J. W. Thorp.

Tailors Pressing-Machine.

No. 77934 Patented May 12, 1868

Fig. 5.

Fig. 2.

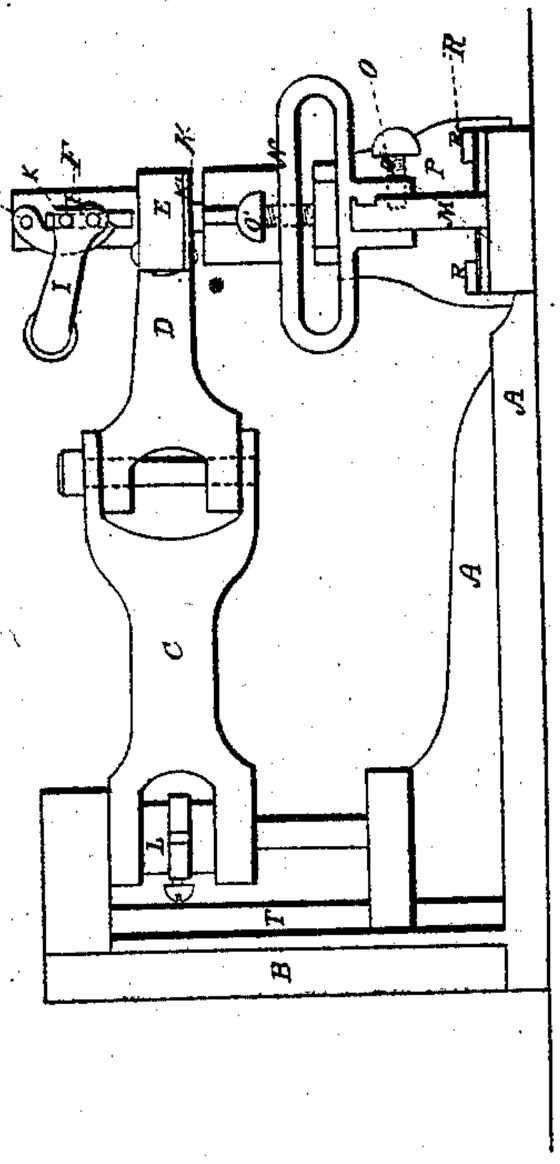


Fig. 3.

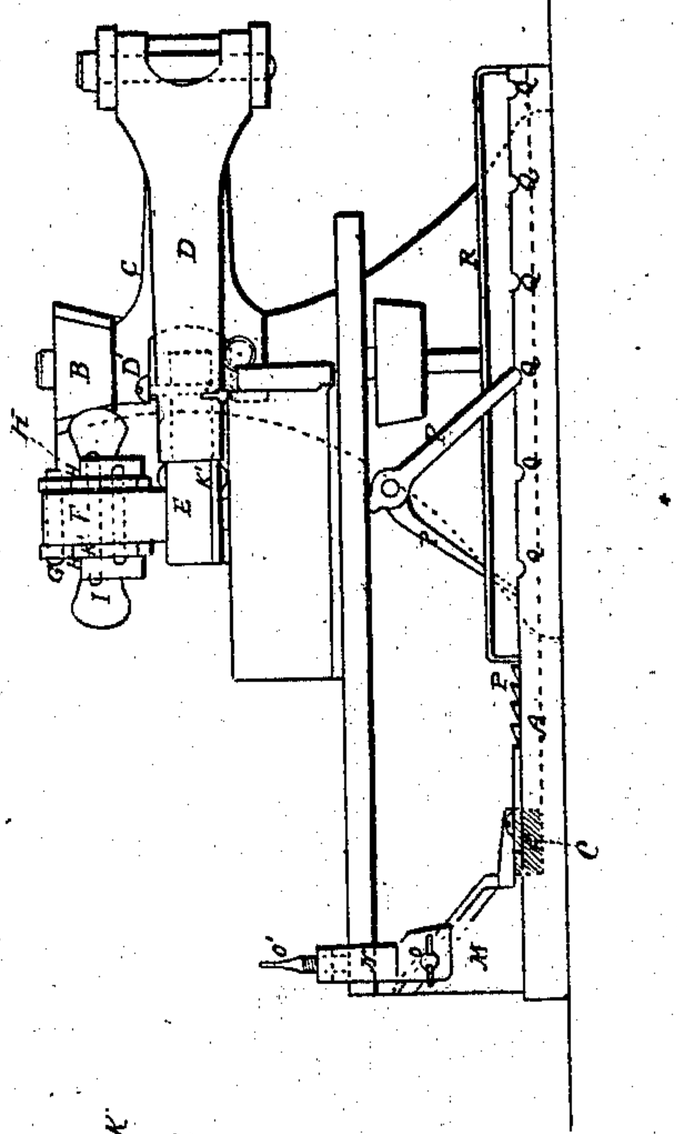


Fig. 4.

