H. HÜBEL.

Machine for Crimping Seamless Foxings for Boots and Shoes.

No. 199,714. Patented Jan. 29, 1878.

Fig: 1.

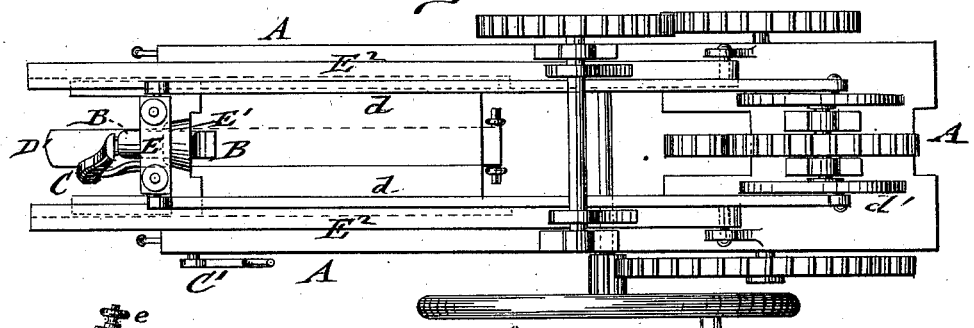


Fig: 2.

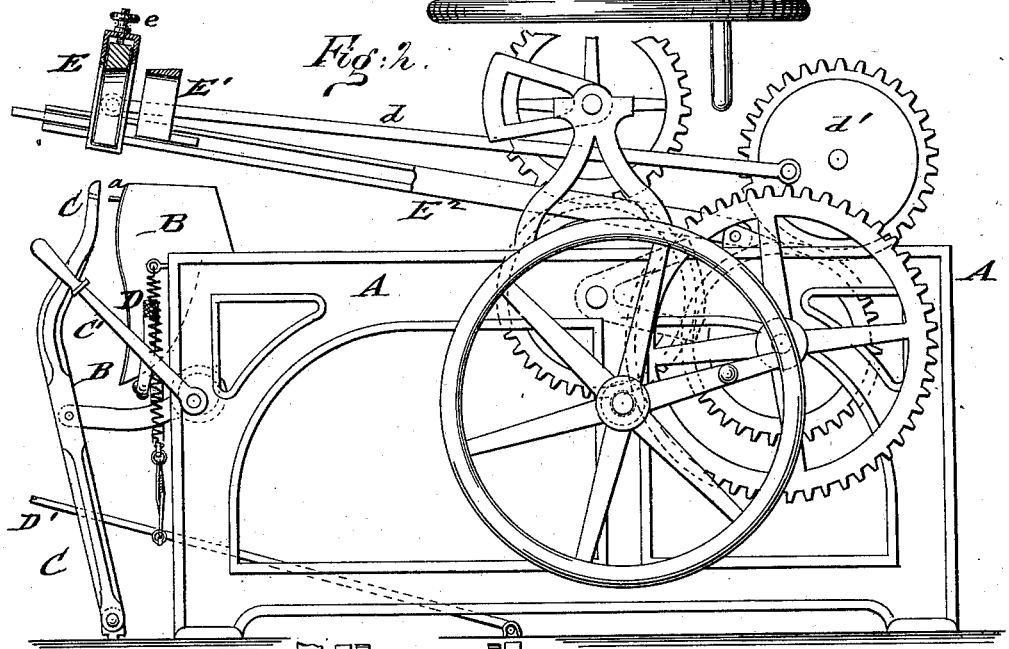


Fig: 3.

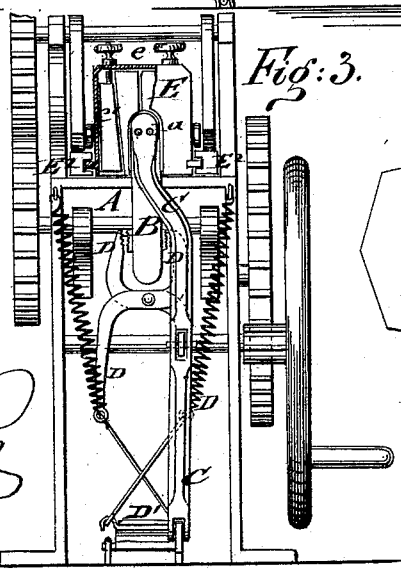


Fig: 4.

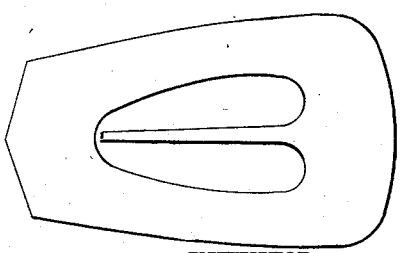
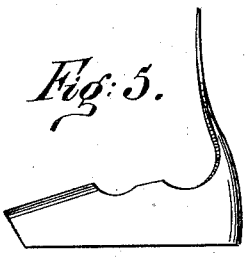


Fig: 5.



