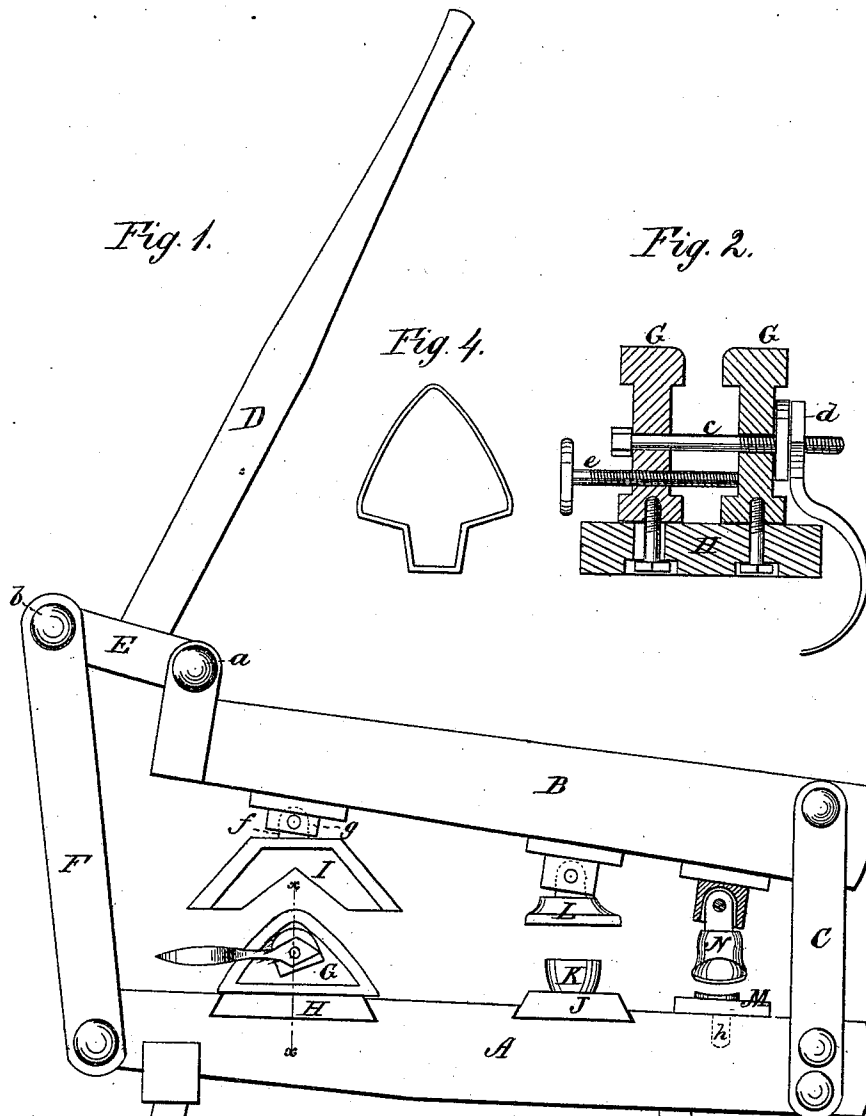


C. M. ROBINSON & J. F. LISTER.

CRIMPING-MACHINES FOR LEATHER.

No. 174,856.

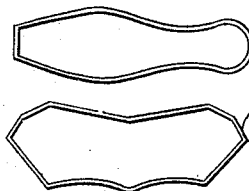
Patented March 14, 1876.



WITNESSES:

W. W. Hollingsworth  
John C. Kemmon

Fig. 3.



INVENTOR:

C. M. Robinson  
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# UNITED STATES PATENT OFFICE.

CHARLES M. ROBINSON AND JOHN F. LISTER, OF NEWTON, IOWA.

## IMPROVEMENT IN CRIMPING-MACHINES FOR LEATHER.

Specification forming part of Letters Patent No. **174,856**, dated March 14, 1876; application filed February 2, 1876.

