

W. W. WILMOT.
Boot-Crimping Machines.

No. 151,643.

Patented June 2, 1874.

FIG. I.

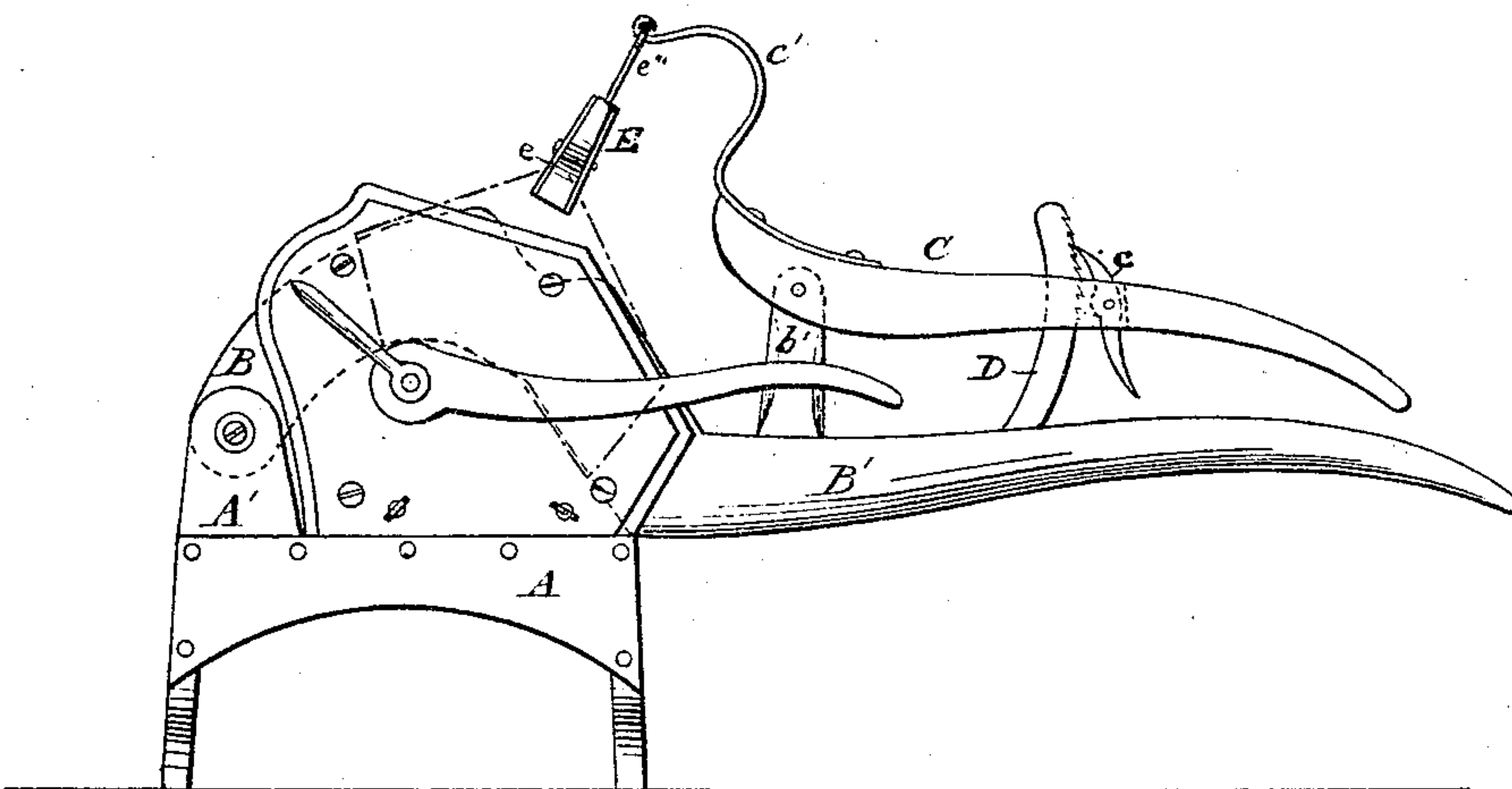


FIG. II.

