

G. C. CONVERSE.
Machines for Pricking Leather.

No. 135,969.

Patented Feb. 18, 1873.

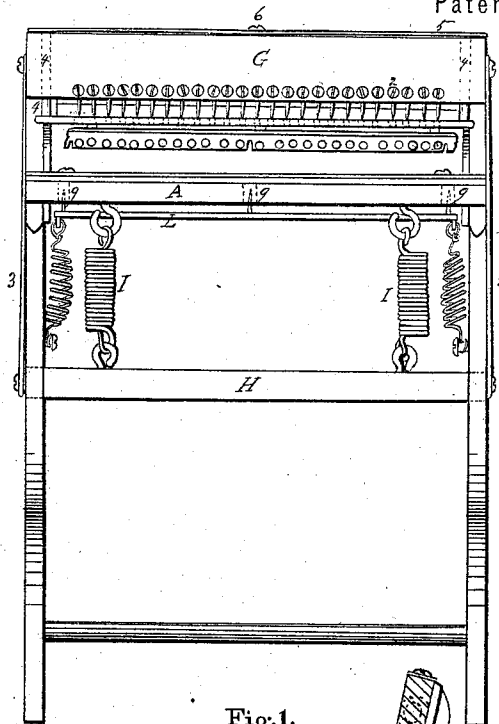


Fig. 1.

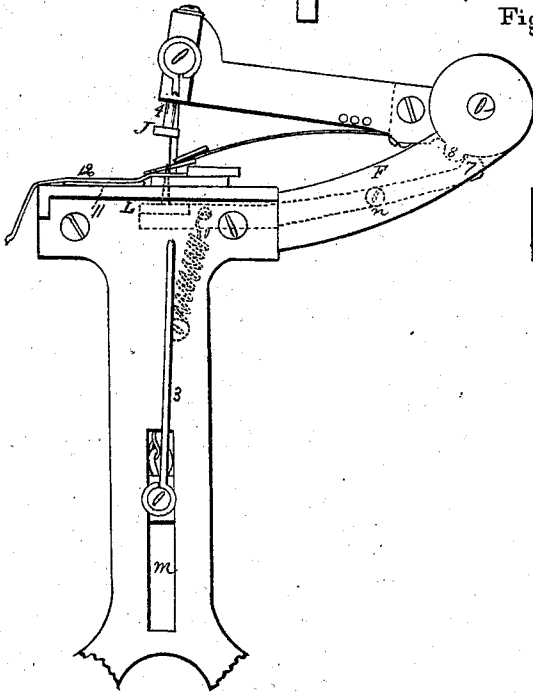


Fig. 2.

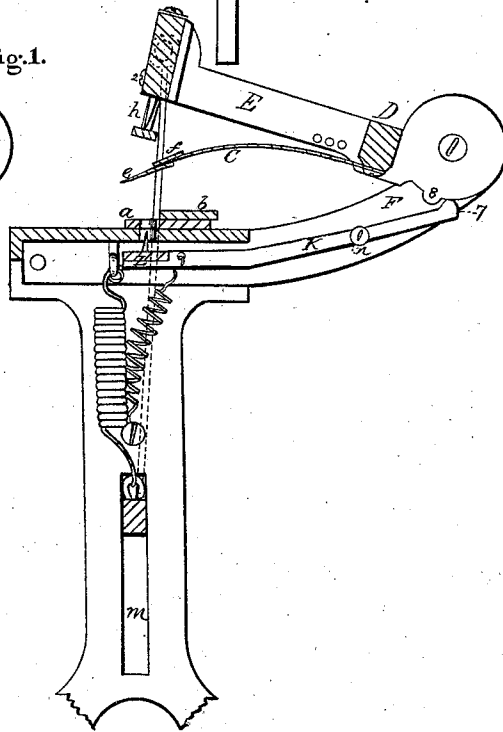


Fig. 3.

