's all about!

(Note: If you're of average height and build, you'll probably find that the numbered size necessary to accommodate your inseam length will yield a pair of trousers with a great deal of surplus room in the waist -- that's OK, this was a common complaint with the originals, too!)

If you simply *must* have trousers that fit you lots better than any originals ever did (or if you

are just too darned tall to come close to a size 4), then you will be happy to know that this package also includes a unique (in fact, *copyrighted*) Custom Draft system which allows you to size the pattern up or down to your heart's content.

This bonus feature is based on the innovative 19th-century proportional pattern drafting systems and should therefore work like a charm, but as this reviewer stuck to constructing his trousers "by the numbers," he has no hands-on experience with the Custom Draft system and therefore cannot render an honest evaluation of it.

In the final analysis, we judge this to be an excellent product that will serve you well, no matter what your sewing skill level. In fact, we were so impressed with the quality and authenticity of the Past Patterns Federal Issue Trowser pattern, we've selected it for inclusion in the aforementioned Trowser Kit.

We've also made arrangements with Past Patterns to handle retail sales of this pattern as a stand-alone product.

The Federal Issue Trowser pattern was still in production when this issue of the *CWCR* went to press, and the price had not yet been established; we should be able to publish this information in our next issue. X

Nick Nichols

Send products for review to: Suttler's Tent, 3102 Sumac St., Fort Collins, CO 80526. Products will be returned if accompanied by sufficient return postage.