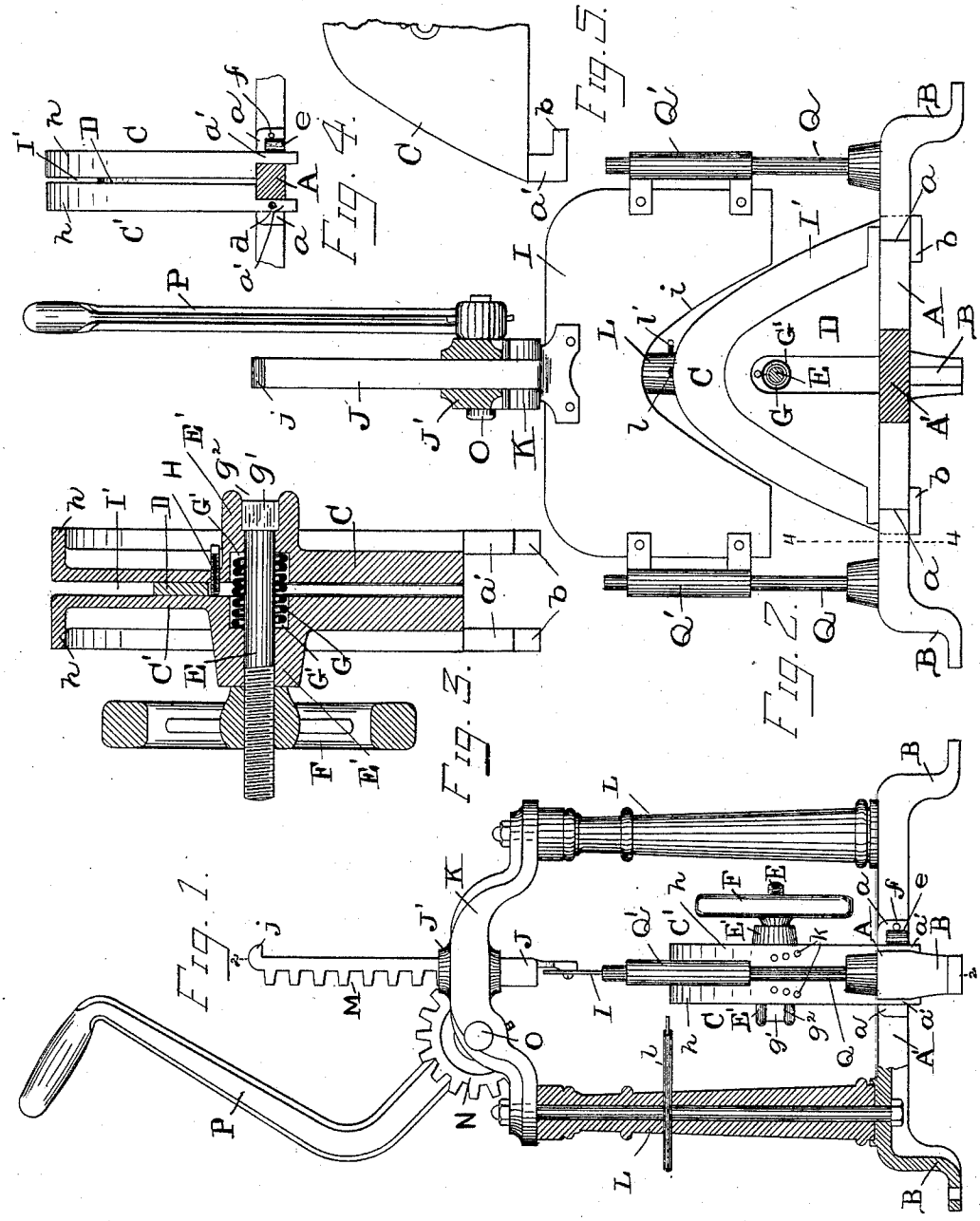
(No Model.)

# H. LEIBE.

## CRIMPING MACHINE FOR CRUPPERS.

No. 477,014. Patented June 14, 1892.



Witnesses:—
J. C. Mattoon
L. Parker Davis.

Inventor:—
Hugo Leibe.
By
Chas. B. Mann
Attorney

# UNITED STATES PATENT OFFICE.

HUGO LEIBE, OF BALTIMORE, MARYLAND.

## CRIMPING-MACHINE FOR CRUPPERS.

SPECIFICATION forming part of Letters Patent No. 477,014, dated June 14, 1892.

Application filed February 27, 1892. Serial No. 422,967. (No model.)

*To all whom it may concern:*

Be it known that I, HUGO LEIBE, a citizen of the United States, residing at Baltimore city, in the State of Maryland, have invented certain new and useful Improvements in Crupper-Dock Crimpers, of which the following is a specification.

This invention relates to improvements in machines for crimping leather blanks into shape for making crupper docks or loops; and it consists in the novel features of construction and combinations of parts hereinafter described and claimed.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of the machine with one of the pillars or posts and legs or feet in section. Fig. 2 shows a vertical section on the line 2 2 of Fig. 1. Fig. 3 is a vertical central section, on an enlarged scale, of the former-plates. Fig. 4 is an end view of said plates with a cross-section of the bed-piece of the machine. Fig. 5 is a detail side view of one-half of one of these plates. Fig. 6 shows a perspective view and a cross-section of the article produced by the machine.