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HENRY HÜBEL, OF NEW YORK, N. Y., ASSIGNOR TO HIERONYMUS HEROLD, JULIUS HEROLD, AND JACOB ZWICKER, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR CRIMPING SEAMLESS FOXINGS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **199,714**, dated January 29, 1878; application filed December 31, 1877.

To all whom it may concern:

Be it known that I, HENRY HÜBEL, of the city, county, and State of New York, have invented a new and Improved Machine for Crimping Seamless Foxing, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a plan view, Fig. 2 a side elevation, partly in section, and Fig. 3 a sectional end elevation, of my improved machine for crimping seamless foxing; and Figs. 4 and 5 show the foxing respectively in uncrimped and crimped state.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide an improved machine for the purpose of crimping one-piece or seamless foxing in rapid and effective manner, so that the crimped foxing may be manufactured with facility and economy; and the invention consists of a fixed crimping-block, in connection with movable side and front retaining devices and reciprocating adjustable jaws, between which the foxing is taken hold of, to be stretched over the crimping-block.

Referring to the drawings, A represents the supporting-frame of my improved crimping-machine, and B the crimping-block, that is rigidly secured to one end of the frame, with the heel portion above the table of the frame and the toe portion extending downward.

The seamless foxing, which is cut as shown in Fig. 4, is placed on the crimping-block, and the tongue or stay of the same secured to front pins *a* of the block by a swinging lever-arm, C, with perforated upper jaw and roughened face. The lever-arm C is applied to or removed from the block by a hand-lever, C′, and by a connecting eccentric or crank rod, and serves to secure the foxing to the block against the longitudinal strain in crimping. The sides of the foxing are taken hold of by sliding and stretching jaws D at both sides of the block B, which are applied by a treadle, D′, being fulcrumed to each other below the crimping, and the inner set of jaws guided in in a lateral recess of the crimping-block, while the ends of the outer jaws are opened or closed by cross-rods connected to the treadle, and by spiral suspension-springs. These stretching-jaws serve to retain the foxing at the sides of the crimping-block, so as to expose the quarters of the foxing to the crimping strain. This strain is produced by swinging and reciprocating crimping-jaws E E^1, which are guided by base rails along grooved and swinging arms E^2, that are intermittently raised and lowered by suitable top and bottom cams, actuated by suitable gearing. The front jaw is connected, by pivoted side rods *d*, to revolving crank-disks *d′*, that impart reciprocating motion to the jaws—a backward motion when the guide-jaws are lowered into position at both sides of the crimping-block, and a forward motion when the guide-arms are raised above the crimping-block.

The crimping-jaws E E^1 correspond to the shape of the crimping-block B, and serve to clamp the quarters of the foxing between them, the jaws assuming a position, one in front, the other back, of the foxing, the rear jaw being pressed toward the front jaws by hand or by suitable springs. The front jaw E is broader, and has adjustable side cheeks, that may be set by top screws *e* and wedge-pieces *e′* to the thickness of the leather to be crimped, while the rear jaws E^1 are beveled to a sharp front edge, so as to cause, by their joint backward motion, the quarter of the foxing to be drawn through between the jaws and crimped onto the block B. The foxing receives thereby the shape shown in Fig. 5, and may then be applied directly in the manufacture of shoes and gaiters. When the jaws arrive at the end of their receding motion, their guide-arms are raised so as to lift them above the crimping-block, and admit of the removal of the crimped foxing by releasing the side jaws and withdrawing the stay-retaining lever-jaw. The next foxing is then placed in position and the same operation continued, the foxing being thus crimped at the quarters by a machine driven by any suitable power, and made ready for being worked up in a quicker and more economical manner than if crimped by hand.

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

1. A machine for crimping seamless foxing,

consisting, essentially, of a fixed crimping-block, of suitable devices for retaining the foxing on the block, and of intermittently swinging and reciprocating crimping-jaws that stretch and shape the foxing to the crimping-block, substantially as and for the purpose described.

2. The combination of the fixed crimping-block, having front pins and sliding side jaws, with a lever-acted tongue-holding jaw, fitting on the pins, and with treadle-acted swinging side jaws, that close on or open from the sliding jaws to secure or release the foxing, substantially as described, and for the purpose specified.

3. The combination of the fixed crimping-block with the correspondingly-shaped front jaw, having adjustable cheeks, and with the sliding and guided rear jaw, having beveled edge, substantially as described, and for the purpose specified.

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