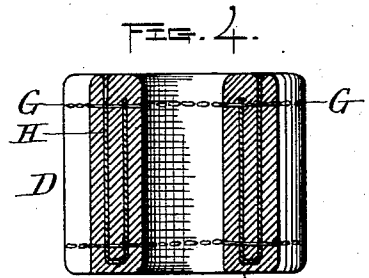
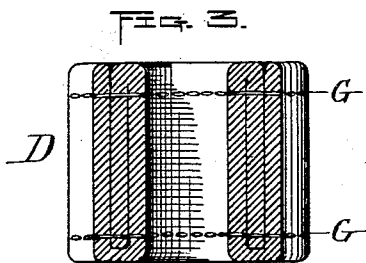
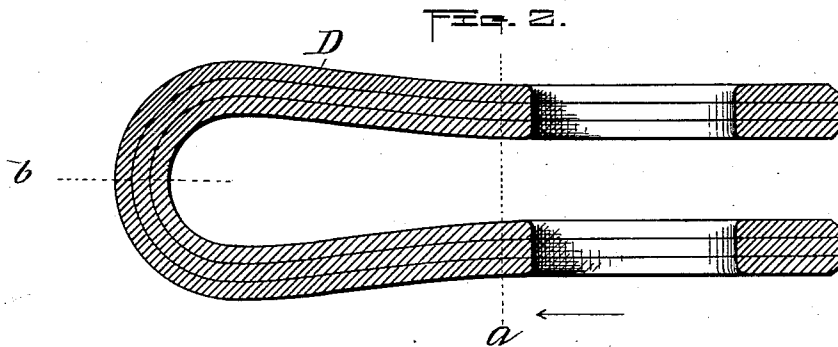
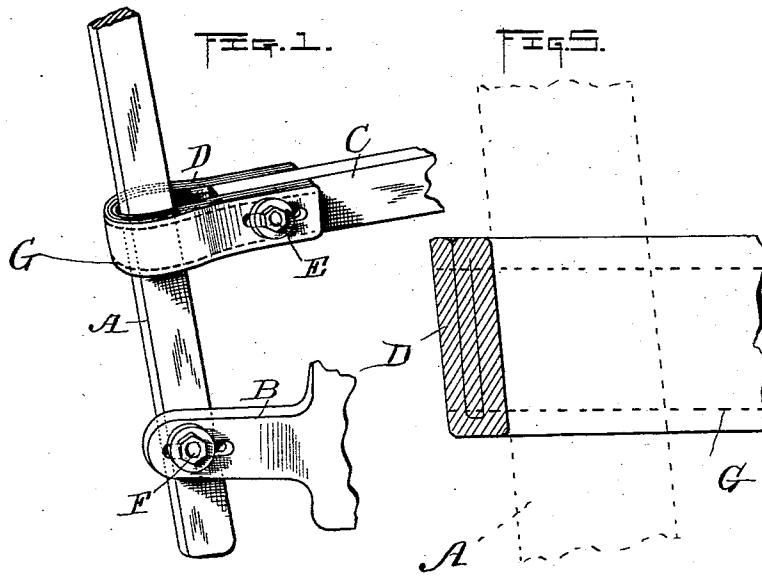


(No Model.)

J. F. & C. G. WARREN.
PICKER STAFF STRAP FOR LOOMS.

No. 572,140.

Patented Dec. 1, 1896.



Witnesses;

Walter B. Nourse,
C. Forrest Nesson.

Inventors;

John F. Warren,
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By A. A. Barker. Atty.

UNITED STATES PATENT OFFICE

JOHN F. WARREN AND CHARLES G. WARREN, OF WORCESTER, MASSACHUSETTS.

PICKER-STAFF STRAP FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 572,140, dated December 1, 1896.

Application filed March 23, 1895. Serial No. 542,897. (No model.)

