The Union "Army Standard Size and Make" Shirt

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AMONG the relatively sparse quantity of Union soldiers' clothing that has somehow survived the one hundred and thirty years since the end of the Civil War, undergarments (including shirts, drawers and socks), are the rarest of all—for reasons obvious to anyone who has given the matter even cursory thought. Undergarments (FIG 1) were the most quickly used-up articles of the common soldiers' limited wardrobe. The routine exertions of marching under loads, digging trenches, felling trees, chopping and hauling firewood, building huts, and countless other sweaty tasks that made up the soldier's exhausting day visited themselves first, and worst, on the humble undergarment. Shirts, drawers, and socks all functioned as a highly absorbent, lightweight buffer between the soldier proper and the heavy wool, jean cloths and satinettes that comprised the soldiers' outer uniform. They were soaked through with perspiration, grossly stained by soldiers' grime, infested by lice, and by necessity or soldierly indifference, they were often worn until worn-out or rendered so repulsive that a new, or at least fresher, replacement became imperative. In the field, opportunities for laundering were infrequent and far from satisfactory; a quick rinse in a muddy creek or stint in a boiling camp kettle often had to suffice. Cheap materials, hurried making, hard wear, and the chronic rancidity of the typical undergarment contributed to an exceptionally high attrition rate for this echelon of soldiers' clothing. Those soldiers who were inclined to save some of their garb and gear as mementos of their war experiences seldom retained their shirts, drawers, or socks. Such anonymous and undistinguished items were generally omitted from a veteran's notions of resonant keepsakes; they were seldom retained as an agent of memory. By contrast, soldiers' caps or uniform coats conveyed a distinct military identity evident in fabric, cut, and fittings; they held immediate appeal as war relics, and as a consequence were the most commonly saved of uniform components.

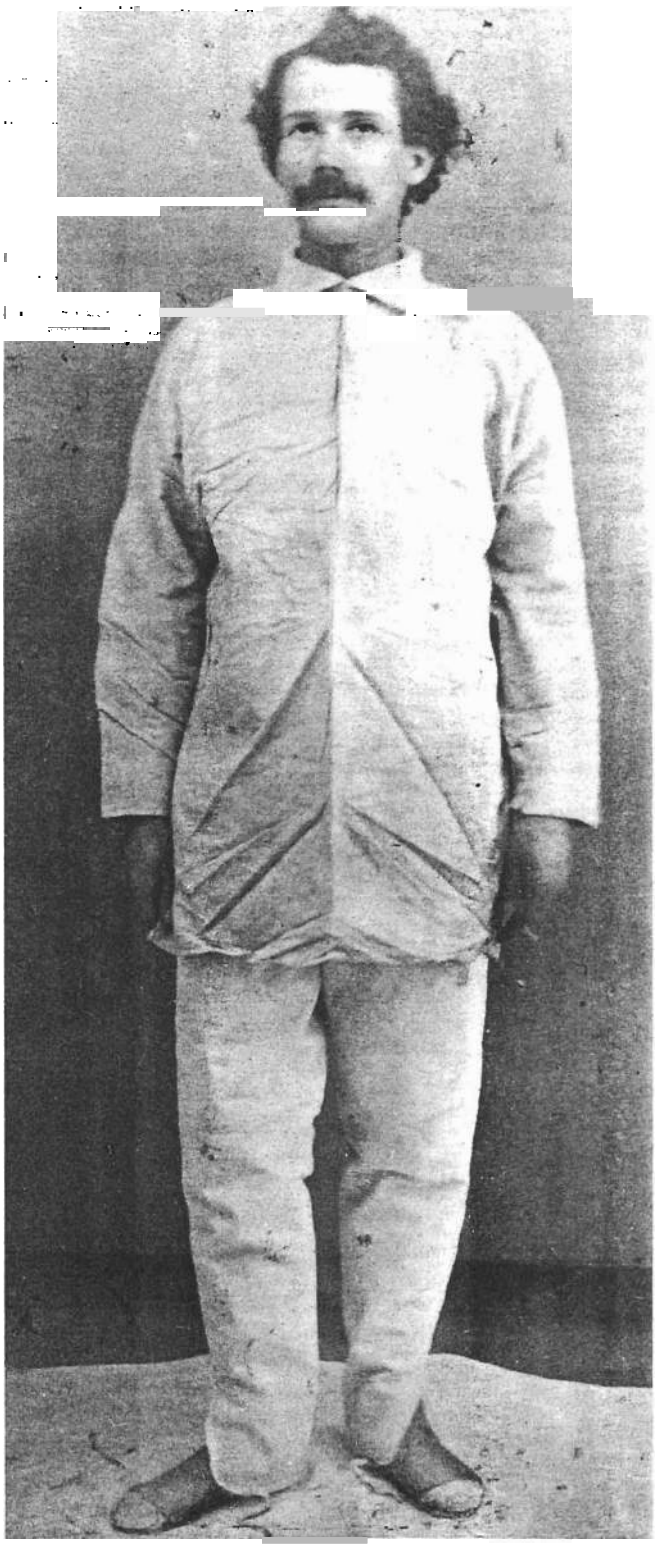


FIG 1. Shirt, drawers and stockings, old pattern, prior to 1872. "The shirts, drawers and stockings are worst of all, past comment and a scarecrow would play high dandy to any man dressed in them alone, while the rebels would take him for the Yankee devil himself. The prime trouble is that the clothing is all 'theoretical regulation', while the soldiers had practical, and very many different styles of fathers." Lt. S. Millett Thompson, 13th New Hampshire Volunteers.

Quartermaster Department Clothing Photographs, ca. 1872. Courtesy Smithsonian Institution (#50159).