*To all whom it may concern :*

Be it known that we, CHARLES M. ROBINSON and JOHN F. LISTER, of Newton, in the county of Jasper and State of Iowa, have invented a new and Improved Machine for Crimping, Stamping, and Pressing Leather; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a vertical side elevation; Fig. 2, a transverse section of the crimping devices; Figs. 3 and 4 are details of the dies.

The object of this invention is to provide a machine for shoemakers' use, to facilitate the work of crimping the leather for the uppers, cutting out the soles, and pressing the same into the proper form, to fit the last without lap-hammering. The invention consists in a table, having a lever pivoted thereto at one end by means of links, and operated at the other end in vertical direction to produce the necessary pressure by means of a secondary lever, to be worked by hand, which lever carries a cross-head, one end of which is pivoted to the first lever, and the other end to a set of links pivoted at their lower ends to the table, which arrangement gives a compound motion for the operating lever, between which and the table the crimping, stamping, and pressing devices are contained.

In the drawings, A represents the table, supported upon legs, and made of strong, heavy material, to withstand the strain consequent upon the operation of the devices. B is the main lever, also made of a heavy, strong construction, and attached to the table by means of the links C, which are rigidly attached to the table and pivoted to the lever B, so as to allow the latter a vertical motion. D is the secondary lever, which operates the main lever, and is itself worked either by hand or power. Said lever D carries a cross-head, E, to which it is attached obliquely or at an obtuse angle. One end of this cross-head is pivoted at *a* to lever B, and the other end is pivoted at *b* to a set of links, F, which links are also pivoted below to the table. This arrangement gives us a movable fulcrum for lever D, producing thereby a compound

motion, which enables us to make the most advantageous use of the power applied. Between the main lever B and the table are contained the crimping, stamping, and pressing devices, all of which are operated by the movement of the said lever. The crimping devices consist of a pair of jaws, G, attached to a base-piece, H, by means of a slot and bolt, so as to have a lateral adjustment. These jaws are drawn together by a screw, *c*, and nut, *d*, and are separated by a screw, *e*, which passes through one and binds against the inner side of the other.

I is the crimping-blade, which is a thin piece of metal, having an angular inwardly-converging edge corresponding to the shape of the jaws, and operating in connection therewith. This blade is provided with a stud or stem, *f*, at the top, which enters a socket, *g*, of the lever, and is pivoted therein, said socket being made of sufficient width to allow the stud play, so as to allow the crimping-blade to hang plumb in the different positions of the lever. The base-plate H is made detachable with the jaws and slides in a dovetail slot in the table. The stamping devices consist of a wooden base-piece, J, made detachable in a dovetail slot, in a manner similar to plate H, so that it may be taken out when worn or cut from the action of the die and a new one substituted. Upon the plate rests the die K, which consists of a steel band shaped like the sole which it is intended to cut, and made with a sharp cutting-edge upon the lower side, so that when the pressure of the lever is transmitted to it, it passes through and cuts out a sole, shoe-front, or quarter from the subjacent leather. These dies are made of different sizes, and are pressed by means of the lever B through the follower L, which has a connection with the lever P similar to the crimping-blade, so as to make it hang plumb over the die. The pressing device consists of a base-plate, M, provided with a stud, *h*, which fits in a hole in the table, to steady and hold it. Said plate is hollowed out on top with a concave face corresponding to the bottom convex portion of the last, and the press N is made convex to correspond, and is attached to the lever above by a pivoted connection similar to those before mentioned, and

for the same purpose. The soles, which are cut out by the die, are placed in the press and made to assume the shape of the bottom of the last, thus avoiding the time and labor of lap-hammering and fitting to the last.

Having thus described our invention, what we claim as new is—

The table A, links C, lever B, links F, and secondary lever D, carrying cross-head E, one end of which is pivoted to the main lever, and

the other end to the links, all combined and arranged for the purpose of receiving the crimping, stamping, and pressing devices, as described.

CHARLES M. ROBINSON.  
JOHN F. LISTER.

Witnesses:

ELIHU RICE,  
SAML. J. CONDIT.