To all whom it may concern:

Be it known that we, JOHN F. WARREN and CHARLES G. WARREN, of the city and county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Lug-Straps for Looms; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents so much of a picker-staff, its strap, and connections as is necessary to illustrate the application of our invention to practice. Fig. 2 is a full-size central longitudinal section of our said improved lug-strap. Fig. 3 is a transverse section thereof, taken at the point indicated by line *a*, Fig. 2; and Fig. 4 is a similar view showing a slight modification. Fig. 5 is a partial sectional view of our improved strap, taken on line *b*, Fig. 2, cutting through the fold at the center of the bend of the strap.

The object of our invention is to produce a lug-strap for looms which shall embody strength, durability, and elasticity in use, and also minor advantages hereinafter specified; and our invention consists in a lug-strap preferably made of a single piece of leather of sufficient size to produce the strap, said piece being folded upon itself and then fastened near the folded edges and bent into the usual loop form of a lug-strap, as will be hereinafter more fully set forth.

In order that others may better understand the nature and purpose of our said invention, we will now proceed to describe it more in detail.

In the drawings, A represents the picker-staff of a loom, which is pivoted at its lower end to a stationary bearing B, forming in practice a part of the loom-frame.

C represents part of the lug-strap-operating bar, to the outer end of which is attached our improved lug-strap D, through the loop of which the picker-staff passes, as shown in Fig. 1.

Our completed lug-strap is preferably made from a single piece of leather about square in shape, said piece being folded upon itself to

produce several thicknesses, one lying against the other, with folds at the edges of the completed strap, as is shown in the drawings.

Our improved strap is preferably so folded that one edge of the piece of leather from which the strap is made comes upon the outside of the strap at what is to be the top thereof, and the other edge of the said piece of leather comes upon the inside of the completed strap near what is to be the bottom thereof, thus forming a wide fold at the bottom of the strap, with the inner edge of the leather lying in said fold, and a narrower fold at the top of the strap, with the outer edge of the leather lying against the outside of the fold.

By folding the leather in the manner just described, with the wide fold at the bottom of the completed strap and the narrower fold at the top thereof lying against the outer edge of the leather, it results that when the strap is bent into its proper shape for use the top of the loop formed by the bend in the strap flares outwardly slightly upwardly, so that what may be termed the "end" of the completed loop, against which the picker-staff strikes, is somewhat inclined relative to a vertical plane, as shown in Figs. 1 and 5, and thus conforms to the radial striking position of the picker-staff at the time of the impact of the blow of the latter. Moreover, in forming our completed lug-strap by a single piece of leather, folded as described, it will be observed that the wearing portions of the said strap, or the parts thereof subjected to the blow of the picker-staff, are all upon what is the finished surface of the piece of leather before the latter is folded, which surface has the greatest capability for resisting wear and consequently the greatest endurance in use.

Our strap, after having been folded as above described, has its several plies firmly secured together, this being preferably done by two rows of stitching, as shown in the drawings.

The completed strap is provided near its ends with the usual transverse openings, through which pass the fastening-bolts E or other securing devices by which the strap is attached to the operating-bar C.

The piece of leather from which our lug-strap is formed may have a lining of cloth, as shown in Fig. 4, if desired.

Having thus described our invention, what
5 we claim, and desire to secure by Letters Patent, is—

1. A lug-strap for looms consisting of a piece of leather folded upon itself to form several plies, with a wide fold at the lower edge of the completed strap and having one edge of the piece of leather lying in said fold, and with a narrower fold at the upper edge of said completed strap lying against the other edge of said piece of leather, the plies of the said
10 folded piece of leather being secured together and then bent into the usual loop form of a lug-strap, substantially as set forth.
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2. A lug-strap for looms consisting of a piece of leather lined with cloth and folded upon itself to form several plies, with a wide fold at the lower edge of the completed strap and having one edge of the piece of leather lying in said fold, and with a narrower fold at the upper edge of said completed strap lying against the other edge of said piece of leather, the plies of the said folded piece of leather being secured together and then bent into the usual loop form of a lug-strap, substantially as set forth.
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