

The 1853-1855 US Pattern Knapsack

Some of our readers have asked us about sources for reproduction knapsacks. So, we thought a study of some original examples might be in order. The most common pattern, the 1853-55 US pattern, was used because: (1) I have two in my collection, (2) It is one of the most commonly seen on the repro market and (3) This pattern can be used pretty much with any impression, any time, in any theater. While the survival rate of these knapsacks is high due to vast amounts bought up by Bannerman's, there is plenty of evidence of field usage due to the high yield of buckles and hooks dug in old camp sites. A close study of these two examples should allow you to make a reasonable judgment for yourself on the qualities of the various examples offered on the current repro market.



The basic pattern consists of a double bag arrangement with the outer envelope being used for clothing and personal effects. The gussets or sides to this bag are long triangular pieces. This compartment is closed with a flap and ties made of buff leather. The inner compartment used to carry the blanket closes with four flaps that are buckled together with four bridle leather straps. The entire knapsack closes with three straps. One of the more distinctive features of this pack are the wide shoulder straps with the scalloped ends and a leather covered stud holding the thinner bottom straps. (FIG 1) There are two sets of these straps: one set to buckle to the bottom of the pack and an extra set with brass hooks for holding up the 1855 rifleman's belt. Because the M1855 rifle accoutrements did not include a sling for the cartridge box and did include a long brass hilted sword bayonet a set of sliding brass keepers that the aforementioned knapsack hooks could be fastened to were furnished with the belt. This

helped ease the weight of the belt rig more evenly. I might add that this feature was copied from the French and soon adapted by most modern armies.

We will call our study examples A and B. Both are from New York contractors. This is evident by the stamping on the left shoulder straps. While the contractor's names are somewhat illegible, A reads "J.———ILL NEW YORK" and B reads "E. RO_INSON," just enough evidence to determine that these are from two different makers. Our examples are made from an off white ten to twelve ounce linen canvas with a thread count of about thirty threads per inch. All facing surfaces are blackened with paint. This paint, made from linseed oil and lamp black, for the most part did not soak completely through the canvas but turned it a brownish colour. However the linen did retain its original off white where the fabric was doubled. It should also be noted that the painting job on both was not done in an especially neat manner but liberally slopped about the inside. Both examples are completely hand sewn with all raw edges finished by flat felling the seams.

For those of you who don't sew that means the raw seam is turned under and whip stitched down. (FIG 2) Example A is neatly sewn with a natural coloured thread (about twenty ounce if the thread was linen). Stitches are about six per inch. The seams are turned under about $\frac{1}{4}$ inch. Example B is randomly stitched at about three to four per inch. The thread colour is black and has retained its colour well with only a slight brownish tint evident upon magnification. The seams are turned under $\frac{3}{8}$ of an inch.

The overall length of the packs vary with A being $52\frac{1}{8}$ inches long and B $54\frac{1}{4}$ inches long. The width on both is fourteen inches. The triangular gussets for the envelope on example A are six inches wide by fifteen inches long on one side of the triangle and thirteen on the other. The gussets on example B are seven inches wide and the same length as A. (FIG 3 and FIG 4) Both have triangular reinforcement pieces on the outer back upper corners made of linen and whip stitched down. The sides measure anywhere from $4\frac{1}{2}$ to $5\frac{3}{4}$ inches with each side being a little different. (FIG 5) Behind this, running the length of the inside, is a reinforcement made from nine ounce split leather. This measures five by $13\frac{1}{4}$ inches on A and $4\frac{1}{8}$ by $12\frac{3}{4}$ inches on B. This piece gives the top shape and helps make the shoulder strap attachment stronger. (FIG 6) The bottom back has two square reinforcement pieces that wrap around the corners. Example B reinforcements are square with the bottom while those on A are square, but sewn across the corners in a trapezoid shape. (FIG 7) Both have a leather piece sewn on the inside of the bottom to give reinforcement as well as a solid surface to hold the buckles. (FIG 8) The four flaps for the inner compartment are crudely turned under giving a different dimension to each side of the flaps; anywhere from $7\frac{1}{2}$ to nine inches. The top and bottom flaps are the same on both, with the top being eleven inches and the bottom nine

inches. (FIG 9)

