

No. 670,429.

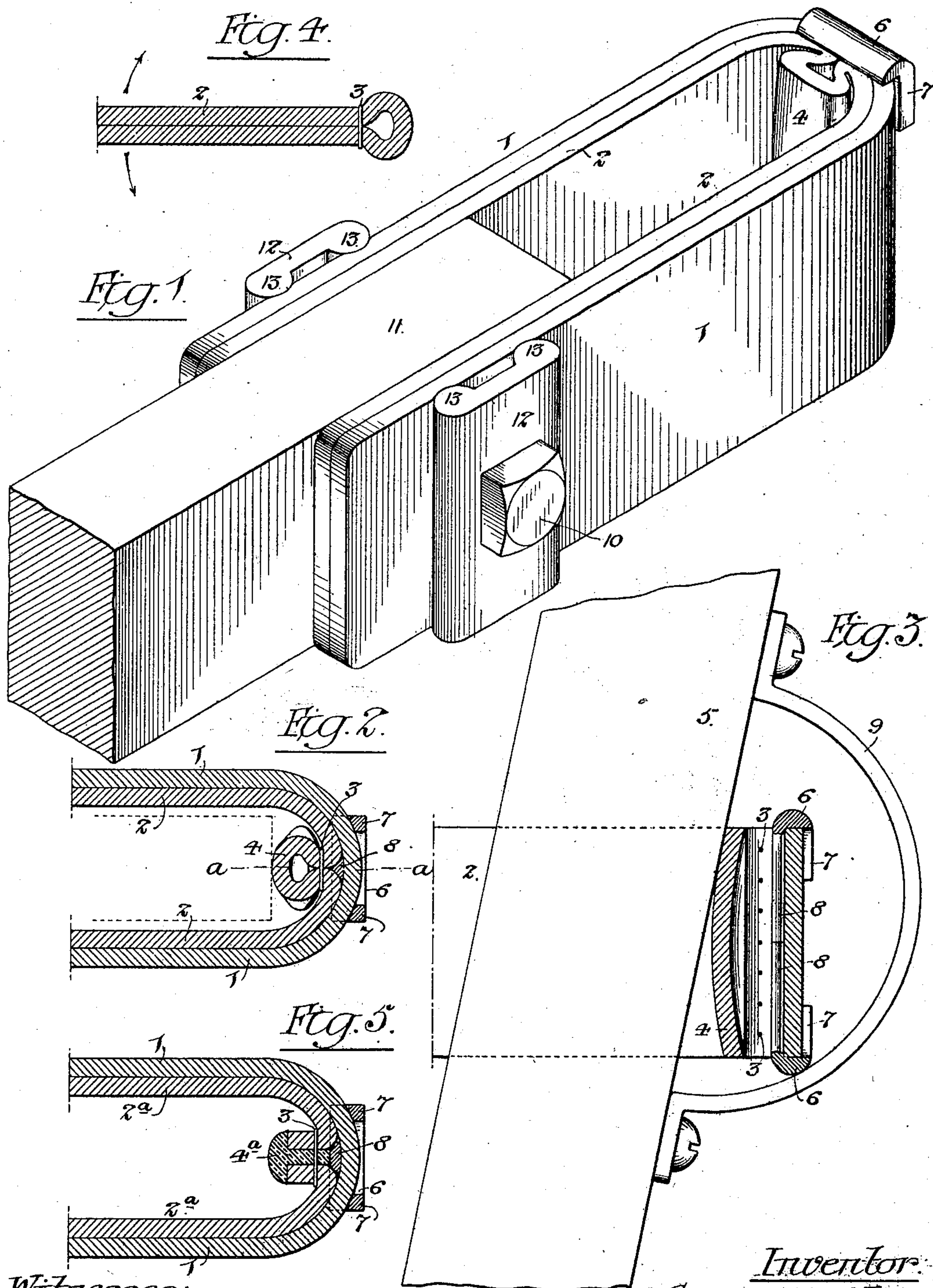
Patented Mar. 26, 1901.

G. A. LYON.

LUG STRAP FOR LOOM PICKER STICKS.

(Application filed Apr. 2, 1900.)

(No Model.)



Witnesses:-

Chas. W. Coe.  
Louis H. Whitehead

Inventor:  
George Albert Lyon.  
by His Attorneys:-  
Howson & Howson



# UNITED STATES PATENT OFFICE.

GEORGE ALBERT LYON, OF PHILADELPHIA, PENNSYLVANIA.

## LUG-STRAP FOR LOOM PICKER-STICKS.

SPECIFICATION forming part of Letters Patent No. 670,429, dated March 26, 1901.

Application filed April 2, 1900. Serial No. 11,183. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE ALBERT LYON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Lug-Straps for Loom Picker-Sticks, of which the following is a specification.

One object of my invention is to so construct a lug-strap for the picker-stick of a loom as to provide an elastic bearing-rib for contact with the outer edge of the stick, a further object being to prevent wear upon the strap by contact of the corners of the picker-stick therewith, and still further objects being to distribute the strain upon the strap so as to prevent rupture of the latter and to provide a ready means for preventing the lug-strap from slipping down from its proper position on the stick. These objects I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a lug-strap constructed in accordance with my invention, showing also part of the sweep-stick and the means employed for securing the lug-strap thereto. Fig. 2 is a sectional plan view of part of the lug-strap with the outline of the picker-stick shown by dotted lines. Fig. 3 is a vertical section on the line *a a*, Fig. 2, showing in side elevation part of the picker-stick and an attachment thereto. Fig. 4 is a view illustrating the first step in the preparation of one of the strips of which my improved lug-strap is composed; and Fig. 5 is a view similar to Fig. 2, but illustrating another construction of lug-strap embodying my invention.