There were, of course, exceptions. Recalling in postwar memoirs his "war fever" enlistment and transition from a schoolboy into a soldier, drummer Harry Kiefer of the 150th Pennsylvania Volunteers wrote of his unit's first clothing issue at Camp Curtin, Harrisburg, Pennsylvania, in the fall of 1862:

> **As we now belonged to Uncle Sam, it was to be expected that he would next proceed to clothe us... Each man received a pair of pantaloons, a coat, cap, overcoat, shoes, blanket and underwear, of which latter the shirt was—well, a revelation to most of us both as to size, and shape and material. It was so rough, that no living mortal, probably, could wear it, except perhaps one who wished to do penance by wearing a hair shirt. Mine was promptly sent home along with my citizen's clothes, with the request that it be kept as a sort of heir-loom in the family for future generations to wonder at.[1]**

Of the shirts that might have been brought home by the veteran for sentimental or practical purposes, many were subsequently used up as work clothes around the farm or shop, eventually making their way to extinction in the household rag box. By 1875, the stockpile of some 1.7 million shirts in Union clothing depots at the war's end had been exhausted through issuances to the postwar regular army, state militias and the Freedman's Bureau and by public auctions of outdated army clothing.[2] It does not seem that many shirts, if any, made it into the stocks of military surplus dealers as was the case, quite fortunately, with quantities of Union-issue forage caps, uniform (dress) hats, overcoats and uniform jackets acquired for commercial resale by the firms of Francis Bannerman, W. Stokes Kirk, White's and other late nineteenth-century dealers in military surplus. These early purveyors of military antiquities passed through their sales roomsmany of the Civil War uniforms, arms, and equipments that form private collections today. As a consequence, the once-common shirt of the Union soldier is, today, astonishingly uncommon; there are very few of them for this future generation to "wonder at."

Even in the absence of a formal survey listing every known example, a casual census suggests there are probably only several dozen surviving shirts with solid provenance of Civil War soldier-use in the hundreds of museums, historical societies and private collections around the country. Among that thin population are Union-issue shirts, state-issue shirts provided in unknown variety and quantity to their respective units, and those purchased by the soldier or gotten from a local aid society or through an entreaty to a loved one at home. The purpose of this article is to provide a broad context for the manufacture and issuance of "the army standard size and make" shirt, and to describe in detail the best surviving example of one.

The 1865 Quartermaster's report stated that more than 11 million shirts had been purchased by Union clothing depots since May 1861.[3] These shirts were generally categorized under one of two major fabric types, either "knit," or "flannel." Flannel shirts were usually further noted as being either white or gray in color. In four years of war, the principal U. S. clothing depots located in New York, Philadelphia, and Cincinnati purchased more than 2.5 million knit shirts from twenty-nine different contractors through at least sixty-five different contracts. The first let for knit shirts were dated in August 1862. Contract language describing these shirts refers to them as "gray knit," "mixed knit," "with collars," or "to be made like sample except that they are to have cuffs instead of elastic wrist bands." Several knit shirt contracts required a weight of "11 pounds per dozen" or, similarly, "each to weigh 14 ounces."[4] Beyond these few meager clues in the contracts, little is known about the Union-issue knit shirt. Of the millions of knit shirts bought by the Quartermaster Department and issued to Union soldiers, not a single shirt of this type is known to survive. The knitting pattern probably resembled that found on machine-knit Civil War officers' sashes of silk and non-commissioned officers' sashes of wool. Over the course of the War, the Quartermaster Department awarded knit shirt contracts ranging in cost from as little as sixty-nine cents per shirt to as much as $2.34 each. Of the twenty-nine knitting manufactories supplying shirts to the army, most were located in and around Northern industrial centers with established concentrations of capital to underwrite their setup and operation. Fifteen knitting contractors were located in New York City, with another seven in Albany, New York, and environs. Two were located in Philadelphia, Pennsylvania, with one each in Trenton, New Jersey; New Britain, Connecticut; Boston, Massachusetts and Bennington, Vermont.[5] Knit good contractors producing for the army employed new, expensive, power knitting machines developed in the 1850s with capacity for large volume production required to fulfill goveniment shirt contracts.

Corporal Henry A. Cornwall, Company D, 20th Connecticut Volunteers, favored flannel shirts made at home over government shirts and wrote home in the hopes of getting another one:

> **In the Field Before Atlanta, Aug. 1, 1864**
>
> **My dear Parents**
>
> **The shins you made and sent me last fall are getting pretty nearly worn out. If you think best I wish you would make and send another like those you sent... please make of blue flannel the same size as the other other *[sic]* ones. Flannel shins are much better than those we can draw from U. S. and warmer. I find them first rate after a long march on a hot day when we lie down on the ground with clothes wet through with sweat or rain. You need send but one for out of the two I now have I can make one.[6]**

When mentioned at all in period letters, diaries or later histories, issue shirts were spoken of in derogatory terms. John D. Billings, of the 10th Massachusetts Battery, wrote in his classic, ***Hard Tack and Coffee***: "These flannels [shirts and drawers] ... from the Government stores were often as rough to the skin as coarse sandpaper, which they somewhat resembled in color." Lieutenant S. Millett Thompson, of the Thirteenth New Hampshire Volunteers, published one of the most caustic accounts of government-issue clothing (perhaps a bit tongue-in-cheek), in which he gave the shirt special mention:

> **The appearance of a regiment which has just received a new outfit of clothing, cap and shoes is most woefully ridiculous. Manufacturers of army clothing stretch a man out on a sheet of paper, mark around him with**

chalk, and cut the paper out for a pattern... [A]ll the clothing, packed like waste paper in huge boxes, comes out wrinkled, creased, puckered, shriveled, twisted, cram-sided and out of joint enough to make a Jew old clo' dealer blush with shame... The poor men, conscious of their grotesque appearance in the general rig, go about looking aslant, downcast, beseeching, shame-faced, and appearing as much to say: 'We know we look bad—like blue chimpanzees and idiotic baboons; but please don't laugh at us we are Union soldiers, we cannot dress any better.' The shirts, drawer s and stockings are worst of all, past comment, and a scarecrow would play high dandy to any man dressed in them alone, while the rebels would take him for the Yankee devil himself. The prime trouble is that the clothing is all 'theoretical regulation,' while the soldiers had practical, and very many different styles of fathers.[8]