All the leather straps on both examples are black and have an embossed line $\frac{3}{16}$ inch from the edge. The thread used to sew the shoulder straps is a five strand while all the other leather is sewn with four strand. This is the same for both examples. The shoulder straps and their attachment buckles, as well as the leather reinforcements, are all sewn with a saddle stitch for strength. (Fig 10) The stitch count of this heavy thread is three on A and five for B. The smaller straps are all sewn with a straight stitch. The stitch count for both is six per inch. All threads are treated with cobblers wax (a mixture of rosin, pitch and lamp black used to lock the thread in place when sewing) giving it a black appearance, except where worn off. It is evident that this is a coating when viewed under magnification with the strands of the thread pulled apart. This is a common feature on most period leatherwork. The small straps that secure the bags are about $\frac{5}{8}$ inch wide. The shoulder straps are about $1\frac{7}{8}$ inch wide and fifteen inches long, with three scallops on the end. There is a brass stud holding the two straps that buckle to the bottom; $1\frac{1}{8}$ inch wide by $16\frac{1}{2}$ inches long and two straps with brass hooks for the aforementioned 1855 rifleman's belt. These measure $\frac{5}{8}$ inch wide by fourteen inches long. As mentioned before, the stud is leather covered. One interesting detail I've found on both examples is that all these straps have a large $1\frac{1}{8}$ inch slit where they are fastened to the stud which could serve as a button hole for removing the straps.

This brings up a question. Has anyone tried fastening these belt hooks under a common waistbelt? Doesn't work very well does it? You have to either let them hang or hook them across your chest. Neither of these works very well (to me anyway). Yes, I've seen some studio images taken with the straps fastened across the chest, but was it done in the field? If it was me, I would have discarded them. In fact, I have lost a few sets of hooks because they just don't seem to work well as chest straps. Still there are plenty of dug examples, but why?

The buckles are a roller type with no evidence of any japanning on either example. In fact, all buckles are in bright condition with a minimal amount of rust. The small strap buckles are $\frac{7}{8}$ inch long by $\frac{3}{4}$ inch wide. The large buckles are $1\frac{1}{4}$ inch long by $\frac{5}{8}$ inch wide.

One of the things I decided to do to prepare for this article was to make my own reproduction of this pack. While this is not a how-to article, I would like to share some period formulas as well as some sources for these sometimes obscure ingredients and materials.

Let's go through a materials list first. Hemp linen has come back on the market. Blue Heron Mercantile has twelve ounce sail cloth or Russia sheeting (their address is **Blue Heron Mercantile**, 4202 Hillside Dr., Lafayette, IN 47901 and (800) ANO-1752 and <http://www.blueheronmercantile.com/> and BlueHeron48@aol.com). There are many sources for roller buckles. Just remember, any stainless steel coating can and should be removed! Heating it until red hot will do the trick. **Fall Creek** has all the brass hooks and studs (their address is PO BOX 92, Whitestown, IN 46075 and (765) 482-1861 and <http://fcsutler.com/> and fcsutler@aol.com).

Here are some sources for leather: <http://pslac.org/>

links.htm#LEATHERCOMPANIES/. This web site will give you links to other sources: **American Leathercraft Supplies** at (888) 282-6570 and <http://www.leather-craft.com/> and **The Leather Shop** at 1482 Madison Ave., Memphis, TN 38104 and <http://www.shopforleather.com/>. **Tandy Leather** is always a source, but their prices don't seem to be as competitive as these others.

You can get cobbler's wax from **ToneCzar Inc.**, 20428 Point Lane, Germantown, MD 20874 and <http://www.toneczar.com/> and (301) 515-3333. It is also a good source for that essential Confederate bagpiper impression. **ARF!**

Here's the real formula for dyeing leather found in the *Rules for the Management and Cleaning of the Rifle Musket Model 1855*.