Thos. G. Dodge
E. C. Moore

WITNESSES

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 INVENTOR

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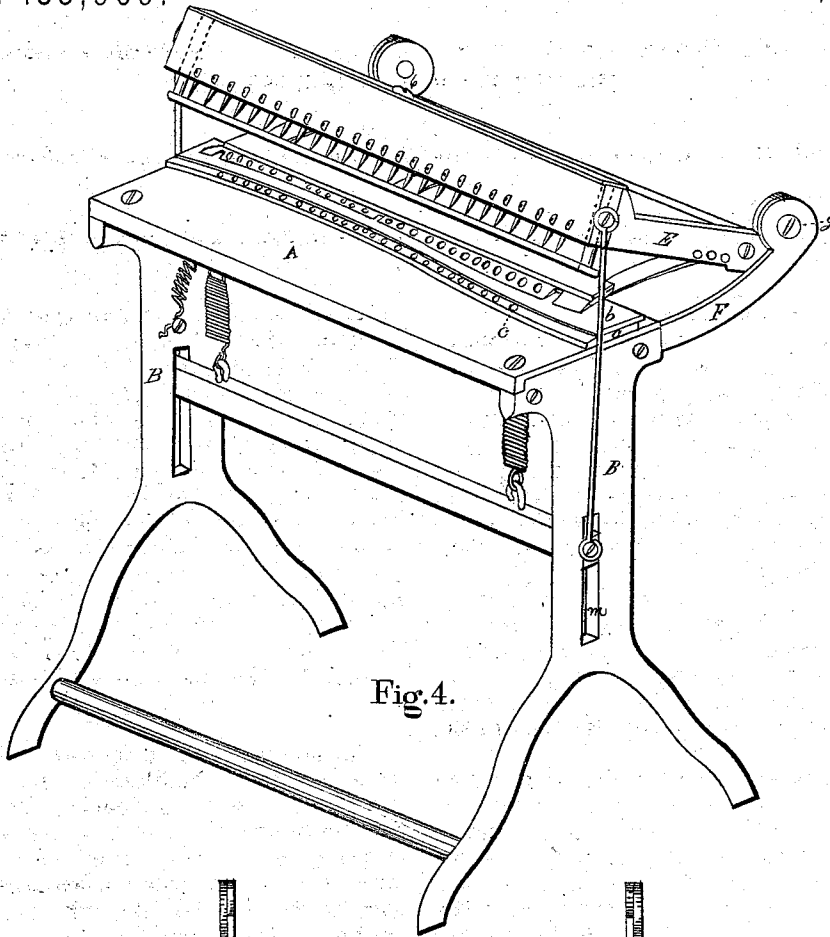


Fig. 4.

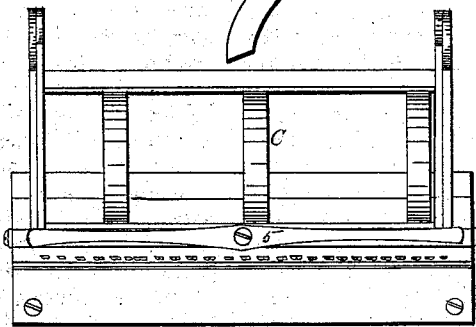


Fig. 5

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GEORGE C. CONVERSE, OF SPENCER, ASSIGNOR TO ABNER WHEELOCK, OF CHARLTON, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR PRICKING LEATHER.

Specification forming part of Letters Patent No. 135,969, dated February 18, 1873.

To all whom it may concern:

Be it known that I, GEORGE C. CONVERSE, of Spencer, in the county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Combined Boot-Leg and Welt Pricking Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 represents a front view. Fig. 2 represents an end view, the lower portion being shown broken off. Fig. 3 represents a vertical central section on line A B, Fig. 1. Fig. 4 represents a perspective view of the machine, and Fig. 5 represents a top or plan view of the machine.

To enable others skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it in detail.

In the drawing, the part marked A is the table, secured to and supported upon the top of the frame B. Upon the rear part of the table A are two gage-plates, *a b*, the former being perforated with a series of small holes, *c*. Above the gage-plates *a b* is supported, upon the front ends of spring-arms C, a perforated presser-plate, *e*, upon the top of which is secured a gage-plate, *f*. The rear ends of spring-arms C are fastened to the lower side of the cross-bar D, which is secured to the end pieces E, the latter being pivoted at *g* to the rear ends of arms F, fastened to the rear upper corner of frame B. To the front ends of end-pieces E is secured a head-plate, G, from the lower edge of which project a series of small perforating punches or awls, *h*, said awls being held in place by small set-screws 2. Each end of head-plate G is connected to the cross-bar H by a connecting-rod, 3. The ends of the cross-bar H work in slots M in the frame B, while it is drawn up by two spiral springs, I, attached to the under side of table A. A stripping-plate, J, is arranged to work upon the awls *h*, and is provided at each end with a guide-pin, 4, which is fitted to work up and down in holes in the ends of the head-plate G, said guide-pins being forced down by a cap-spring, 5, the ends of which spring cover the ends of said guide-pins, said spring being fastened at its

