I. H. & J. D. SPAKE.

CRIMPING APPARATUS FOR THE UPPERS OF BOOTS AND SHOES.

No. 190,922. Patented May 15, 1877.

Fig. 1.

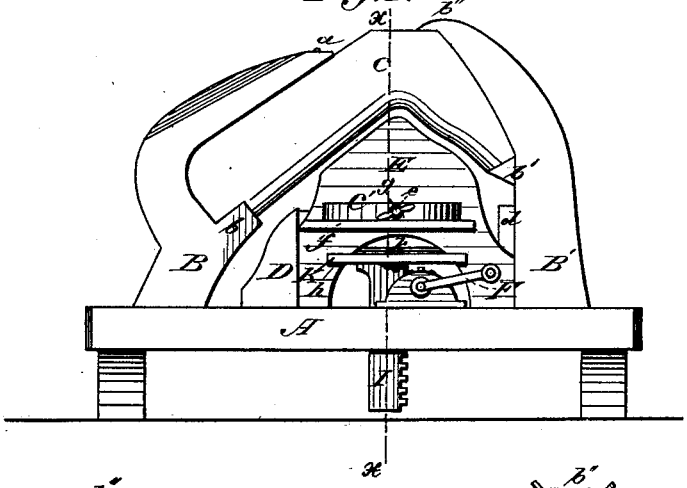


Fig. 2.

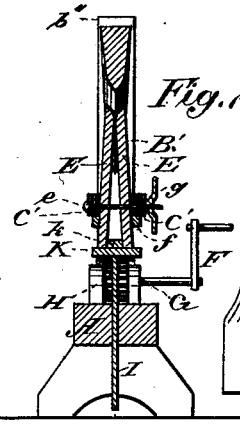
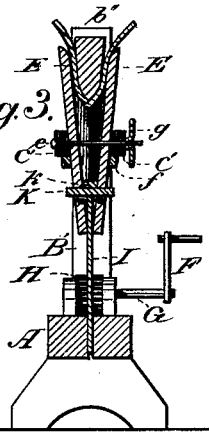


Fig. 3.



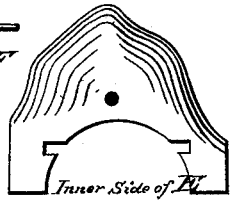
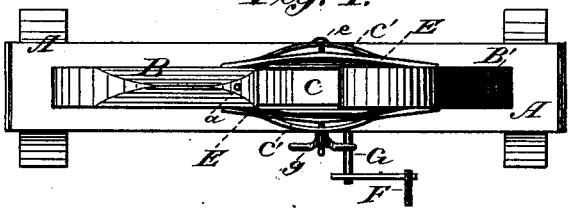


Fig. 4.



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UNITED STATES PATENT OFFICE.

ISAIAH H. SPAKE AND JOSEPH D. SPAKE, OF BLUFFTON, INDIANA.

IMPROVEMENT IN CRIMPING APPARATUS FOR THE UPPERS OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. **190,922**, dated May 15, 1877; application filed October 23, 1876.

To all whom it may concern:

Be it known that we, ISAIAH H. SPAKE and JOSEPH D. SPAKE, both of Bluffton, in the county of Wells and State of Indiana, have invented certain new and useful Improvements in Leather-Crimpers; and we 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 appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation. Fig. 2 is a vertical cross-section, after the line denoted by *x x*. Fig. 3 is a similar section, showing the position of the crimping-jaws in the act of crimping; and Fig. 4 is a top plan.

Similar letters of reference indicate corresponding parts in all the figures.

The nature of our invention consists in the construction and arrangement of the operative parts of a leather-crimping machine, as will be hereinafter more fully set forth.

In the drawing, A is the bed of our machine, upon which are secured the uprights or forms B B′, for holding the crimping-board C. The latter is of the construction shown in the cross-sections, Figs. 2 and 3—that is, it is wedge-shaped, with straight sides, the straight sides beginning about one inch from the front edge of the board, and running clear to the back thereof. The uprights B B′ have lugs or steps *b b′*, the former fitting into a recess at the top of the crimping-board, and the latter abutting against the toe-piece thereof, so as to hold the board securely in its place. Upright B′ terminates in a projection, *b″*, which catches up under the heel-piece of the board, and upright B has a set-screw, *a*, by tightening which the board, after it has been inserted sidewise into its position, will be held firmly in its place during the operation of crimping. D is a guide-piece, affixed upon the bed of the machine, so as to face the corresponding guide-piece *d*, which projects laterally from the upright B′. E E are the crimping-jaws, which face each other, and are arranged between the guide-pieces D *d*, which control their up and downward motions and prevent lateral play. The faces of these jaws are of peculiar construction, being shaped so as to incline in three directions—viz., from the heel to the toe of front, from the heel to the top of front, and from the heel to the crimp. This shape causes the jaws, when the machine is operated, to fit tightly the inclinations of the board, so as to exert a close and even pressure against the leather placed between the board and crimping-jaws. These are caused to approach each other in an inclined position by means of a rod, *e*, which, passing through openings in the jaws, is secured, at each end, in a stout spring, C′ C′, that rests upon a narrow shoulder or flange, *f f*, that projects from the outer straight face of each jaw. By tightening the nut *g* upon the end of rod *e* the power required to separate the jaws E E at their point of contact will, of course, be increased. F is a crank, operating a shaft, G, and pinion H, which engages with the ratchet I, moving vertically through a slot in the bed-plate A. To the upper end of ratchet I is affixed a horizontal plate, K, which fits into notches *h h* in the crimping-jaws, so that by moving ratchet I, and with it plate K, up or downward the jaws E E will be moved accordingly. Plate K has a rib or flange, *k*, on its upper side, which serves the double purpose of strengthening it and of preventing it from slipping out of the notches *h h*.

From the foregoing description, taken in connection with the drawing, the manner of using our machine will be readily understood.

The leather to be crimped is placed on the top of the jaws, after which the crank F is turned, and the leather is forced against and onto the crimping-board C. The heel-screw *a* is then tightened down upon the leather, which is folded in under it, over the edges of the board, so as to hold it in place upon the board when the jaws are withdrawn; and the jaws are moved successively up and down until the leather stretched on the board is made perfectly smooth and even.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. The combination of posts B B′ and guide-piece D with crimping-jaws E E, plate K, ratchet I, and operating-pinion H, all arranged

upon a suitable bed-plate, substantially as and for the purpose set forth.

2. The combination of the crimping-jaws E E, plate K, and operating-ratchet I, substantially as and for the purpose herein shown and described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

ISAIAH H. SPAKE.
JOSEPH D. SPAKE.

Witnesses:

ADOLPH J. TRIBOLET,
JAMES G. SMITH.