Mr. Dingee's Directions for Reblacking Leather

Brush them with a hard brush to clean the surface; if they are very greasy, use a scratch-brush; then, with a soft brush or sponge, apply the following mixture, viz: One gallon of soft water, two pounds of extract of logwood, half a pound of broken nutgalls, boiled until the logwood is dissolved. When cold, add half a pint of the pyrolignite of iron - made by dissolving iron filings in pyroligneous acid, as much as the acid will take up.

The dye thus prepared should be well stirred, and then left to settle. When clear, decant it free from sediment and keep well corked for use.

Dry the belts in the shade; then apply a little sperm or olive oil, and rub well with a hard brush.

Should any bad spots appear, scratch up the surface with the wire-brush, and wet two or three times with a simple decoction of gallnuts, or shumac, and again apply the dye as above.

The addition of the logwood is not essential; and a solution of copperas may replace, but not so well, the acetate of iron.

Pyroligneous acid is vinegar and you can get your iron fillings from steel wool or brake drum fillings from a tire store. A source for nutgalls: **Penn Herb Co. LTD.**, 10601 Decatur Road, Suite #2, Philadelphia, PA 19154-3293 and (215) 632-6100 and <http://www.pennherb.com/>. The sacred Logwood dye can be attained at **Chaggon's Outdoor World**, 220 S. Cedar, Manistique, Michigan 49851 and (800) 795-5157 and <http://trap-supply.hypermart.net/>.

To make black paint: Since linen is porous and the original paint didn't seem to soak through the cloth, I coated the finished pack with two coats of sizing. Rabbit skin sizing (found at art supply stores) works best. Wallpaper size seems to work on cotton canvas, but not as well on linen. Mix one part lamp black with two parts linseed oil and a little japan dryer, about one ounce. This will help it dry in your lifetime. A source for real lampblack is **Real Milk Paint Siever Products Co.**, 618 California Rd., Quakertown, PA 18951 and (800) 339-9748 and <http://www.realmilkpaint.com/>

On a final note and as mentioned above, the linen used is an off-white. When painted it turned a brown colour except where the cloth was doubled. I tried to reproduce this, but could not get the cloth to turn brown. If you paint the cloth without sizing it first, the paint just soaks completely through. I also tried painting the cloth first with linseed oil using both sized and un-sized cloth. The results were the same. The linseed soaked through and when painted, carried the paint all the way through the cloth. My conclusion is that the brown color could very well be caused by age and/or the paint breaking down.

Mr. Simmons

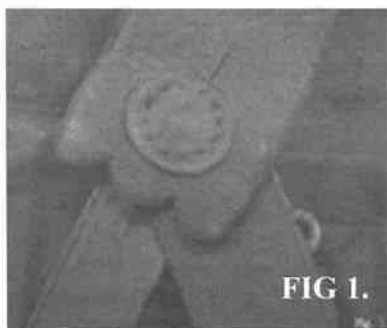


FIG 1.



FIG 2.



FIG 3.

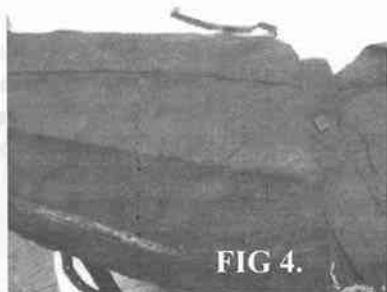


FIG 4.



FIG 5.

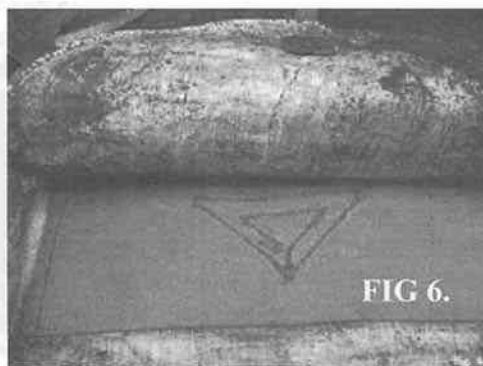


FIG 6.