Army regulations authorized enlisted men to draw three shirts per year.[9] The quartermaster(s) of each regiment maintained detailed clothing account books, ledger book-fashion, which documented by the enlisted soldiers' signatures and quartermaster(s) signature as witness every uniform item (and current monetary value) drawn from quartermaster stores. An annual reconciliation of each account weighed the total value of quartermaster issues against that soldier's clothing allowance. Overdrawn soldiers experienced stoppages to their pay. Soldiers who drew less than their entitlement received the difference in cash. Prices for shirts and all other government clothing and equipage receipted to the soldier tended to go up without much advance warning in the course of the war. Imagine the shock, for example, of Privates Martin Wetherbee and James Terrell of the 83rd Pennsylvania Volunteers who had each drawn several shirts at different times throughout 1863 with a "money value" of 88 cents each only to find upon drawing them again in March 1864 that the shirts had leapt in value to $1.46 each,[10] the increase being equivalent to a day's soldier-pay! One feasible way to get around this costly' dilemma, at least in units whose officers were indifferent to the kind of shirts worn in their command, was to obtain a less costly and perhaps better shirt from another source. Substitute shirts could cushion the hard numbers entered on their pages of the company clothing book on reckoning day. A regular army officer's official critique of the military clothing system in 1875 undoubtedly speaks as well to circumstances of the Civil War years a decade earlier:

> Many men do not draw their full allowance of clothing, but this does not prove that the allowance is sufficient. Some men want a better article and purchase it; others wish to save money and effect it by purchasing Government clothing at reduced rates from private dealers."

The predominant issue shirt of the Union army was one of gray or white domet flannel. ***Cole's Encyclopedia*** of Dry ***Goods*** defined the fabric as follows:

> DOMETT (dom'et). (So called from the inventor of the fabric Josiah Domett, a cotton manufacturer of Manchester, England.) A variety of soft, loosely woven napped flannel, properly of cotton warp and woolen weft, but at the present time [1900] constructed entirely of cotton. The fabric was originally employed for shrouds, and sometimes by dressmakers in the place of wadding.[12]

There were at least seventy-nine contractors for the production of flannel shirts who worked under at least ninety different contracts which yielded over 4,967,455 flannel shirts. Some forty-seven per cent of these (2,317,253) were specified in the contracts to be of white flannel and fifty-three per cent (2,650,202) were to be gray. As with contracts for knit shirts, the language is very general, calling variously for fabrics such as "regulation flannel," "grey twilled flannel," "dark grey mixed twill flannel," "white domet flannel," or "white cotton and wool flannel." Cloths sometimes differed slightly within the same contract as with "grey flannel equal to material marked No. 2 and gray flannel equal to material marked No. 3." One contract for flannel yardage noted "white, cotton and wool, 6½ ounces, 31 inches wide." Another specified two gray flannels, the first all wool and the second a gray flannel with cotton warp which was four cents cheaper in the finished garment than the all wool shirt.[13] The 1865 "Quartermaster's Manual" (unpublished), codified flannel specifications that likely had regulated flannel procurement during the war. The three flannel types listed there--canton, white domet, and gray domet—each had forty-eight filling (or weft) threads per inch, and each had fifty-six chain (or warp) threads per inch. The canton and gray domet flannels were both woven twenty-seven inches wide and weighed five and one-half ounces per linear yard. The white domet flannel was a bit lighter, weighing five and one-half ounces per linear yard, in this case thirty-one and one-half inches wide. The "Manual" also listed bearing strain-to-tear standards and, referring to its table that outlined the data, noted "The foregoing specifications of textile fabrics are recommended to manufacturers of army goods, as those which are considered best fitted for producing serviceable articles, with the requisite strength and durability."[14]

Scattered throughout the many flannel shirt contracts are further specifications concerning size and pattern. The shirts were to be either "Army standard size," "like sample D," "sized as per rules established in this department," "per pattern at the New York Depot," "with pocket on left breast," or "white domestic shirts, full regulation."[15] It is most likely that marked specimens were provided by the Quartermaster Department to the contractor, or sometimes vice versa, to clearly communicate the expectations of the contract in terms of material, pattern and workmanship. The 1865 "Quartermaster's Manual" listed cutting dimensions for flannel shirt components. Conscientious layout and cutting to these specifications, with the pieces properly assembled, will with consistency result in a shirt of the "army standard size and make."[16] The Quartermaster Department intended that one size would fit all. Though the contractor typically provided all materials and labor in the majority of contracts, the government would in some cases provide the shirt flannel which it had bought under a prior, separate contract. Contracts used the phrase "for making and trimming" when the quartermaster depot provided the uncut yardage to the contractor to make into shirts. Here, the contractor usually received about 13 cents per shirt for the labor it entailed. An October 1861 contract between the New York Clothing Depot and Lawton Brothers, Newport, Rhode Island, called for the fabrication of 3,000 shirts at $1.25 per dozen for "making and trimming

from 8,622¼ yards of white domestic flannel from Reuben M. Potter, Military Storekeeper," with "scraps to be returned to depot." An agreement with Charles E. Strong, New York City, dated 4 January 1862, ordered an unstated number of shirts at $.135 each using "as needed 2¾ yards white cotton and wool flannel and three shirt buttons from the Quartermaster Department; all else from the contractor for one shirt of the army standard size and make."[17]

Like the contractors undertaking the manufacture of knit shirts who operated knitting mills in the largest cities, the majority of the flannel shirt contractors were also clustered in the densely populated Northern urban centers such as Philadelphia, New York and Boston, and Cincinnati and Indianapolis in the West. Their business edge did not engage machine power, but rather the semiskilled garment worker, in great numbers, to make shirts of flannel to government specifications. The small town or rural area of the north could not muster enough seamstresses to fabricate shirts in the huge quantity bought under the urgent schedule of the War Department. Most government shirt contracts called for at least 20,000 pieces; orders for 50,000 were fairly common. Several huge contracts, like one of 3 September 1864, between the Cincinnati Depot and contractor J. T. Martin of New York, specified 300,000 gray flannel shirts. The Philadelphia Depot contracted with Noms & Company, also of Philadelphia, and mandated that 100,000 white domet flannel shirts be delivered at a rate of 1,500 daily; while an 1863 contract between James and William Lyall of New York City with the New York Depot called for 200,000 "to be delivered at the rate of 18,000 per week starting two weeks from the date of the contract."[18] A period newspaper article provides a perspective into the dynamics of the shirt-making process and the lives of those who actually performed the work, either under piecework subcontract with the garment house or perhaps employed directly by the depot itself:

The Saint Paul Pioneer, April 7,1864

The Slave Women of New York; How the Shoddyite Humanitarians Grind the Faces of the Poor—Startling Facts for the People. At the meeting of the workingwomen, held at the Cooper Institute, on Monday last, one of their number made a statement of prices paid for the making of various articles exhibiting them to the audience… A coarse flannel army shirt, large size, made by hand sewing. Collars, wristbands and gussets put on with double rows of stitching all round. The seams all felled, three button holes, buttons, and stays, requiring upwards of two thousand stitches. The woman who made this garment was sixty years old, and too deaf to go to the stores for orders. She has worked on these shirts since the war broke out, receiving seven cents each--one of them to be a good day's work for her. Younger women might make two, or perhaps three, in twelve hours, furnishing their own thread. This old lady occupied, with another woman, a damp dark basement, where she strained her eyes in the day, and sewed by the light of her neighbor's lamp during the evening. At the end of the week her net earnings, after paying for needles and thread, amounted to thirty-nine cents in 'currency.'[19]

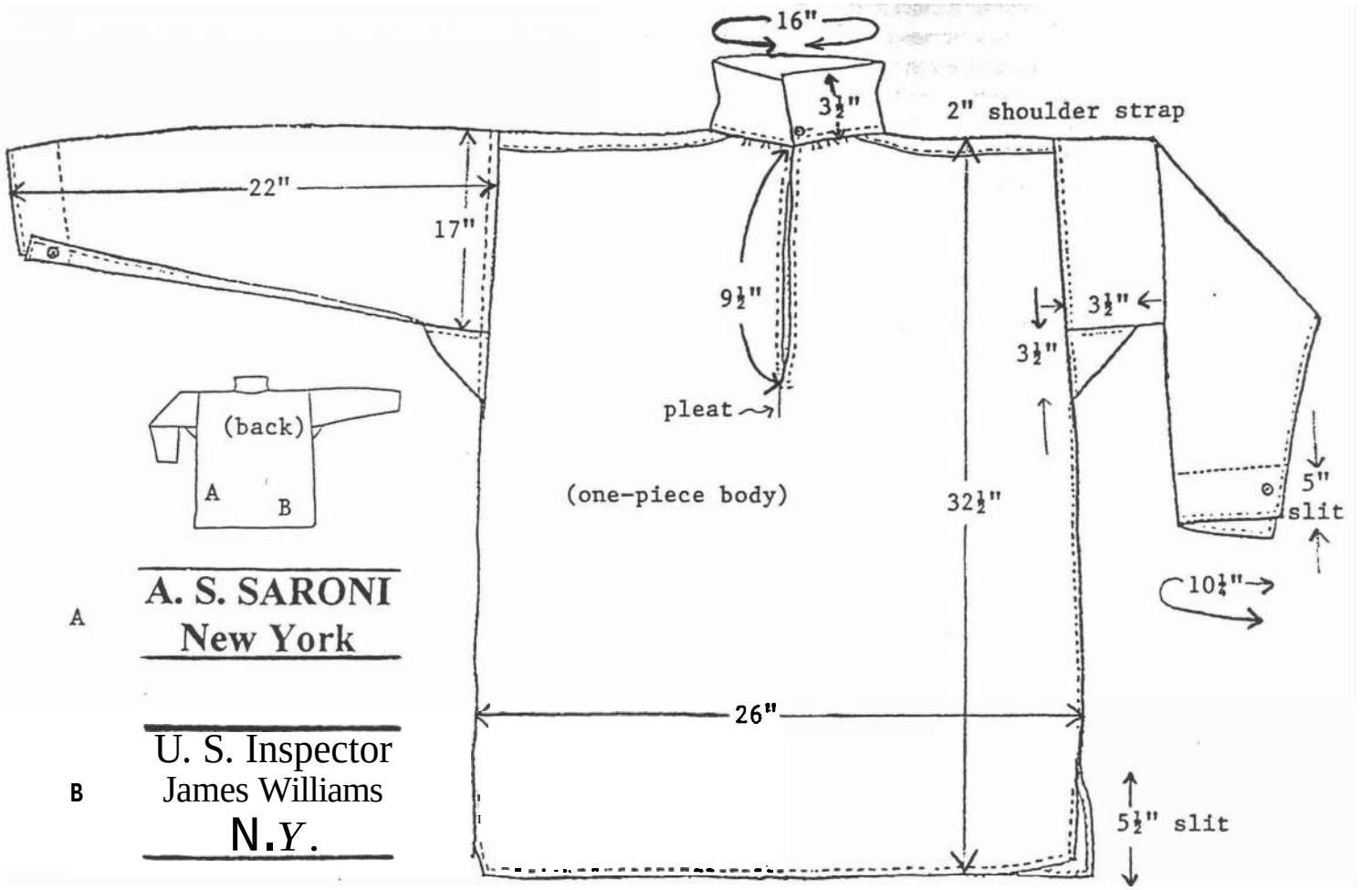
That competent hand-sewers were, at best, able to each produce only three finished contract shirts a day underscores a sense of the broad and complex network that each of the shirt contractors must have had to successfully manage the business of cutting and distribution of materials among a legion of sewers and then gathering the finished shirts in order to supply one or two thousand shirts per day to fulfill, without penalty, contracts for one, two, or three hundred thousand shirts. No doubt those with treadle-operated sewing machines, readily available but expensive in the 1860s (costing around $150.00), could boost their own production considerably, but they probably still earned about seven cents per shirt. Those garments failing US inspection could be traced back to the maker and pay docked accordingly.

The 1865 Quartermaster's report documents that the depots themselves also "manufactured" flannel shirts of great quantities in addition to those "purchased" through contracts. From July 1864 through June 1865, the Philadelphia Depot purchased 495,847 shirts, both knit and flannel, for $728,895 at an average cost of $1.47 each and manufactured 467,644 flannel shirts for $752,906, at a slightly higher average cost of $1.61 each. In this same one-year period, Cincinnati Depot purchased 679,000 knit or flannel shirts for $1,627,278, averaging $2.40 each; and made 562,439 flannel shirts for $1,071,346 at a much lower average cost of $1.90 each. Throughout the war the major clothing depots bought more than 14 million yards of flannel, which would have yielded more than 4½ million shirts if all of it was dedicated of the manufacture of shirts.[20] The flannel purchases, of course, would have also been used for making drawers, reducing the possible total of depot-made shirts in this very broad calculation.

