

JAMES H. OSGOOD.

Mode of Covering Rounded Articles with Leather.

No. 127,098.

Patented May 21, 1872.

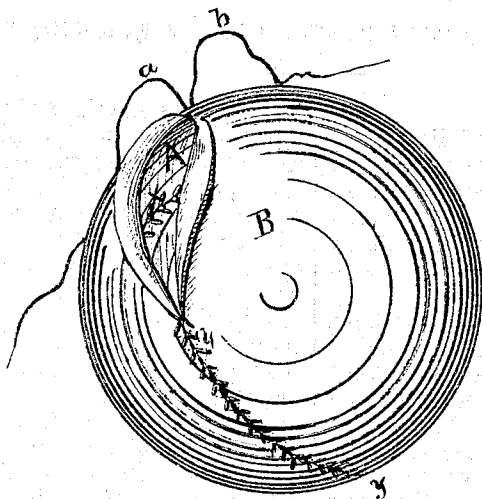


Fig. 1.

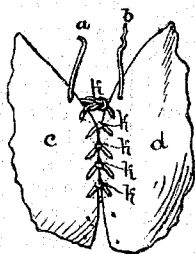


Fig. 2.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN MODES OF COVERING ROUNDED ARTICLES WITH LEATHER.

Specification forming part of Letters Patent No. 127,098, dated May 21, 1872.

Know all men by these presents:

That I, JAMES H. OSGOOD, of Boston, in the State of Massachusetts, have invented a new and useful Method of Covering Rounded Articles with Leather, suitable for the manufacture of base-balls and other similar articles, of which the following is an accurate specification:

The nature of the invention consists, first, in the employment of a new stitch which I call the "double herring-bone secured stitch," whereby only one stitch of the covering can be broken at a time; second, in the employment of a binder of leather next the yarn of a base-ball, or as a first cover to other round articles, so stitched and put on, that the outer covering when applied shall have its seams at right angles or breaking joints with the seams of the said first cover; third, in making the leather covers of a hemispherical shape by compression and crimping in properly-shaped molds with plungers, while wet, after which they are dried in shape and then softened by moisture, stretched on, and sewed.

In the accompanying drawing the invention is illustrated by a game ball. This ball is made in the usual way with a rubber or cork core, and yarn tightly wound on till the ball is of proper size. Stout leather is then cut to proper shape to form one hemisphere of the cover, and is thoroughly wet, and, while wet, put into a hemispherical mold, preferably of wood, and strongly compressed therein by a hemispherical plunger closely fitting the mold. It is then allowed to remain in the mold till somewhat dry, the compression itself removing considerable water by pressure. The edges of the hemisphere are then trimmed, and the leather laid by so as to become thoroughly hard and dry. When it is dry and it is desirable to cover a ball, two of these hemispheres of leather are taken, moistened enough to make them flexible, while still retaining their shape, and being softened at the edges sufficient to admit of working a needle through them. This drying to shape and subsequent softening is requisite, because when first molded, the leather dries unevenly; and in fitting on the covers, it is requisite to have only the edges soft for sewing, while the dish-part should be only flexible. Two of these

hemispheres are then placed upon the yarn ball and are drawn into place by sewing them as follows: A thread of suitable length is taken, having a needle at each end. The needles are passed from below up through the leather, the thread drawn tight on both sides, crossed, and tied in a "square or reefing knot," by which means the two threads are looped around each other. The needles are then passed under the leather, up through it, the threads again drawn up, again knotted, and this repeated until the leather is all sewed on. The usual stitch for these purposes is made with a single thread carried up through the leather, across the seam, and under the leather on the other side, up through it, across under, up through, across, and so on, making the "herring-bone" stitch. This, it will be seen, is a sort of "double herring-bone" knotted, only the thread which starts on a given side, by the knotting, never crosses to the other side. Almost any knot used for fastening the ends of rope together will serve for the knot in this case, but the "square knot" or the "Carrick bend or weaver's knot" would be the one most generally adopted, and probably the best.

This form of stitch is illustrated at Fig. 2, where *a* and *b* are the two threads, *c* and *d* the two leather sides, and *k* the knots.

This stitch will not rip, for each stitch is independently fastened.

The ball is now fit to be used, but is not suitable for the very hardest usage. I call this cover so put on the first cover or "binder." I now take two other hemispheres of leather, place them upon the ball so covered with the first cover, after that has dried, in such a way as to have their seam break joints with the seam of the covers already on, and sew them, as before, with the "double herring-bone stitch knotted."

This construction is shown at Figure 1, where *A* is the binder, *x* its seam, and *B* is the outer cover, and *y* its seam.

By this construction I save sewing, because the seam is the line of a great circle, and not, as is usual, a meandering line sufficiently long to make two great circles. I thus put my two envelopes on the ball with only the amount of sewing now used for one. I also secure a per-

fectly spherical form by molding the leather first. I also have leather to resist the strain in every direction. The seams cannot rip.

The illustration given is that of a base-ball, but the stitch is equally applicable to the sewing of raw-hide covers, to pack or military saddles, or to any strained covering of leather. The method of molding or shaping the leather and then drying it before attempting to fit it, moistening it while fitting only slightly is also applicable to all leather coverings, as of harness, buckles, and trimmings, panniers, axe, and shovel slings, and the like.

I claim, and desire to secure by Letters Patent—

1. A ball exterior, composed of two crimped hemispherical covers, A and B, having their respective seams *x* and *y* break joints, substantially as set forth.

2. In combination with a ball whose exterior is composed of two hemispherical covers A and B, with their respective seams *x y* breaking joints, I claim the double herring-bone stitch formed of two threads, in the manner herein set forth.

JAMES H. OSGOOD.

Witnesses:

L. H. MAHN,
THOS. WM. CLARKE.