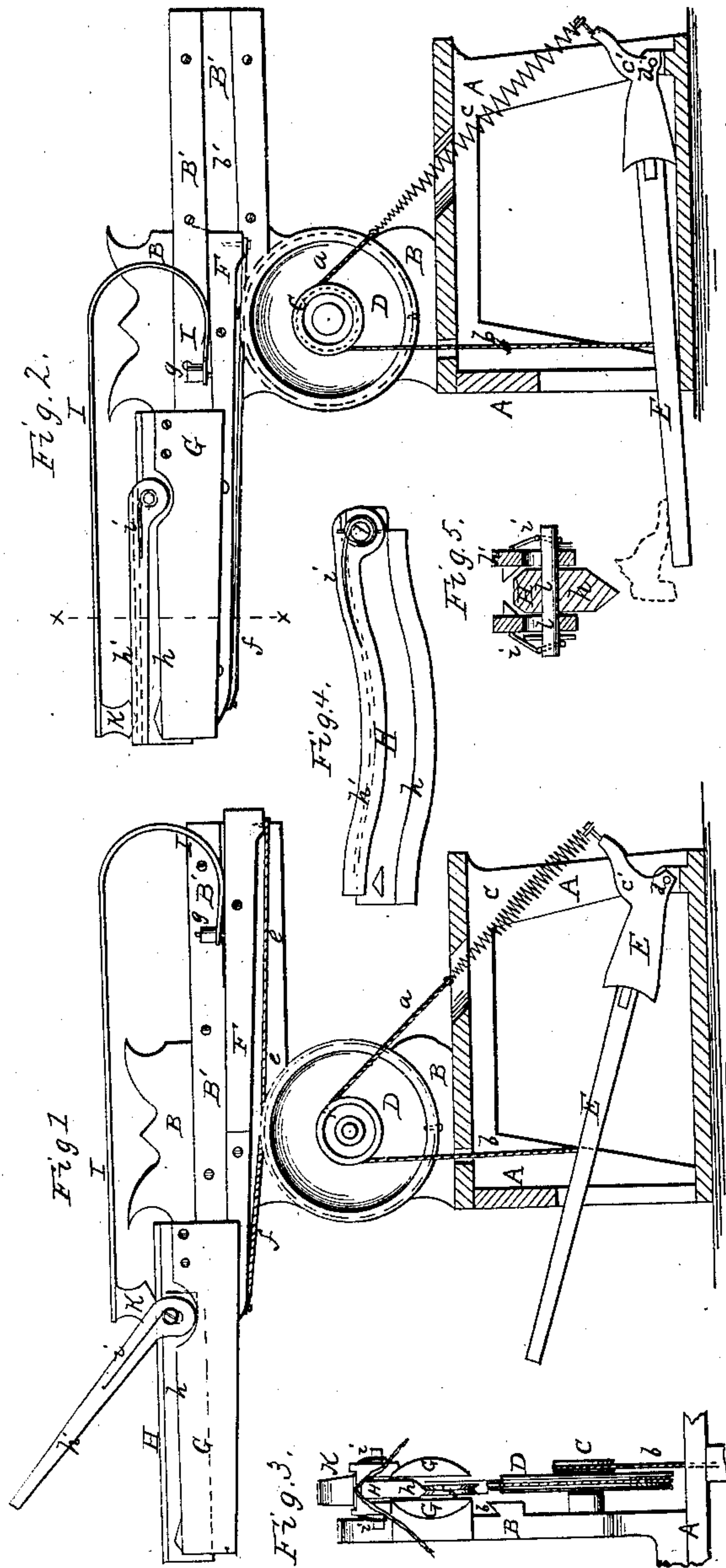


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 Upper Machine
 N^o 62,659. Patented Mar. 5, 1867.



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WILLIAM MAY, OF BINGHAMTON, NEW YORK.

Letters Patent No. 62,659, dated March 5, 1867.

IMPROVED MODE FOR PRESSING LEATHER SEAMS.

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, WILLIAM MAY, of Binghamton, in the county of Broome, and State of New York, have invented a new and improved Machine for Pressing Leather Seams; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to construct and arrange a machine whereby leather seams of any description, whether straight or curved, whether used for boots or shoes, or for saddles, or for any other article whatever, may be pressed neatly and without trouble, said machine being of simple construction and cheaply made.

My invention consists in the application of treadles to such seam-pressing machines; also, in the manner of making the clamping device, wherein the leather is held, self-adjustable, for any thickness of leather; and also in the adjustable spring, whereby the pressure upon the seam may be varied to suit different kinds of work; and also in the construction of the treadle, so that the least possible strain may be put upon the working parts of the machine. In the accompanying drawing my invention is completely illustrated.

Figure 1 is a side elevation of my invention, partly in section, showing the parts "at rest."