center to the upper edge of the head-plate G, as shown at 6. To the inner sides of the arms F are attached levers K, by means of journals N. The rear ends of levers K are provided with cams 7, which are acted upon by cams 8 on the lower sides of the rear ends of the end pieces E, when head-piece G is depressed. To the front ends of levers K is fastened cross-piece L, provided in this instance with three points, 9, which project up from its upper side, and holes are made in table A and gage-plate *a*, through which said points 9 pass when the rear ends of levers K are depressed. Cross-piece L is drawn down by means of springs 10 when head-piece G is elevated.

Operation.

The operation is as follows when my machine is used to facilitate the siding of boot-legs: The parts of the machine being in position, as shown in Figs 1, 3, and 4, the operator places one bar, 11, of his clamp, upon table A, and upon this bar arranges the front part of the boot-leg 12 with its edge to be pricked resting against the front edge of gage-plate *b*. He then, by means of a treadle device, connected with the cross-bar H or the end pieces E, depresses head-piece G until the presser-plate *e*, bears upon the edge of the boot-leg, as shown in Fig. 2, and in which position it will be seen that the points 9 have been forced up through the leather so as to project a little above the upper surface of the presser-plate *e*, the latter being slotted out, as shown at 11. The operator now places the welt upon the top of the presser-plate *e*, the points 9 catching into its under surface and holding it in place, after which he places in position the piece of leather to form the back of the leg, with its edge resting against the front edge of the gage-plate *f*. He now, by means of the treadle device before alluded to, depresses head-plate G, thus bringing down the stripper-plate J firm upon the last piece of leather placed in position; and, as head-piece G is still further depressed, all the awls *h* are forced through all three of the pieces of leather placed in position, and thus by one operation both pieces of the boot-leg and the welt are perforated. The operator now places the other bar of the clamp upon the upper side of the

pieces of leather which have been pricked, and then clamps both bars firmly together, after which head-piece G is allowed to rise, when the awls *h* are withdrawn from the pieces of leather which have been perforated preparatory to being removed to be sided by hand. The gage-plate *a* serves as a guide in placing the clamp in position. In lieu of spring 5, guide-pins 4 may be headed on top and held down by means of spiral springs arranged around them in head-plate G, the lower ends of the springs resting on the stripping-plate J. The presser-plate *e* may be made in sections, and not extend from end to end of the machine; and, if preferred, one thick gage-plate may be made to answer the purpose of gage-plates *b* and *f* when the gage-plate *f* is made in sections. In this case, however, the thick gage-plate should be slotted or cut out to allow the arm C to drop sufficiently low down to bring the sections of the presser-plate *e* down upon the points 9, the same as now shown in the drawing.

Having described my improvements in combined boot-leg and welt pricking machines, what I claim therein as new and of my inven-

tion, and desire to secure by Letters Patent, is—

1. The combination, with head-plate G, of the perforating-awls *h*, stripping-plate J, and spring 5, substantially as and for the purposes set forth.

2. The combination, with the spring-arms C, of the perforated presser-plate *e*, substantially as and for the purpose set forth.

3. The combination, with table A, of the self-adjusting cross-piece L, provided with holding-points 9, substantially as and for the purposes set forth.

4. The combination, with the levers K and end-pieces E, of cams 7 and 8, substantially as and for the purposes set forth.

5. The combination, with the table A, head-plate G, and hinged end-pieces E, of perforating-awls *h*, stripper-plate J, perforated presser-plate *e*, and gage-plates *a*, *b*, and *f*, substantially as and for the purposes set forth.

GEORGE C. CONVERSE.

Witnesses:

THOS. H. DODGE,

E. E. MOORE.