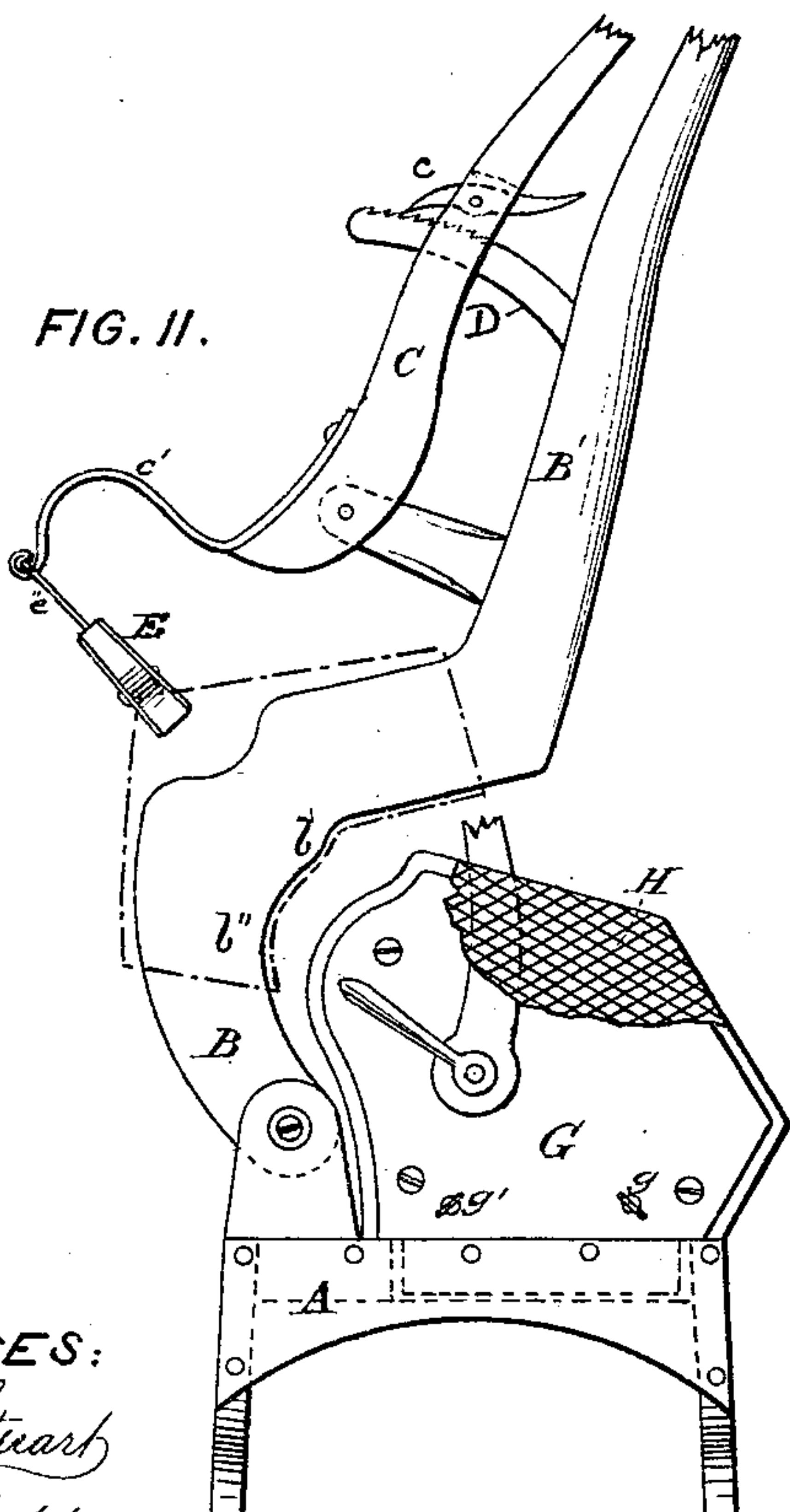


FIG. IV.