Upon passing clothing depot inspection, shirts were baled in lots of one hundred for shipment to the armies. The bales were wrapped first in "petroleum paper," then packing paper, and then burlap sewed securely with doubled thread and finally bound with three strap iron bands. The mummified bale weighed ninety-two pounds. Schuylkill Arsenal expected that one hundred shirts could be compacted into a cube somewhat under two feet in each dimension.[21]

Most curiously, the tens of thousands of preserved Civil War photographs, whether taken in the studio, or garrison, or in the field, offer few shirt-sleeved soldier images that are distinct enough to suggest that the wearer has on a Federal-issue shirt. Those photos that do clearly depict shirts and their particular construction details invariably portray non-regulation examples with such features as patterned fabrics, straight-cut sleeves gathered into wristbands, breast pockets, button-placket fronts, attached paper collars, stepped-front collars, etcetera. How the millions of issued "army standard size and make" shirts, either knit or flannel, so successfully eluded all the photographers is one of the minor mysteries of the time. The post-Civil War Quartermaster Department photographic series illustrating old (FIG 1) and new patterns of military clothing (circa 1872) is probably the only worthwhile pictorial source for the Federal-issue flannel shirt that is closest to the period.[22]

Of the more than 13 million flannel shirts purchased or manufactured by the U. S. Army Quartermaster Department during the four years of war to clothe almost 2 million Union



soldiers, a mere six are known to have survived in public and private collections. All six of the survivors are made of white domet flannel; none are of gray flannel. Best known of the six is the "Danish Exchange" shirt given as part of a complete uniform set by the U. S. War Department to the government of Denmark in 1858. This Regular Anny "exchange" shirt was analyzed in an excellent article in this Journal titled "A Tale of Two Shirts"[23] by Fellow Stephen Osman, who there also introduced a white flannel shirt of Union-issue style discovered in the collections of the Wisconsin Historical Society that was worn by a Union soldier named George Searles, unit unknown. Two more military white flannel shirts of this general configuration are also in the collections of the Smithsonian Institution. Minor variations among these shirts appear in features such as an interior facing of the breast slit on the Danish Exchange shirt; both Smithsonian examples and the Searles shirt have tapered sleeves set into cuffs. Osman makes a very convincing case, based on Quartermaster Department documents in the National Archives, that white domet flannel shirts cut to this general pattern were essentially the army-issue shirt for more than sixty years, originating in the War of 1812, and enduring many shifts in military fashion through the Mexican War and Civil War until shirt specifications were officially changed in 1874.

FIG 2. The Saroni Contract Shirt illustrating the "Army Standard Size and Make" shirt, circa 1814 through 1874. Made of white domet flannel, plain weave, approximately 46 cotton warp threads per inch and 36 wool weft threads per inch. All hand-sewn in medium-weight white thread using running, back, and whip stitches, variously. Tinned sheet iron buttons, ½" dia., 4-hole, tin backs.

There was only one New York Clothing Depot contract with Alex. S. Saroni, merchant, 79 Maiden Lane, New York, 9 December 1861, for "making and trimming" 50,000 shirts at 13½ cents each, of depot-supplied cloth.

The best surviving U. S. Army-issue shirt is in the private collection of celebrated military artist and Fellow Don Troiani. Collected in the late 1970s accompanied by a regulation infantry dress coat with sergeant's chevrons and a pair of Schuylkill Arsenal-stamped sky blue kersey foot trousers with ghost-line evidence of removed sergeant's stripes, the identification of the Union infantry sergeant who saved his uniform for posterity was regrettably misplaced and forever lost by an earlier collector. This shirt (FIGs 2, 3, 4, 5), though

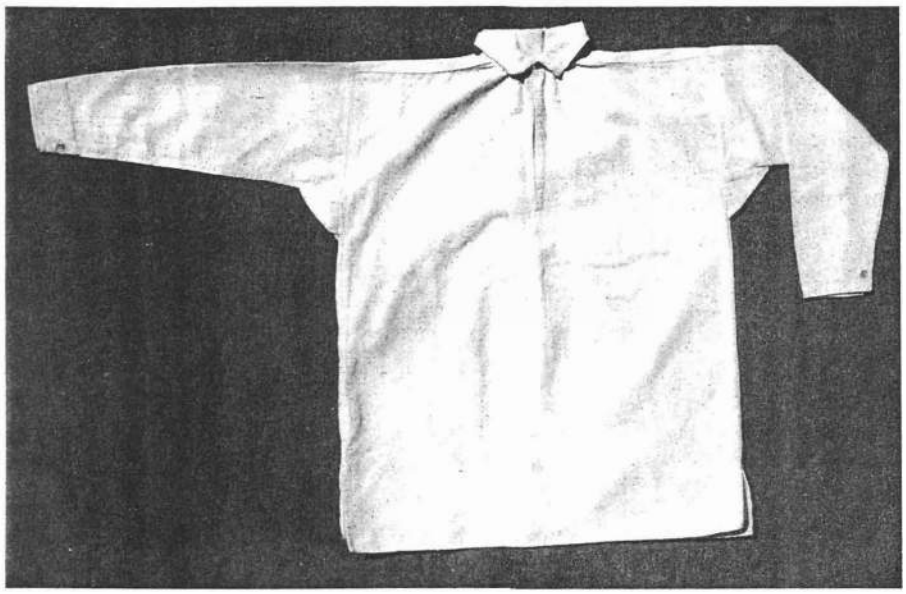
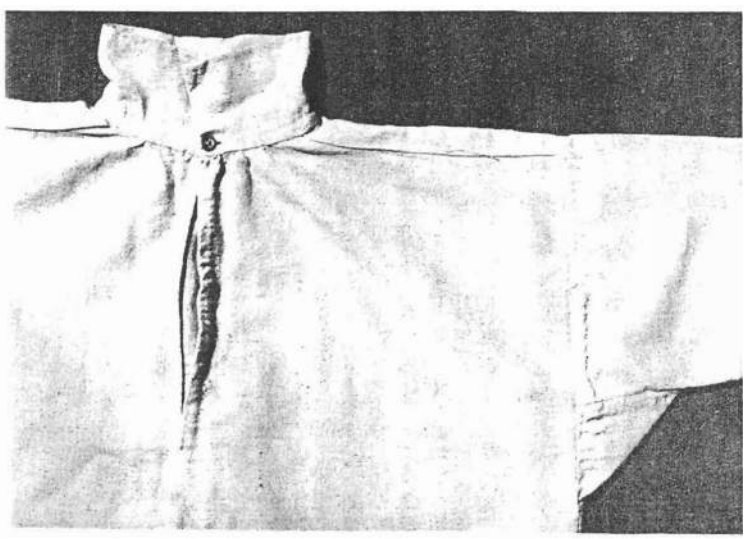
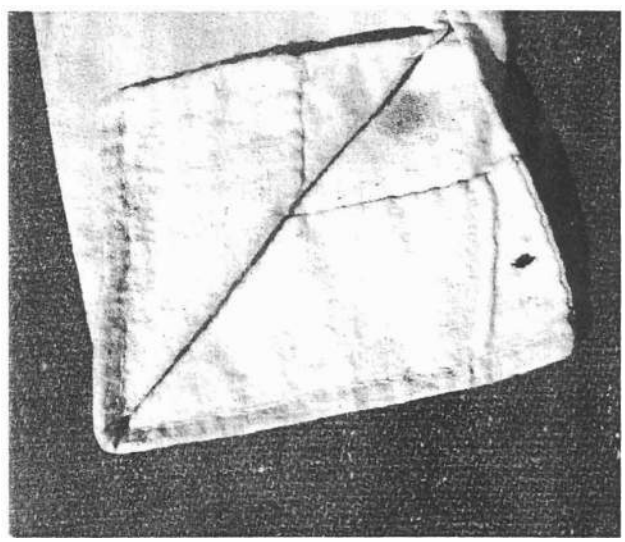


