

D. D. MASON.

ADJUSTABLE JACK STRAP FOR LOOMS.

No. 266,491.

Patented Oct. 24, 1882.

Fig. 1.

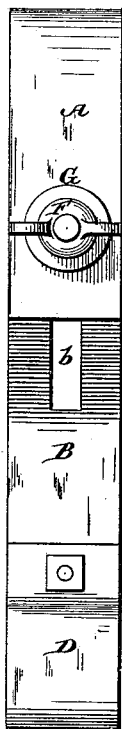


Fig. 2.

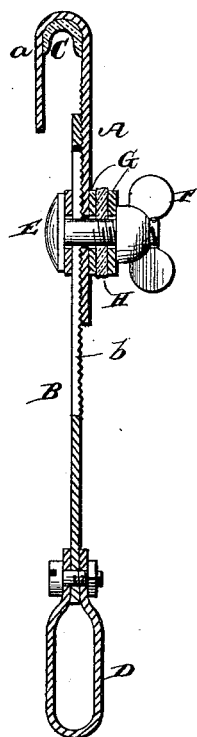


Fig. 3.

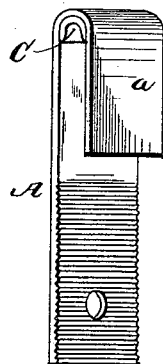
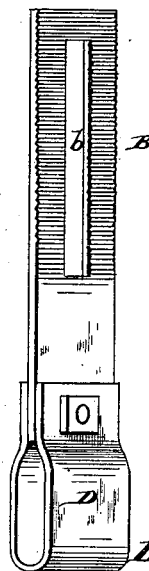


Fig. 4.



Witnesses.

Robert Everett.

J. A. Rutherford.

Inventor.

David D. Mason.

By James L. Norris.

Atty.

(No Model.)

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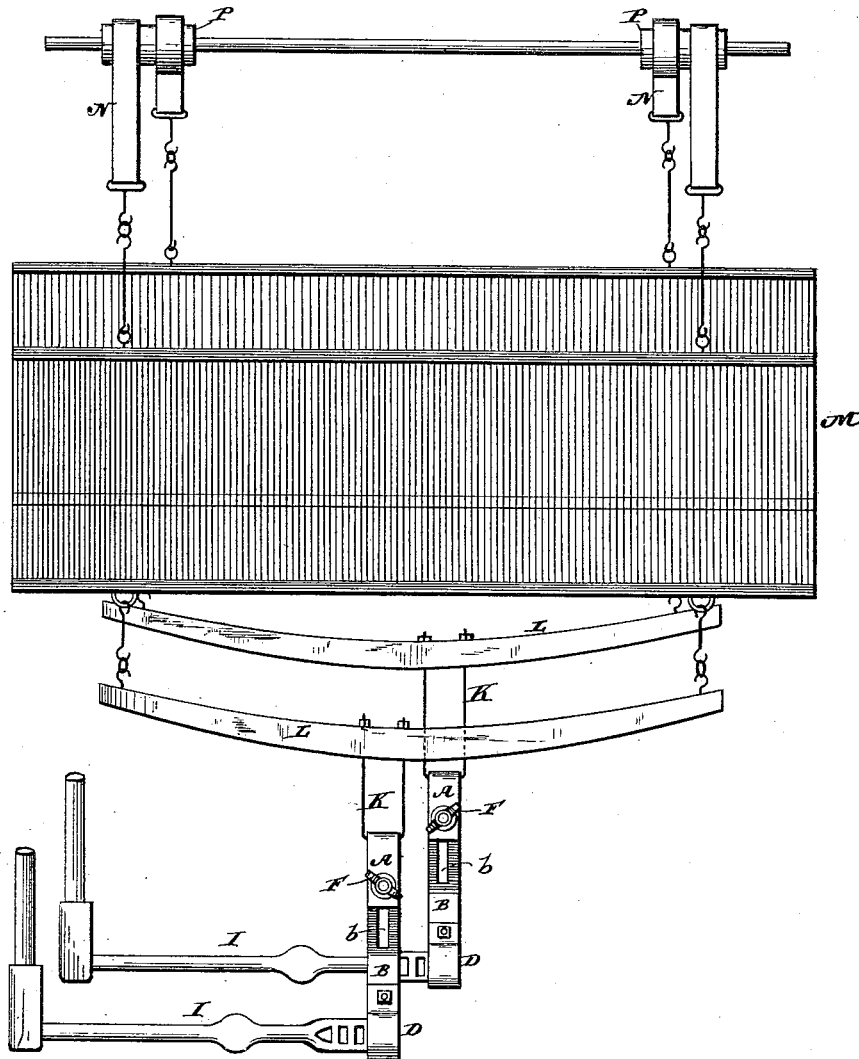
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Fig. 5.



Witnesses.

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J. A. Rutherford

Inventor.

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UNITED STATES PATENT OFFICE.