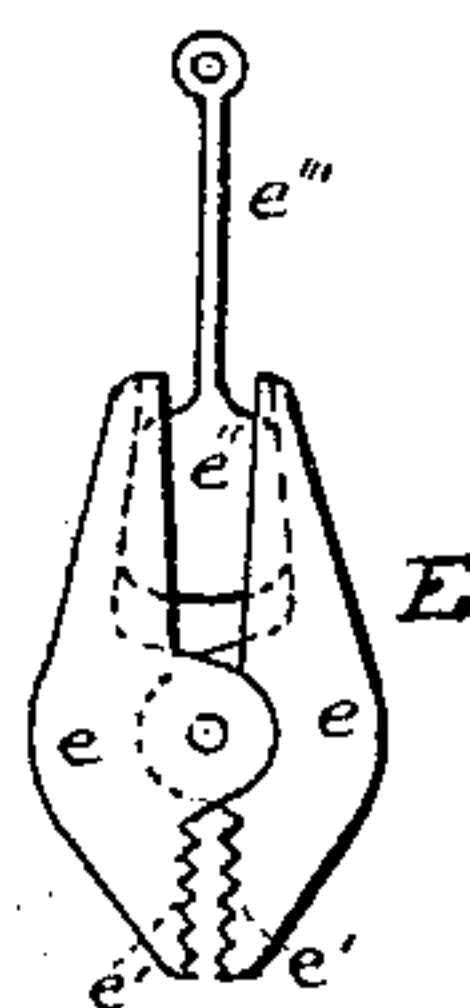
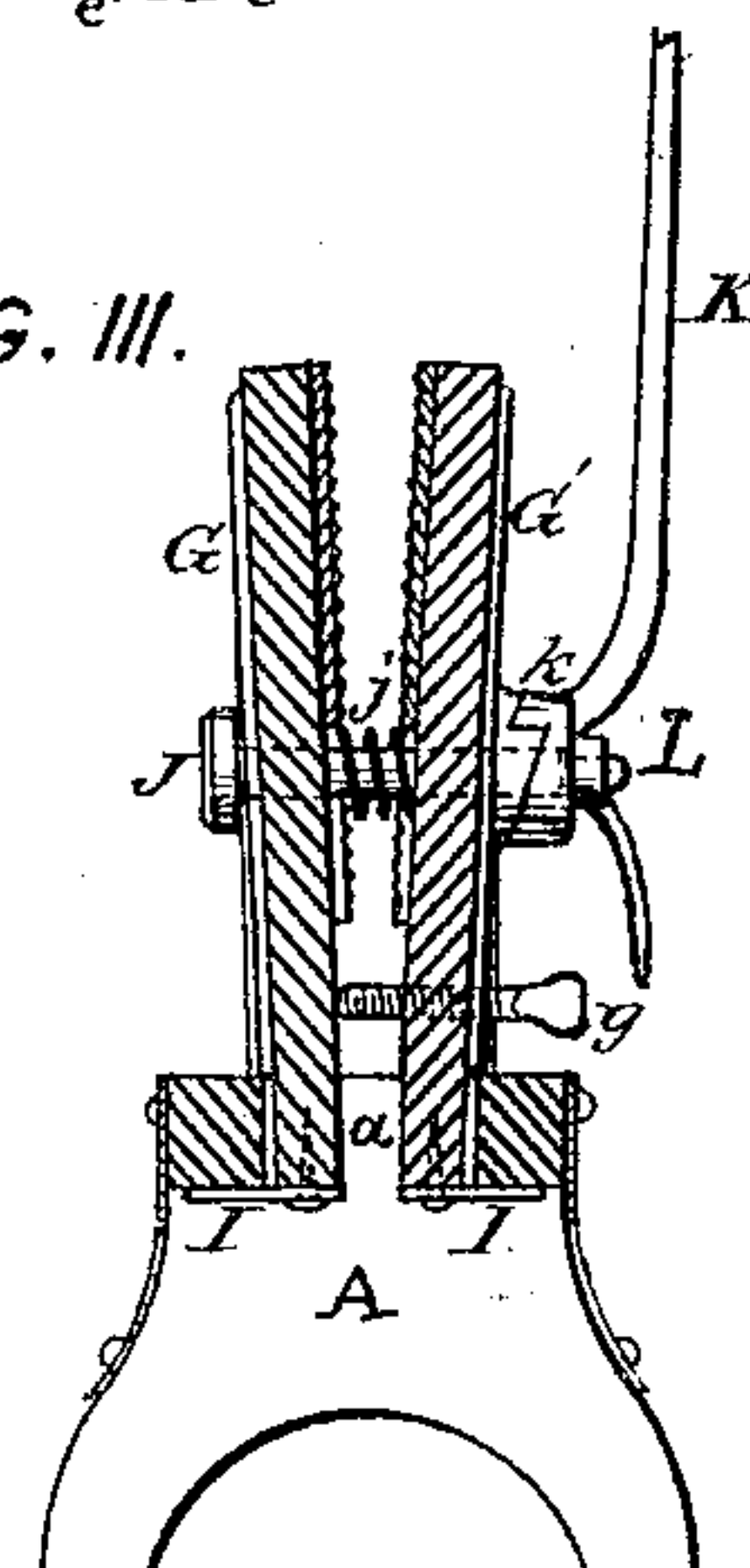


FIG. III.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM W. WILMOT, OF MONROEVILLE, OHIO.

IMPROVEMENT IN BOOT-CRIMPING MACHINES.

Specification forming part of Letters Patent No. **151,643**, dated June 2, 1874; application filed April 3, 1874.