FIG 3 (left). The Saroni contract shirt. Don Troiani Collection; author's photo.

FIG 4 (below, left). Detail of collar, shoulder strap, front slit, and gusset sleeve. Don Troiani Collection; author's photo.

FIG 5 (below, right). Cuff detail, showing inside facing; button hole is on inner edge of cuff. Don Troiani Collection; author's photo





issued, is very likely unworn and probably never washed. The light nap survives on the fabric, the wool and cotton yams are soft and unshmnken, loose thread endsremain untrimmed, the tin coating on the sheet-iron buttons still shines, and most importantly, the black ink inspector's and maker's stamps are clear and legible. Named, here, for its maker, the Saroni contract shirt offers a most compelling linkage of object with historical records. It best documents the typical characteristics of the Union-issue contract shirt. Its excellent, as-made condition, and the presence of both contractor's stamp and army clothing inspector's stamp together tie the shirt to a known contract in the Quartermasters archives. It provides an unparalleled opportunity to examine a datable, early-war shirt of the "army standard size and make" against the specifications of the 1865 "Quartermaster's Manual" four years later.

The contractor stamp identifies the maker as one Alex[ander?] S. Saroni, listed in Trow's New York City Directory, May 1862, as a merchant at 79 Maiden Lane, and residing at 217 West 30th Street.[24] The New York Clothing Depot contracted with Saroni for "making and trimming" 50,000 shirts at 13½ cents each on 9 December 1861.[25] The price indicates that, as was typical with many garments early in the War, the Quartermaster was supplying the flannel and buttons and Saroni the cutting and labor for assembly. Earlier that fall, on 27 September 1861, Saroni had contracted with the depot for 50,000 pairs of Canton flannel drawers at fifty cents each,[26] the price here indicating that he had fumished the fabric and trimmings for this contract. This drawer contract and shirt contract are the only U. S. contracts listed with Saroni in the Quartermaster contract abstracts, revealing the Saroni contract shirt to be a rare surviving early war shirt. The US inspector who evaluated and passed the Saroni contract shirt,

James Williams, twice served in the capacity of clothing inspector at the New York Clothing Depot, first under a four-month contract from December 1861, through March 1862 (during which he inspected the Saroni shirt), with a second stint from September 1862 through January 1863.[27]

The New York Clothing Depot had contracted for at least 450,000 yards of flannel, "white cotton and wool, 31 inches wide, 6½ ounce" at 23 cents to 25 cents per yard, on 16 August 1861 from contractors Joseph P. Buggy of Delaware County, Pennsylvania, Cronin, Hurxthal & Sears of New York City (known to be an importer), Edward C. Damon of Concord, Massachusetts, and William Divine & Sons of Philadelphia, Pennsylvania.[28] It is quite likely that Saroni received for his shirt contract yardage produced by one of these contractors. The flannel is now a very light cream color rather than a crisp white and is of plain weave (sometimes called tabby weave) with approximately forty-six cotton warp threads per inch and thirty-six wool weft (or filling) threads per inch. The Saroni contract shirt warp thread count approximates the forty-eight specified in the 1865 "Quartermaster's Manual," but the weft thread count of thirty-six per inch falls far short of the manual's call for fifty-six. Scattered throughout the fabric are dark thread fragments and even bits of plant husk, probably the "shorts, tow or jute" present in lesser quality goods and derogated by the 1865 "Quartermaster's Manual." Definitely a factory second-quality flannel, at best, it nonetheless passed the New York Depot inspectors at the time and in turn was accepted, paid for, and distributed to contractor A. S. Saroni to make into shirts. Such was the need for fabric and garments that much was accepted as long as it was "serviceable."

The Saroni contract shirt is hastily assembled by hand-sewing, variously using four to six running stitches, back stitches, or whip stitches per inch. If a stitch were to break, its seam would yield quickly, too, as the thread pulled loose. A poorly fitted shirt back and collar present a markedly hump-backed appearance over the nape of the neck. In fabric quality, workmanship, and fit, it is a garment that could hardly have made a favorable impression on those fated to wear it. Yet, the

Table 1.
Shirt Specifications

Flannel shirts-of white, grey or mixed domet cotton and wool flannel, made loose; and with a button at the foot of each collar and one at each wristband, according to the specifications; see table, chapter eleventh.

Materials Required to Make Clothing

Shirts—2% yards of 7/8 cotton and wool domet flannel, 3 shirt buttons of white metal, and 3% skeins of W. B. thread, no. 35; seams to be all "felled."