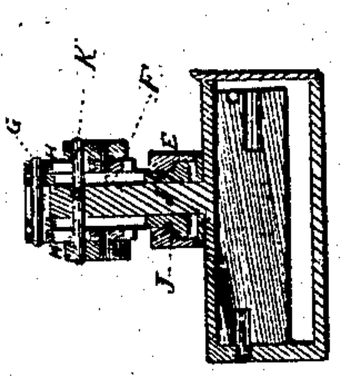


Fig. 1.

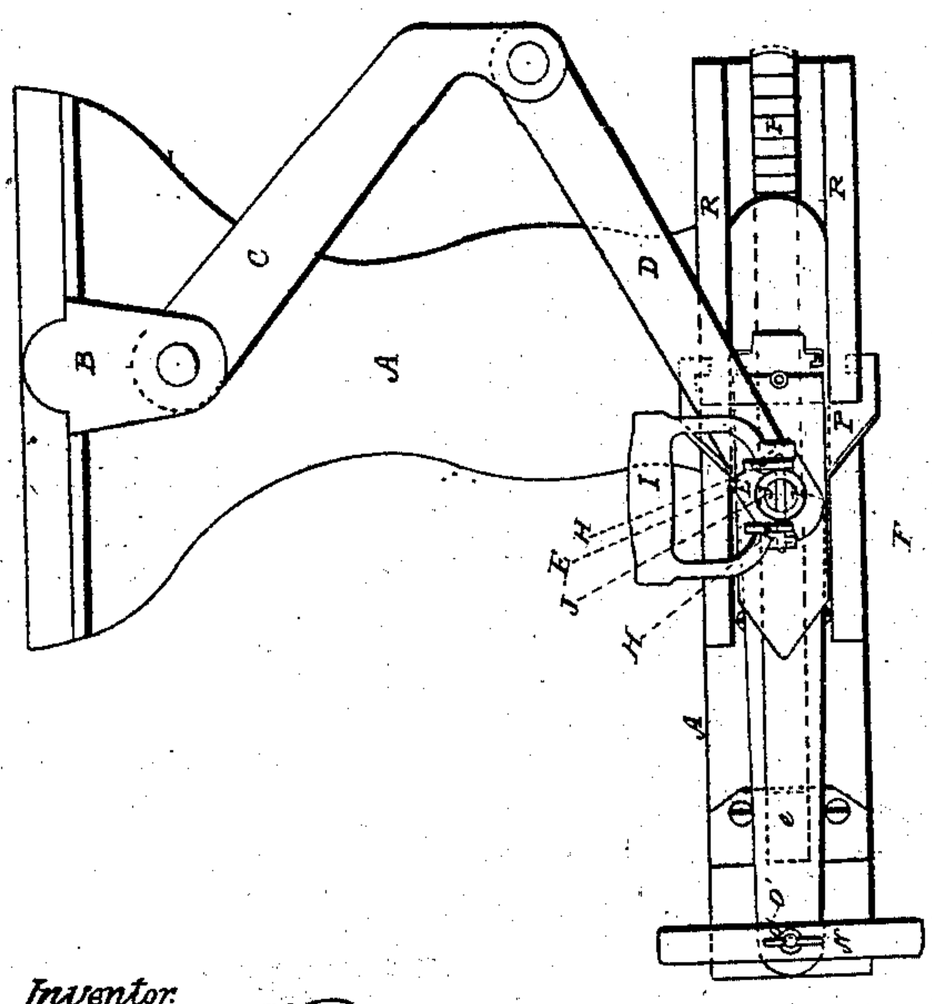


Fig. 6.

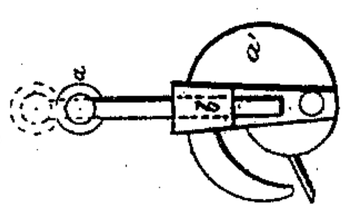
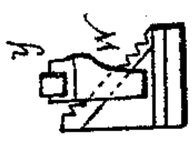


Fig. 7.



Witnesses
Chas. H. Griffin
C. W. Butlding

Inventor:
Joseph W. Thorp

United States Patent Office.

JOSEPH W. THORP, OF HILLSBOROUGH BRIDGE, NEW HAMPSHIRE,
ASSIGNOR TO HIMSELF AND DAVID F. BROWN.

Letters Patent No. 77,934, *dated May* 12, 1868.