To all whom it may concern:

Be it known that I, WILLIAM W. WILMOT, of Monroeville, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Boot-Crimping Machines; 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 which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to machines for crimping boots; and the invention consists in certain new and improved mechanical devices and combinations whereby the operation of crimping or giving the desired shape to the leather is performed with great ease and rapidity, and the shape given to the leather is such that when the boot is in use no wrinkles are formed at the ankles, all as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a side elevation of my improved crimping-machine, showing the positions of the parts when the boot-leg is being crimped. Fig. 2 is a similar view, showing the leather stretched on the former before being crimped, and with one of the jaws cut away to show the serrated metal lining. Fig. 3 is a vertical sectional view of the jaws, showing their construction and the springs by which they are held apart. Fig. 4 is a detached and enlarged view, showing the construction of the hitch-on or griper for stretching and holding the leather on the former.

Referring to the parts by letters, letter A represents the pedestal or supporting-frame of the machine, having at one end a slotted upright, A', and a longitudinal slot, a, cut through its center for the reception of the lower end of the jaws. B represents the brake or former, pivoted to the standards A' at its lower end, and secured to a long handle, B', at its other, the whole making a lever of considerable power. The upper portion of the brake B is shaped on its inner edge so as to give the desired form to the boot-leg, the swell b imparting the required contour of the instep-piece. C is a lever, pivoted to the standard

b', projecting from the handle B'. D is an arc-shaped ratchet-bar, also secured to the handle B', and projecting upward therefrom through a slot formed in the lever C. c is a pawl, pivoted in a slot in the lever C, and which engages with the ratchet-bar D. c' is a bent rod, secured to the lever C, projecting upward and forward therefrom, the point being formed into a hook, from which is suspended the griper or hitch-on E. This griper (see Fig. 4) consists of two jaws, e e, pivoted together, and, having their lower ends serrated or cut with teeth, e'. Their upper ends are grooved on their inner faces, and inclose a wedge-shaped block, e'', having a stem, e''', by means of which it is linked to the bent bar c' of lever C. G G are two jaws of peculiar form, corresponding on their front and upper sides with the shape of the former B. Their inner sides are shod or faced with metal plates H, preferably of zinc, which are cut or serrated with a diamond-shaped pattern. The lower sides of the jaws are tenoned, the tenoned part being inserted in the slot a of the frame A, the shoulders resting squarely on the top of the frame. I I are steel spring-plates, secured at one side to the under side of the tenons of the jaws, and their other or free side resting beneath and against the top of frame A. g g are two screws, passed through one of the jaws, their inner ends resting against the inside of the other jaw. J is a bolt or axle, passed centrally through the jaws, having a spiral spring, j, on the portion which passes between the jaws. K is a cam-lever, secured to the bolt J on its threaded end, and k is a corresponding cam-block, secured to the outer side of the jaw G' at the same point, or where the bolt passes through. L is a screw-nut on the threaded end of the bolt J, outside of the cam-lever K.

The operation of my invention is as follows: The leather to be crimped, after being properly shaped, is placed on the former in the usual way. The ends at the ankle portion, or opposite to the instep, are then inserted between the serrated jaws of the griper E, and the lever C pressed downward, thereby stretching the leather upon the former, particularly at the instep-piece, and, as is obvious from the construction of the griper, the greater the

strain the firmer it will hold, the block *e''* in the slotted portions of the jaws *e e* necessarily bringing the serrated portions *e'* closer together with a tighter gripe. When the leather has been sufficiently stretched upon the former, the lever *C* is secured in position by causing the pawl *c* to engage with the ratchet-bar *D*. The former is now brought down so as to enter between the jaws *G G'*. The cam-lever *K* is then pressed down so as to bring the jaws close up against the leather, in which position the jaws are secured by the screw-nut *L*. The crimping is then performed in the usual way by forcing the former carrying the leather down between the jaws by means of the lever *B'*, the diamond-shaped serrated plates on the inner side of the jaws gripping the leather with sufficient strength to hold it against the front edge of the former, so as to receive the desired impression without injury to the material. By unscrewing the nut *L* and raising the lever *K*, the jaws at once spring apart through the action of the springs, and the former or brake is immediately released. The screws *g g* regulate the distance between the lower side of the jaws, and prevent them coming together at that

point, and the springs *I I* hold the jaws to the frame in proper working position without interfering with their lateral motion or play.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the former *B* and lever *B'*, with the lever *C*, ratchet *D*, pawl *c*, and with the griper *E*, the whole constructed substantially as and for the purpose specified.

2. The jaws *G G'*, having the diamond-shaped serrated plates *H*, substantially as and for the purpose specified.

3. The spring-plates *I I*, for attaching the jaws *G G'* to the frame *A*, in manner and for the purpose specified.

4. The jaws *G G'*, plates *I I*, bolt *J*, cam-lever *K*, and cam *k*, and screw-nut *L*, in combination with the former *B*, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM W. WILMOT.

Witnesses:

WILLIAM SIPE,

ALVAH S. SKILTON.