The lug-strap shown in Figs. 1, 2, and 3 comprises two strips 1 and 2, of leather, rawhide, textile fabric, or other available material, the outer strip 1 being bent into U form and secured by cementing or otherwise to the inner strip 2, which, however, before being bent into U form is first bent at the center in the opposite direction, as shown in Fig. 4, the folded strip being then secured together at a point close to the bend by means of transverse stitches, staples, or other transverse fastening devices 3. After this has been done the free ends of the strip are bent around in the direction of the arrows, Fig. 4, so as to produce a strip which conforms generally to

the interior formation of the outer strip 1, but has at the bend of the strap an inwardly-projecting rib 4. While the two strips are being secured together, this rib 4 is subjected to pressure, whereby its inner face is rendered convex vertically, so as to provide a properly-rounded bearing for the outer face of the picker-stick 5. The projecting rib thus formed possesses a considerable degree of elasticity, and thus relieves the lug-strap from a large amount of the shock and strain exerted upon it when the said strap has a solid rib at the bend. Furthermore, the rib projects inwardly to such an extent that it prevents the picker-stick from entering the bend of the strap. Hence it is impossible for the outer corners of the picker-stick to come into contact with the inner strip 2 at the bend, and said strip is therefore relieved from wear at that point, as shown in Fig. 2. In some cases the strap may consist of but a single strip having the inwardly-projecting elastic rib formed at the bend in the manner described; but the use of the outer reinforcing-strip is always preferred.

Instead of providing the lug-strap with an internally-projecting rib composed wholly of the material of the inner strip 2 I may in some cases use in place of said inner strip two independent inner side strips 2<sup>a</sup>, as shown in Fig. 5, these strips being bent inwardly at the bend of the lug-strap, so as to confine between them the stem or shank of a rubber or other elastic bearing-rib 4<sup>a</sup>, the inwardly-bent parts being secured together by transverse stitches, staples, or other fastenings 3, as before.

In order to prevent the lug-strap from slipping down from its proper position on the picker-stick, I provide the stick upon its outer face with a bow 9, and I also provide the lug-strap with fenders 6 at the top and bottom of the bend, these fenders being preferably of metal and serving to prevent contact of the bow 9 with the material of which the lug-strap is composed. Each fender 6 consists of a transverse bar having a stem 8, which extends from top or bottom of the lug-strap, between the inner and outer strips of the same, to a point midway of the strap and occupies a position at the center of the bend of the strap, as shown in Fig. 2, this stem by pref-



erence conforming to the shape of the opening formed by the bending of the inner strip

2. Each fender-bar 6 is also by preference provided at each end with a projecting finger 7, which bears upon the outer side of the strap at the bend and extends some distance from the top or bottom edge of the strap. Hence the fender-bars are firmly held in their proper positions upon the strap, the latter being clipped between the central inner stem and the outer corner-fingers of the fender-bar.

The head and nut of the bolt 10, whereby the lug-strap is secured to the sweep-stick 11, bear upon washers 12, which extend from top to bottom of the lug-strap, each of these washers having at each vertical edge an inwardly-projecting rib 13, which indents and takes a firm hold upon the strap, so that the strain is distributed throughout the entire width of the strap instead of being concentrated at the bolt, as usual, hence preventing the rupture of the strap, which frequently occurs when the ordinary fastening is used.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The within-described lug-strap for the picker-stick of a loom, said strap being bent so as to embrace the stick, and having an inwardly-projecting hollow elastic rib at the bend, said rib being integral with the strap, substantially as specified.

2. The within-described lug-strap for the picker-stick of a loom, said strap being bent so as to embrace the picker-stick and being composed of inner and outer strips secured together and having an inwardly-projecting hollow elastic rib at the bend of the strap, said rib being integral with the inner strip, substantially as specified.

3. The within-described lug-strap for the picker-stick of a loom, said lug-strap being bent so as to embrace the picker-stick and having at the bend an inwardly-projecting rib constituting a fold in the material of which the strap is composed, substantially as specified.

4. The within-described lug-strap for the picker-stick of a loom, said lug-strap being bent so as to embrace the picker-stick and consisting of inner and outer strips secured together the inner strip having at the bend an inwardly-projecting rib constituting a fold in

the material of which said inner strip is composed, substantially as specified.

5. The within-described lug-strap for the picker-stick of a loom, said lug-strap being bent so as to embrace the picker-stick and having at the bend an inwardly-projecting rib constituting a fold of the material of which the strap is composed, said fold being secured together at its base by transverse fastenings, substantially as specified.

6. The within-described lug-strap for the picker-stick of a loom, said lug-strap being bent so as to embrace the picker-stick and comprising inner and outer strips secured together, the inner strip having at the bend an inwardly-projecting rib constituting a fold of the material of which the inner strip is composed, said fold being secured together at its base by transverse fastenings, substantially as specified.

7. A lug-strap for the picker-stick of a loom, said strap being bent so as to embrace the stick and being composed of inner and outer strips secured together, in combination with fender-bars disposed at top and bottom of the bend of the strap and having stems contained between the strips of the latter, said bars covering and protecting the edges of the strap at the bend, substantially as specified.

8. A lug-strap for the picker-stick of a loom, said strap being bent so as to embrace the stick and being composed of inner and outer strips secured together, in combination with fender-bars disposed at top and bottom of the bend of the strap and having stems contained between the strips of the latter, and fingers bearing against the outer face of the strap, substantially as specified.

9. A lug-strap for the picker-stick of a loom, said lug-strap being bent so as to embrace the stick, and having at the bend an inwardly-projecting hollow elastic rib for contact with the stick, said rib being integral with the strap and preventing the stick from entering the bend of the strap, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE ALBERT LYON.

Witnesses:

F. E. BECHTOLD,  
JOS. H. KLEIN.