In December of 1989 I met Mr. William F. Ludwig Jr. at the Midwest International Band and Orchestra Clinic in Chicago. After discussing the demise of calfskin drumheads, I mentioned that I had brought a newly completed rope tension drum with me to Chicago for a performance. Since I had done much of the construction of that drum, Mr. Ludwig wondered whether I might be interested in restoring a rope tension drum from his collection. Three days later I was traveling back to Austin with Mr. Ludwig’s Eagle drum. The drum was one of 30,000 produced for the United States Army during the Civil War. On the inside of the shell of Ludwig’s Eagle drum is a label

Manufactured
by
A. ROGERS
Flushing, L. I.

(The Rogers Drum Company is still active although I understand the drums are actually produced in Taiwan now.) Also inside the shell has been pasted an interesting but undated newspaper clipping presumably from Barre, Vermont.

FINE COLLECTION OF DRUMS
S. N. Parker Has Many of the Old "Eagle" Type

Eagle drums that one day led the martial tread of thousands of Vermont soldiers in the Civil War are in the possession of Sherman N. Parker, a North Main street harness dealer, who recently procured the well-known Wheelock & Dawley collection of 18 snare drums that saw service in the Rebellion. Until recently the exact whereabouts of the drums has not been generally known, but Mr. Parker set about to complete his own collection with the result that he was able to purchase the remnant of the drum supply forwarded by the captains of several state companies to Quartermaster P. P. Pitkin at the close of the war.
Time has had its way with the original rope, ears and heads of the drums, but the barrels are wholly intact. Painting in pigment of unmistakable colors on each drum are the national colors, and the belligerent eagle whence is derived the name of the drum. In a number of instances worn-out drum heads bear the inscription of the companies in which they were used. People who have a penchant for army relics join with Mr. Parker in believing his collection to be the largest of its kind in existence. Since it became known that the harness man has had secured the drums a number of historical societies have made overtures for a drum to add to their exhibit. Mr. Parker has generously offered to place one of the drums in the historical room of the Barre city hall and some of the other drums will doubtless find their way into historical collections of the same sort.

Possibly this was one of those drums in the article but I am unaware of how it came to Ludwig's possession.

The drum itself has a shell measuring 16 inches in diameter and 12 inches deep. This is contrasted with the Revolutionary War era drums that were typically larger - perhaps 17 inches by 17 inches. As the article mentions, there is an 18 inch wide rendering of an eagle in whose beak is a banner reading "REGt U. S. INFANTRY". There is space before the word "REGt" to hold numerals. However, according to Mr. Ludwig, although constructed in 1864, the drum was never actually assigned to a regiment and was never used in battle. Thus no numerals were ever added. Immediately to the right of the painting, are 41 (apparently originally 44) brass tacks arrayed in a circle, two chevrons, and two vertical lines. Although decorative, the tacks actually are also functional: holding together the wooden shell at the section of overlap. The drum has 1 5/8 inch high counterhoops drilled with ten holes for the tensioning rope. There are eight gut snares strained by a screw-fashion mechanism. The drum weighs about 5 pounds 12 ounces.

During its 125 year lifetime the drum probably underwent previous restorations. Mr. Ludwig mentioned that the eagle artwork had been redone in Milwaukee at some point. There were four different types of leather ears of different age, size, and construction, so some (if not all) of the ten ears were not original. It is also possible that the rope was replaced. Obviously the heads were not 125 years old and I believe the snare straining mechanism may be new - certainly from the marks apparently it had been repositioned several inches down the shell at some time.
Mr. Ludwig's greatest concern was the rope. Since the rope passes over the counterhoops, whenever the drum rested on its top or bottom counterhoop it was actually resting on the rope. Years of friction had caused severe fraying at twelve such locations. Eventually these would have simply snapped. Several of the ears were in very poor condition as well and would not have been able to withstand prolonged tension. There was also deterioration of the wooden counterhoops primarily on the top edges but with some minor paint chipping as well. The artwork was cracked and dull. Considering its age and usage, however, the drum was in good condition.

A thorny issue I faced from the moment I agreed to work on the drum was the ethical question of restoring an historical artifact. I discussed this with two conservators at the University of Texas Memorial Museum and was essentially told to leave the drum alone. They said if I was to change something I should perform only such operations as could be reversed. I couldn't conceive of techniques for say repairing the rope but allowing for the repairs to be undone. Given the premise that the drum was to be playable when I was done, I simply adopted the attitude that I would make the drum playable and presentable, and when it was necessary to replace a part, I would try to make that consistent with the construction of the original Eagle drums. (I admit that I still am uncomfortable about the matter.)

The restoration began by measuring, photographing and disassembling the drum. I considered the rope and the ears the major concerns. One possibility was cutting out the frayed sections of rope and splicing the remainder but there simply was not sufficient length to allow the twelve splices. As I found it, the rope was 3/16 inch hemp arranged as four strands wrapped around a core. Despite contacting major rope companies across the country I could find no current supplier or producer of such a product. Furthermore, even replacing the rope with a natural fiber strong enough for the requisite tension yet smooth enough to allow the sliding of the ears would be difficult. After studying Civil War era photographs of Eagle drums I decided that white linen rope seemed to have been used and ordered 35 feet of it of Scottish origin.

The ears presented a different predicament. Some of the ears were usable but were they original? If I was to have new ears made should I copy what might have been only a replacement anyway? Here again I studied the pictures and found quite a bit of nonuniformity. Leather drum ears are of two principle types: rectangular and conical. The rectangular types are just long rectangles folded along the short axis and sewn. The rope passes between the fold and the sewing. The conical style ear wraps around the rope and is sewn on the side toward the shell. The cone opens up on one end into a large flap for grasping when applying the tension. The photographs showed both were used in the Civil War. (As an
interesting aside, the photographs also showed that occasionally the ears were attached in an inverted fashion so that tension was applied by sliding the ears up rather than down.) I opted for the conical ears and since have realized the unexpected benefit that they slide much easier than the rectangular ones. The ears were hand-made by Cooperman Fife and Drum Company of Centerbrook, Connecticut. They arrived in a natural leather state: I dyed them dark brown.

The shell was the next problem. After cleaning the painted artwork, it still appeared dull. I was also worried about the cracking of the paint. In an attempt at brightening the painting and protecting the surface I hand-rubbed fifteen coats of tung oil varnish onto it. I also removed the finish from the unpainted remainder of the shell, then sanded and re-varnished it. The counterhoops were sanded and wood-filler was applied to the distressed portions. Three coats of enamel were applied and finally a coat of matte finish varnish that reduces the gloss and protects the paint. The snare-side hoop had become distorted in shape from circularity. Given several days of tension, it was to returned to uniform curvature. All of the metalwork was removed, rubbed with fine steel wool, and polished.

Upon reassembly, it was necessary to keep tension on the heads to allow for stretching of the linen rope. As the rope stretches, it may become necessary to remove slack. The sound the drum produces indicates that the current tension is sufficient.