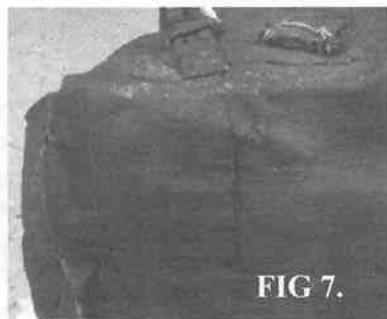


FIG 7.

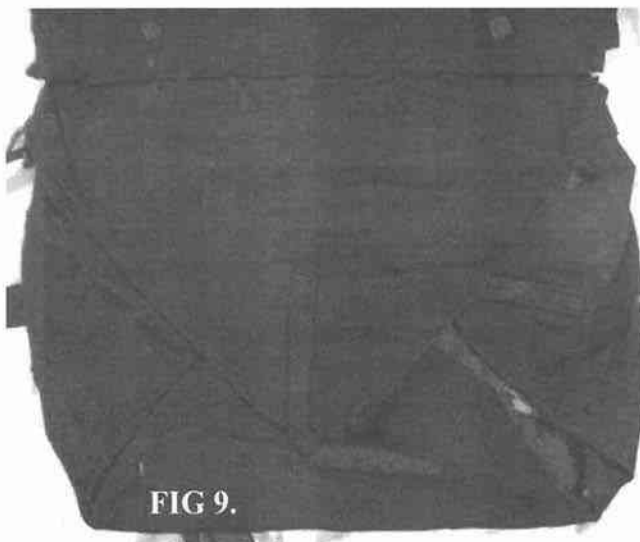


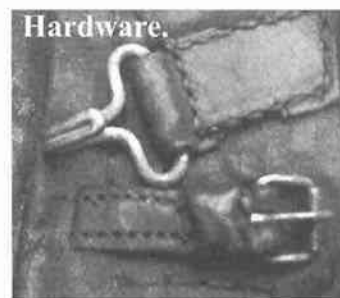
FIG 9.



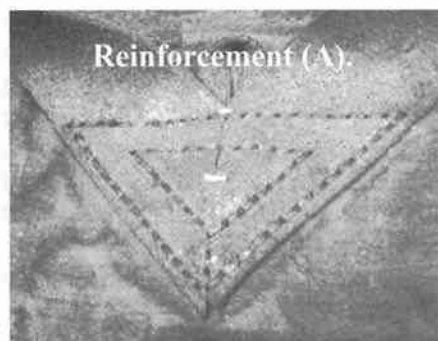
FIG 10.



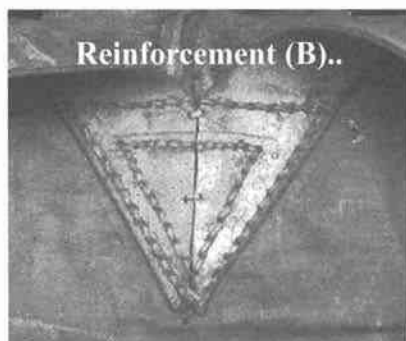
FIG 8.



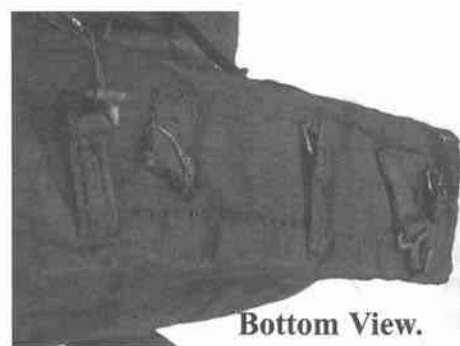
Hardware.



Reinforcement (A).



Reinforcement (B)..



Bottom View.