Specifications for the Dimensions of Clothing to Regulate the Cutting of Same Before Being Made Up

Shirts—1 Size	Saroni Contract Shirt; *Finished* Dimensions
Length of shirt, 34 inches.	32% inches
do. sleeve, 21 inches.	22 inches
do. collar, 16 to 17 inches, 1 button on collar.	16 inches
Length of (gusset) under arm pit, 5 inches.	3% inches
Width of shirt, 26 inches.	26 inches
do. collar, 3% inches.	3% inches
do. sleeve at top, 20 inches.	17 inches
do. do. at wrist, 10 inches, and one button for each sleeve.	10¼ inches
do. (gusset) under arm pit, 3 inches.	3% inches
do. shoulder strap, 3 inches.	2 inches
Length of shoulder strap, 9 inches.	9 inches
do. slit in sleeve at wrist, 5 inches.	4% inches
do. slit at bottom of shirt, 9 inches.	5% inches
do. slit in breast of shirt, 12 inches.	9% inches

Note: Quartermaster specifications excerpted from George Crosman, "Quartermaster's Manual" (Washington, 1865), unpublished galley. The Quartermaster specifications give cutting dimensions; the Saroni contract shirt dimensions are from the finished garment and do not include seam allowances.

Saroni contract shirt passed government muster in the winter of 1861-62. The quality was in the eye of the inspector; James Williams' official stamp of approval said it had met the criteria for purchase by the army.

The one-piece shirt body is formed with a fold at the top and side seams closed first with an average of four running stitches per inch of single-strand white thread. The (wearer's) left side seam is felled with four single-strand whip stitches per inch and the right utilizing the selvedge for a single-fold felled seam. The hem of the shirt tails and side slit edges are also turned and whipped so that there are no raw edges anywhere in the garment. Set into the top fold, at the collar bone on either side of the neck hole, are tapered gussets, each three inches long. Concealing these gussets and reinforcing the top of the shirt are two inch-wide shoulder straps, edges folded under, back stitched to the body of the shirt using paired threads, approximately five stitches per inch. The front slit of the shirt is 9½ inches long with rolled edges, secured with five single-thread whip stitches per inch. The left side of the slit, at the bottom, is pleated over the right side by one-half inch and back stitched down to reinforce the bottom of the slit. The one-piece collar has finished dimensions of 3½ inches high and 16 inches long, and is set into a slightly gathered neck hole. Each sleeve is one piece, tapered, seamed on the underside, and features an inside cuff facing. At each armpit is a gusset to allow ease of movement in the shoulder. Like the body side seams, the sleeves are closed first with running stitches and then felled with whip stitches. The cuff ends are backstitched with six stitches per inch and the upper edge of the inside facing is turned and whip stitched from the inside. The cuffs are each closed with a single ½" diameter tinned sheet-iron four-hole button, tin backed, centered on the cuff on the outside edge of the vent with a buttonhole on the inside edge of the vent. The collar is buttoned at the base, above the front slit. The finished dimensions of the Saroni shirt correlate fairly closely to the cutting dimensions of the 1865 shirt specifications, the principal (and minor) differences being that the "slits[7]" at the tails and in the breast of the Saroni shirt (Table 1) are several inches shorter than required by the later specifications of the 1865 "Quartermaster's Manual."

A sixth shirt conforming closely to the army standard has recently surfaced and is now in the Paul Loane collection. Like the other survivors, it is of white domet flannel and very closely resembles the Saroni contract shirt. It is well-worn and shows extensive use. The nap is gone and the yam fibers are shrunken and tightened from washing. No maker's or inspector's stamps remain. The soldier who wore it, Sergeant Charles Bright, 17th Ohio Infantry, cut a series of narrow vertical slits across the length of the collar, perhaps to lace in place a cloth cravat. He also added a button and buttonhole near the top of the breast slit, just below the as-made ones on the collar, perhaps to custom-enlarge the one-size-fits-all collar of the issue garment.

Shortly after the war's end, the Surgeon General published a critique of government-issue clothing and equipment in *A*

Table 2.
Types and Quantities of Contract Shirts Purchased, by Depot

	Knit	White Flannel	Gray Flannel
New York	1,685,233	820,753	255,001
(NY %)	(61%)	(30%)	(9%)
Philadelphia	820,639	1,356,500	512,301
(Phila.%)	(31%)	(50%)	(19%)
Cincinnati	86,000	140,000	1,864,500
(Cin. %)	(4%)	(7%)	(89 %)
Total, all depots	2,530,672	2,317,253	2,650,202
(All depots %)	(34%)	(31%)	(35%)

Note: This table provides summary totals from E. J. Coates and F. C. Gaede, compilers, "U. S. Army Quartermaster Contracts, 1861–1865" (unpublished production draft no. 4, 1993) The 7,498,127 shins enumerated here, by type, account for 68% of the 11,091,639 shins reported as purchased, without differentiation, by the army from May 1861 through June 1865, in the Quartermaster's lists in ***Report of the Secretary of War in Two Volumes: Message of the President of the United States and Accompanying Documents, to the Two Houses of Congress at the Commencement of the First Session of the Thirty-ninth Congress, Vol. I*** (Washington: Government Printing Office, 1866).

Table 3.
Number of Shirt Contracts, by Type and Depot

	New York	Philadelphia	Cincinnati
Knit	45	17	3
Gray Flannel	3	8	25
White Flannel	25	23	5
Blue Flannel	0	1	0
Unspecified	29	2	10

Note: E. J. Coates and F. C. Gaede, compilers, "U. S. Army Quartermaster Contracts, 1861–1865" (unpublished production draft no. 4, 1993).