The bed-piece of the machine comprises two cross-arms A A′, having legs or feet B formed on their ends, on which feet the machine stands. One of the cross-arms A has shoulders *a* formed at opposite sides near each end, and a pair of semi-oval plates C C′ rest with their bases on the upper side of said cross-arm A and have downward-extending portions *a*′ at each end, which fit against the said shoulders *a*, and inward-projecting lugs *b*, which take under the bed-piece to hold the plates in place. One of these plates fits on each side of the cross-arm A, and between them is inserted a thin plate D, having the same shape as the two plates C C′ and also resting on the bed-piece A, but considerably smaller than said plates, so that it may form the base of a deep groove or channel I′ between them. One of the plates C′ is fastened rigidly by screws *d* to the bed-piece A, while the other plate C is loose. This latter plate is held on the shoulders *a* by means of a rubber block *e*, at each side fitting between it and a pin *f*, projecting from the said shoulder. The two plates are connected together by a bolt E, extending through bosses E′, formed at the center, the head *g*′ of said bolt fitting a socket $g^2$ in the boss of the rigid plate C′, and the opposite end threaded to receive a hand-wheel F, which bears against the outer face of the boss on the loose plate C. The interposed plate D straddles this connecting-bolt so as to bring its upper edge above the same, as shown. A spiral spring G fits around the bolt E and is contained in pockets G′, formed in the two plates C C′. This spring tends to force the said plates apart. A set-screw H enters through the rigid plate C′ just above the point of connection and is arranged to impinge against the inner face of the loose plate C. Each of the said plates has an outward-extending flange *h* all around the outer edge.

Upright guide-rods Q rise from the cross-arm A of the bed-piece at opposite ends of the plates C C′, and a thin presser plate or plunger I extends between said rods and has bosses Q′, which slide thereon. This presser-plate is cut out on the under side to form an edge *i* to coincide with the shape of the middle plate D, and said presser-plate is to engage in the channel or groove I′ and straddle the plate D. The presser-plate I has an upward-extending stem J, which works through a boss J′, formed at the middle of a cross-piece K, supported on two upright pillars or posts L, which rise from the cross-arm A′ of the bed-piece. This stem has a rack M in one side and a lip *j* at the opposite side to prevent it from passing all the way down through the boss J′. A segmental pinion N is mounted on a stud O, fixed in the cross-piece K, and engages the said rack. This pinion has connected with it a handle-bar P, by means of which it may be turned and the rack and presser-plate or plunger reciprocated up and down.

The operation of the machine is as follows: The plates C C′ are adjusted to the desired distance apart by means of the hand-wheel F and set-screw H. A piece of leather cut to the proper shape is laid over the flanges *h* of the plates C C′ and centered by means of gage-pins *k*, set in holes or sockets in said flanges, and a gage-pin *l*, extending transversely through one of the uprights L and set by means of a screw *l*′. This latter pin holds the central part of the leather blank, and the

pins *k* hold the ends and may be adjusted in the sockets to the desired positions, according to the width of the leather and the adjustment of the crimping-plates C C′. After this adjustment is effected the handle-bar P is operated to bring down the presser-plate or plunger I, whose edge *i* will act on the leather and force it down into the channel I′, between the plates C C′ and upon the middle plate D. In this manner the leather blank is stretched over the said plate D into the desired semi-oval form, while the plates C C′ hold sides *z* of the leather blank up and parallel with each other. It will be observed the plunger has the form of a yoke, which straddles the plate D, and the two plates C form a female die to receive said plunger.

My construction permits an adjustment to any thickness of leather which would be used for this purpose and to any size of crupper to be made.

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

1. In a machine for crimping leather for crupper-docks, the combination of a bed-piece having projections from two opposite side edges, a crimping-plate resting on said bed-piece and rigidly secured thereto, another crimping-plate loosely resting on said bed-piece and having downward-extending portions fitting against the side edges thereof, elastic blocks between said downward-extending portions and the projections from the bed-piece, means for adjusting said loosely-mounted plate at different distances from the stationary plate, an interposed plate comprising a base for the channel formed between the two crimping-plates, and a plunger to enter between the said two crimping-plates, in the manner and for the purpose described.

2. In a machine for crimping leather for crupper-docks, the combination of a pair of crimping-plates standing vertically side by side on a suitable base with a space between them and adjustable to different distances apart, each of said plates having a laterally-extending flat top surface and holes or sockets therein, an interposed plate comprising the base of the channel formed between the two crimping-plates, gage-pins projecting from the flat top surfaces of the crimping-plates and fitting in the sockets in the latter and adjustable to different positions therein for the purpose of holding the leather in the proper position, and a plunger to enter between the crimping-plates, in the manner and for the purpose described.

3. In a machine for crimping leather for crupper-docks, the combination of a pair of crimping-plates standing vertically side by side on a suitable base with a space between them and adjustable to different distances apart, each of said plates having a laterally-extending flat top surface and holes or sockets therein, an interposed plate comprising the base of the channel formed between the two crimping-plates, gage-pins projecting from the flat top surfaces of the crimping-plates and fitting in the sockets in the latter and adjustable to different positions therein for the purpose of holding the leather in the proper place, a suitable upright on one side of the crimping-plates, an adjustable gage-pin fitting transversely through said upright and arranged to center the leather at its middle part, and a plunger to enter between the crimping-plates, in the manner and for the purpose described.

In testimony whereof I affix my signature in the presence of two witnesses.

HUGO LEIBE.

Witnesses:
JNO. T. MADDOX,
F. PARKER DAVIS.