

UNITED STATES PATENT OFFICE.

THEODORE HADDEN, OF MATTEAWAN, NEW YORK, ASSIGNOR OF ONE-HALF
TO MERVILLE A. ROBINSON, OF SAME PLACE.

HAT-POUNCING MACHINE.

SPECIFICATION forming part of Letters Patent No. 266,811, dated October 31, 1882.

Application filed July 18, 1882. (Model.)

To all whom it may concern:

Be it known that I, THEODORE HADDEN, of Matteawan, in the county of Dutchess and State of New York, have invented a new and Improved Hat-Pouncing Machine, of which the following is a full, clear, and exact description.

My invention consists of a tension attachment for hat-pouncing machines, whereby the action of the pouncing-roller upon the felt may be easily controlled and the danger of injury to the hands of the operator from contact with the wheel is obviated.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of a hat-pouncing machine having my tension device applied thereto, and Fig. 2 is a plan view of the under side of the tension-bar.

The frame A, pouncing-wheel B, pulley C, and head-block D are of the ordinary form and construction, and the head-block is operated by the pivoted board E, lever F, and foot-lever G, in the ordinary manner.

To the ledge *a* of the table *a'* of the frame A of the machine is secured, by means of the screw *b*, the tension-frame H, which is composed of the horizontal board *h* and the vertical board *h'*.

Upon the rear end of the vertical board *h'* is formed a slotted lug, as shown at *l*, and to this lug is adjustably secured, by means of the bolt *i*, the rear end of the tension-bar J. The forward part or end of this bar J is supported by the hooked rod L, and it reaches in front of and a short distance past the pouncing-wheel B and stands slightly above the head D, as shown in Fig. 1, and the extreme end *j* of this bar is provided with the pins *e e'*, the former of which protects the operator's fingers from coming in contact with the pouncing-wheel B, while the latter is adapted to come upon the hat and cause it to swing upon the head block for pouncing the tip of the hat, and the said bar is faced with the board or plate K, the lower edge of which is adapted to be brought down by slight pressure from the hand of the operator placed upon the outer end, *j*, of the bar, so as to grasp the hat between it and the head D, as shown in dotted lines in Fig. 1, and this

board also serves to prevent the hat being thrown over against the wheel B.

The hooked rod L reaches above the tension-frame H, as shown, and is provided at its upper end, above the lug *l* of the board *h'*, through which the rod passes, with the coiled-wire spring *f*. The lower end of this spring rests upon the said lug *l*, and is confined at its upper end by the nut *c*. The rod L is loose in its bearing, so that when the nut *c* is screwed down upon the spring *f* the rod will be raised by the action of the spring, thereby raising the outer end of the bar J, so that the space between the lower edge of the board K and the head D may be varied as desired.

On the face of the vertical board *h'* is secured the flat spring N, the outer end of which is held down so as to impinge upon the upper edge of the bar J by means of the thumb-screw O, which passes through the lug *o*, attached to or formed upon the upper edge of the vertical plate *h'*, as shown in Fig. 1. This spring and screw constitute an auxiliary tension to the spring *f*, so that the pressure of the bar J may be quickly and easily varied by turning the screw O to suit the particular work, without the necessity of adjusting the pressure of the spring *f*.

In use the hat is placed upon the head-block D, which is pressed forward to the roller B by placing the foot upon the foot-lever G in the ordinary manner. The movement forward of the head-block brings the hat placed upon it first against the lower edge of the board K, which exerts a slight tension on it. If this tension is sufficient, the hat is simply manipulated in the hands, so that the action of the wheel will not draw it over the head-block too rapidly. In case the tension is not sufficient the operator simply places his thumb upon the end *j* of the bar J and presses it down with the desired pressure, and this is done when the tip is to be pounced, so that the pin *e* will cause the tip to work under the wheel. In this manner the machine may be easily regulated to the exact tension the grade of felt being worked requires, and there is no danger of the operator getting his hands injured from contact with the wheel B, as the pin *e* furnishes a perfect guard against such accidents, so that he can work with bare hands. Besides, the board

K may be adjusted by the springs and bolt *i* so as to bear evenly across the head-block or rest, giving a steady motion to the hat, and there is no danger of injuring the brim of the hat from being thrown against the wheel, and there is no danger of the hat running out of the machine.

I am aware that a shield, presser-bar, and adjustable spring have been heretofore used; also, that a guard and presser-pin have been employed in hat-pouncing machines; but

What I do claim as new is—

1. The combination, with the frame A, the wheel B, and tension-frame H, of the tension-

bar J, carrying the plate K, secured adjustably at its rear end to said tension-frame, supported at the front end by the hook-rod L, and extending in front of and beyond the pouncing-wheel, as shown and described.

2. The combination, with the tension-frame H and bar J, of the hooked rod L, spring *f*, spring N, nut *e*, and thumb-screw O, substantially as described.

THEODORE HADDEN.

Witnesses:

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