DAVID D. MASON, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR OF TWO-THIRDS TO BENJAMIN F. GARLAND AND GILBERT P. WHITMAN, BOTH OF SAME PLACE.

ADJUSTABLE JACK-STRAP FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 266,491, dated October 24, 1882.

Application filed April 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, DAVID D. MASON, a citizen of the United States, residing at Manchester, Hillsborough county, State of New Hampshire, have invented new and useful Improvements in Adjustable Jack-Straps for Looms, of which the following is a specification.

This invention relates to improvements in jack-straps employed for operating the harness-frames of looms; and it consists of a certain combination of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of a jack-strap embodying my invention; Fig. 2, a longitudinal central sectional view of the same; Figs. 3 and 4, detached views, in perspective, of the two parts of the strap; and Fig. 5, a front elevation of portion of a loom representing a pair of harness-frames with the jack-strap applied thereto.

The jack-strap illustrated in said figures of the drawings comprises two metal parts, A and B, each part being by preference made of steel. The upper part, A, is formed with the hook or bend *a* at its upper end, and against the curved inner face of this portion of this strap is fitted a leather cushion, C, which will not only serve to prevent noise during the operation of the loom, but will also prevent wear between the strap and the jack-hook with which the upper bent portion of the strap is engaged. When worn so as to be unserviceable this leather pad or cushion can be replaced by a fresh one at a trifling cost. To the lower end of the lower part, B, of the strap is secured a metal loop, D, by means of a screw-bolt passing through the strap and the ends of the loop, and a nut fitted upon the bolt, said loop serving to connect the metal jack-strap with the treadles or shedding-levers of the loom, as shown in Fig. 5. These two parts A and B of the jack-strap are connected together by means of a screw-bolt, E, passing through the same, and a thumb-nut, F, fitted upon the screw-bolt; and in order to admit of ready adjustment in the length of the strap by hand I form one of the

metal parts or straps of which the jack is composed with a longitudinal slot, *b*, and pass the screw-bolt which holds the two parts together through this slot. To prevent the slipping of the two main parts of the strap their opposing faces are serrated or formed with file-teeth, and by reason of such construction it is obvious that but little binding-power will be requisite to hold the two parts against any sliding movement upon each other. In order to admit of the ready adjustment of the two parts of the jack-strap, I arrange upon the screw-bolt, and between the thumb-nut and one of said parts, a pair of metal washers, G G, and between these metal washers I arrange an elastic washer, H, which can be of leather, rubber, or other suitable elastic material. In turning the thumb-nut the inner metal washer will be clamped upon the strap and the elastic washer will be compressed between the said pair of metal washers. The elasticity of this intermediate washer admits of the thumb-nut being turned back by the thumb and finger of the operator's hand during the operation of the loom far more readily than could be effected if all of the binding-surfaces in contact were of metal, the friction being considerably less; and, moreover, the elasticity of said washer will, when the thumb-nut is tightened up, cause the inner washer to quickly and easily bind upon the strap, and also cause the head of the bolt to bind upon the opposite side of the jack-strap with a force sufficient to hold the parts together, which, as before stated, need not be very great, owing to the serrated inner faces of the two main portions A and B of the jack-strap.

In Fig. 5, which shows portion of a loom in order to illustrate the way in which my jack-strap is employed, I indicates the cam-operated shedding-levers to which the loops D at the lower ends of the jack-straps are attached, the ends of these levers being received in said loops. K indicates the jack-hooks employed for connecting the upper hook ends of the jack-straps with the harness-jacks L, and the letter M designates the loom-harness from which said

harness-jacks are supported. N refers to the usual gallows-straps, and P the gallows-rolls for the said straps.

What I claim is—

- 5 1. The combination, with the harness-frame of a loom, of the jack-strap composed of two parts, one having a longitudinal slot and a serrated face, and the other having a serrated face, a screw-threaded bolt extending through the
10 slot, and a thumb-nut applied to the threaded end of the bolt for confining the slotted part of the strap in its adjusted position, substantially as described.
- 15 2. The combination, with the harness-frame of a loom, of a jack-strap consisting of the part A, having a hooked end; a, connected with the harness-frame, the part B, having a longitudinal slot, b, and a loop, D, and the screw-bolt E and thumb-nut F, for adjustably connecting the
20 parts of the strap, substantially as described.

3. The metal jack-strap for looms, composed of two parts adjustably connected together by a screw-bolt and thumb-nut, an elastic washer being arranged upon the bolt between the nut and the jack-strap, substantially as and for the
25 purpose set forth.

4. The metal jack-strap composed of two parts adjustably secured together by a screw-bolt and thumb-nut, a pair of metal washers being arranged upon the bolt between the
30 thumb-nut and the jack-strap, and an elastic washer being interposed between the pair of metal washers, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing
35 witnesses.

DAVID D. MASON.

Witnesses:

WILLIAM H. EMERY,
WILLIAM H. MINOT.