Figure 2 is a similar view, showing the parts in working position.

Figure 3 is a vertical cross-section of the same, taken on the line *x x*, fig. 2.

Figures 4 and 5 are detail views, to be hereinafter referred to.

Similar letters of reference indicate like parts.

A is a table or platform, which is made of wood or any other suitable material, and upon which all the other parts of my machine are arranged. A cast-iron or other metal upright, B, is secured to the table, and in it is arranged a box, wherein the horizontal axle of the wheels C and D is mounted. The wheel C is of smaller diameter than the wheel D, and to its periphery are secured two cords, *a* and *b*, the latter going direct down to the centre of the treadle E, while the former is connected to a spiral spring, *c*, which is attached to an arm, *c'*, which extends at a right angle from the treadle and is part of the same. This arm does greatly protect the spring *c*, as, when the treadle is pressed down, as in fig. 2, the end of the arm *c'*, to which the spring is attached, will swing around the pivoting point *d* of the treadle, and will thereby considerably diminish the distance from end to end of the spring, thereby lessening the strain of the spring. By pressing on the treadle the wheels C and D will be rotated in the direction of the arrow, shown thereon in fig. 1; thereby a cord or rope, *e*, which is secured to the periphery of the large wheel, and to the rear end of a sliding-bar, F, will draw this bar forward to the position shown in fig. 2. As soon as the pressure of the treadle is released the spring *c* will draw the wheels back again, and thereby a cord, *f*, which is also attached to the periphery of the large wheel, and to the front end of the bar F, will draw this bar back again into the position shown in fig. 1. The bar F is pivoted to a small block, which fits into a dove-tailed groove, *b'*, which is sunk into a horizontal arm, B', attached to the support B. Another arm, G, or rather two horizontal extensions, are secured to the front edges of the upright B, and between them is held the "clamp and holder" H. This consists of the lower stationary block or rest *h*, to which the slotted clamp *h'* is pivoted, as shown. A spring, I, which is of flat metal plate, and in the shape of a hook, is secured with its short arm to the rear end of the bar F, and is held there by a set-screw, *g*. This short arm is so bent that the spring will rest upon the bar F, in rear of the fastening point *g*, so that its extreme lower end will press up against the head of the set-screw *g*. Thus the more the screw *g* is turned down the harder will be the pressure of the "smoother" K, which is secured to the upper end of the spring I, upon the seam, which is held between the rest *h* and clamp *h'*, as shown in fig. 3. The lower edge of the rest *h* conforms to and is parallel with its upper edge, so that when a curved seam is to be pressed, and a curved rest and clamp, H, have to be used, (fig. 4,) then the front end of the bar F, which is provided with a friction-roller, *f'*, (fig. 3,) is pressed against this curved lower edge, and thereby the smoother K will be held with equal pressure upon each part of the curved upper surface, while otherwise the pressure would be greatest where *h* was highest, and *vice versa*. The leather, after having been sewn, is placed between the rest and clamp, in the manner shown in fig. 3, so that the seam will be upon the centre of the rest. The treadle is then pressed down and the smoother or presser K will thereby be brought over the seam into the position shown in fig. 2. When the treadle is released the presser will be pulled back again by the action of

the spring *c*, while the leather is also released from the rest and clamp by means of a spring *z*, which throws the clamp *h'* up as soon as the pressure upon the same ceases, as shown in fig. 1. To adapt this clamp and rest to leather of different thickness, the pivoting pin *l*, which connects the rest and clamp, passes through a slot in the clamp, as seen more particularly in fig. 5, which is a vertical cross-section through that portion of the rest and clamp. A roller may, if required, be substituted for the fixed smoother or presser *K*, and also two rollers in place of the clamp *h'*, one on each side of the rest *h*. In the latter case the centre of the rollers would have to be in line with the centre of the presser *K*, and the two rollers would be secured to an extension of the spring *I*, so as to travel with the presser *K* and hold the leather down where it is needed.

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

1. The application of a treadle to a machine for pressing leather seams, substantially as herein shown and described.
2. The arm *c'*, on the treadle *E*, in connection with the spring *c* and roller *C*, substantially as and for the purpose herein shown and described.
3. The spring *I*, and the manner of regulating its pressure by means of the screw *g*, substantially as herein shown and described.
4. The rest *h* and clamp *h'*, in connection with the pin *l* and spring *z*, made and operating substantially as and for the purpose herein shown and described.
5. The removable "clamp and holder" *H*, in combination with the fixed supports *G*, substantially as and for the purpose herein shown and described.
6. The sliding-bar *F*, to which the spring *I* is secured, when made and operating substantially as herein shown and described.
7. The rest *h*, which is so constructed that its lower edge will be parallel with its upper surface, substantially as and for the purpose herein shown and described.

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