Medical Report upon the Uniform and Clothing of the Soldiers of the U. S. Army (1868), commonly referred to as the "Woodhull Report." This study put into summary the solicited opinions of 120 medical officers of the postwar regular army "regarding the hygienic fitness of the present uniform and allowance of clothing for enlisted men, and to invite suggestions for its modification." The issue shirt received considerable unfavorable comment which here is excerpted from the report:

> Before the war a large white flannel shirt was issued and is still [1868] continued as part of the allowance. There are also furnished one of very coarse bluish gray flannel and a coarse knit one. These are of the same texture for every post, and seem recently to have been issued in some sections to the exclusion of the white flannel. At the north they answer well enough, but in the south, where the body is so frequently bathed in perspiration, the softened and tender skins irritated in the most excruciating manner by their coarseness and the cutaneous affections of which they are the direct cause. The shirt is the very garment that, on all sanitary

considerations, should vary both in quality and number with the latitude. It hardly seems necessary that both the white and gray should be issued, but at least three separate grades and many sizes ought to be furnished. .. Professional opinion so greatly favors flannel as their necessary material that no elaborate argument thereupon is necessary. The general reasons for its use are its conduction of heat and its superior absorption of moisture... The objections are its tendency to cause undue perspiration, difficulty of washing and the liability of all woolen goods to convey septic disease... The importance of length must not be overlooked. The shirt must reach to the middle third of the thigh and not, as at present after washing, but a little below the navel. It is suggested, as a matter of appearance rather than of hygiene, that it would be well to make the shirts with a neckband, to which may be attached at pleasure a white flannel or muslin collar and which would prevent any undue constriction by possible shrinking.[29]

The "Woodhull Report" was followed seven years later by ***Report on the Hygiene of the United States Army (1875)*** which echoed earlier condemnations of the army shirt: "those which have been furnished shrink very much and are found to irritate the skin. The men purchase many shirts from civilians; the present allowance is insufficient. There should be two qualities, each of flannel, for cold and warm weather." The report went on to state, "The old stock of shirts and some of the sizes of drawers being about exhausted, the patterns of these articles have been improved. A new standard shirt was adopted on the 5th of August last [1874]..."[30]

The oft-maligned "old pattern" shirt was probably the most long-lived item of clothing ever issued by the United States army, a date span far exceeding any kind of headgear, coat, trouser or footwear ever emanating from the Quartermaster Department. The adoption of the *1874* "new pattern" shirt and the depletion of old stocks of this garment ended the quiet reign of the shirt of primary interest here after more than sixty years as the army standard. The "new pattern" shirt featured a stepped collar, buttoned placket and sleeves set into wristbands. It is hoped that this article will bring to light more of those regulation shirts of knit, gray or white flannel construction that may exist unrecognized or underappreciated in attic trunks or museum collections storage. Perhaps it will also encourage the thoughtful scrutiny and publication of other Civil War-used shirts of whatever origin for all of us to "wonder at."

Special gratitude goes out to those who helped bring this article into being. Fred Gaede generously provided an invaluable and totally absorbing production draft of U. S. Army Quartermaster Contracts, ***1861-65, that he and Jerry Coates have laboriously compiled over the last decade from records in the National Archives. He also made available germane pages of the unpublished 1865 "Quartermaster's Manual." Charlie Childs offered many useful insights into shirt fabrics and the ready-made garment industry that matured in this period. Don Troiani, again, kindly afforded me an extraordinary "what's-mine-is-yours" communion with the Saroni contract shirt.***

Notes:

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2. War Department, Surgeon-General's Office, ***A Report on the Hygiene of the United States Army, with Descriptions of Military Posts*** (Washington: GPO, 1875), lii (hereafter cited as ***Report on the Hygiene)***.
3. ***Report of the Secretary of War in Two Volumes: Message of the President of the United States and Accompanying Documents, to the Two Houses of Congress at the Commencement of the First Session of the Thirty-ninth Congress, Vol. I*** (Washington: GPO, 1866), 174 (hereafter cited as ***Report of the Secretary of War)***.
4. E. J. Coates and F. C. Gaede, compilers, "U. S. Army Quartermaster Contracts, 1861–1865" (unpublished production draft no. 4, 1993), passim (hereafter cited as Coates and Gaede).
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6. Henry A. Comwall to parents, 1 August 1864, Comwall Papers, Connecticut State Library, Hartford, CT.
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8. Lt. S. Millett Thompson, ***Thirteenth Regiment of New Hampshire Volunteer Infantry in the War of the Rebellion, 1861–1865: A Diary Covering Three Years and a Day*** (Boston: Houghton, Mifflin and Company, Riverside Press, 1888). 531–532.
9. By Authority of the War Department, ***Revised Regulations for the Army of the United States,*** 1861 (Philadelphia: J. G. L. Brown, Printer, 1861), 170.
10. Manuscript page from the Clothing Book of Company K, 83rd Pennsylvania Volunteers, Miscellaneous Manuscript File, Nelsonian Institute, Southington, CT.
11. ***Report on the Hygiene,*** xlviii.
12. George S. Cole, ***Cole's Encyclopedia of Dry Goods; A Reference Book for the Wholesale and Retail Dry Goods Trade of the United States*** (Chicago: Root Newspaper Association, 1900), 152.
13. Coates and Gaede, passim.
14. "Quartermaster's Manual," (Washington: GPO, 1865; hereafter cited as "Quartermaster's Manual").
15. Coates and Gaede, passim.
16. "Quartermaster's Manual," 28.
17. Coates and Gaede, passim.
18. Coates and Gaede, passim.
19. "The Slave Women in New York," ***The Saint Paul Pioneer (7*** April 1864), courtesy of Charlie Childs.
20. ***Report of the Secretary of War,*** passim.
21. "Quartermaster's Manual," 31.
22. Quartermaster Department Uniform Photographs, circa 1872; Military History Division, Smithsonian Institution, Washington, DC.
23. Stephen E. Osman, "A Tale of Two Shins," ***MC&H,*** XLV, 2 (Summer 1993): 67-72. See also Frederick C. Gaede, "The 'Danish Exchange' US Army Blanket," ***MC&H*** XXXVI, no. 2 (Summer 1984): 64-66.
24. H. Wilson, compiler, ***Trow's New York City Directory for the Year Ending May 1, 1862*** (New York: John F. Trow, 1862), 745.
25. Coates and Gaede, 248.
26. Ibid.
27. Coates and Gaede, List of Clothing Inspectors, 7.
28. Coates and Gaede, passim.
29. Surgeon General's Office, ***A Medical Report upon the Uniform and Clothing of the Soldiers of the U. S. Army*** (Washington: GPO, 1868), 15–16.
30. ***Report on the Hygiene,*** lii.