IMPROVEMENT IN TAILORS' PRESSING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSEPH W. THORP, of Hillsborough Bridge, in the county of Hillsborough, and State of New Hampshire, have invented a new and useful Improvement in Tailors' Pressing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon. In the accompanying drawings—

Figure 1 is a top or bird's-eye view of my machine.

Figure 2 is a side view or elevation of the same.

Figure 3 is an end view of the machine.

Figure 4 is a vertical section of the press-iron and its spindle or shank, showing also the sleeve, and socket-joint for operating the same.

Figure 5 is a detached horizontal section of the collar or nut, forming part of the hinge of the crane or swinging arm.

Figure 6 is a modified view of the cam and handle detached from the press-iron.

Figure 7 is an inclined ratchet-standard, for supporting the press-board.

My invention consists, first, in an improved arrangement for giving a universal joint to the press-iron supported on a crane; and, second, in the mode of supporting the press-board and heater.

In the construction of my improvement in pressing-machines, the bed-plate, with the standards B and M, may be cast in one piece, in order to hold the main hinge of the crane at one end of the machine in fixed relation to the attachment of the press-board at the other end of the machine.

The crane or arm C is strongly hinged to the main frame or standard B, by two large sockets fitted to bolt on shaft T. Between the sockets of this hinge is a well-fitted collar, L, fig. 2, provided with a thumb-screw, V, and also bushed by two slightly-movable plates, *a*, fig. 5, against one of which said thumb-screw works in fixing the collar, and thus supporting the crane or arm C at any desired height upon the bolt or shaft T.

The hinge between the arms C and D is also very strong, and works closely.

At the distal extremity of the arm D, the socket or holder E is attached by a wrist-joint, fig. 3, provided with a screw-stop, D′ thus giving the socket a rotary motion in the arm. This socket has a face-plate, and also a cavity of peculiar shape, fig. 4, forming, with the sleeve F, a ball-and-socket joint, limited by the spindle of the press-iron about to be described.

The press-iron has a rigid spindle, J, well fitted to and sliding in the sleeve F. This spindle is pivoted to the handle I by a pin, K, passing through the sleeve, and working up and down in slots therein.

The sleeve F may be connected to the handle and to the spindle by means of two levers H, figs. 2 and 4, or by two cams, figs. 6 and 8, cast together or rigidly connected by bar *c*, fig. 8. The latter modification gives less play than the levers H, and also allows the handle I to slide in or out, as shown in red and black lines, fig. 6, and thus increase or diminish the leverage os the handle at pleasure.

By this arrangement, a slight pressure of the hand upon handle I brings the force of an elbow-lever upon the spindle of the press-iron, and thus enables the workman, without weariness, to employ any desirable amount of pressure upon his work.

The heater *j*, fig. 4, when too hot, is suspended in the chamber of the press-iron by means of pins *x*, and is not allowed to touch the face-plate of the press-iron, thus preventing the excessive heat of the heater from burning the goods.

One end of the press-board is slightly held or hinged to the rigid cap N, in such manner that the other end of the press-board may swing horizontally. The cap N is adjustable upon the firm standard M, and is fixed by means of set-screw O, working in a groove in the standard M. This cap may also be provided with a ratchet, to fit another ratchet on the standard M, as seen in fig. 7.

The other end of the press-board rests upon an adjustable prop or folding-jack, P, one foot of which rests in notches Q of the bed-plate, whilst the other foot rests upon the ratchet-bar P′.

This ratchet-bar rests in a groove, and one end of it bears against a piece of rubber, *e*, fig. 1, dotted red lines, so that the bar, under strong pressure from the jack P, may slide a little in the groove, and thus prevent cutting or tearing the goods when the press-iron comes unexpectedly in contact with a seam, fold, or other unobserved obstruction.

I also sometimes employ an adjustable standard, W, fig. 7, having a piece of India rubber, Y, instead of the folding-jack and ratchet-bar.

I do not confine my invention to the precise form of bed-plate and other devices above described. The plate itself may be cast in two or more pieces, and rigidly bolted or otherwise fastened together, and other changes of construction may be adopted as experience may indicate, so long as the machine is practically the same, or substantially the same.

Neither do I here claim any of the features contained in my former patents.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The arrangement of the socket E, the sleeve F, and the spindle J, with the press-iron and its adjusting-handle, substantially as set forth.

2. Supporting the heater at a distance from the face-plate of the press-iron, by means substantially as described, and for the purpose specified.

3. The arrangement of the adjustable handle *a* and cam *a′* with the spindle J and press-iron, for the purpose substantially as set forth.

4. The rubber or elastic bearing *e*, arranged in combination with the jack P, substantially as set forth.

JOSEPH W. THORP.

Witnesses:

CHAS. H. GRIFFIN,

C. W. BALDWIN.