P. BAMMER.

HOOK SETTING MACHINE.

APPLICATION FILED MAY 1, 1911.

1,035,140. Patented Aug. 13, 1912.

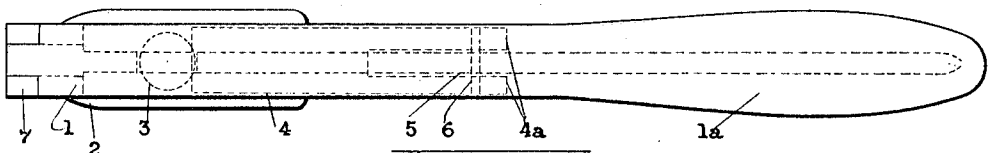

Fig 1

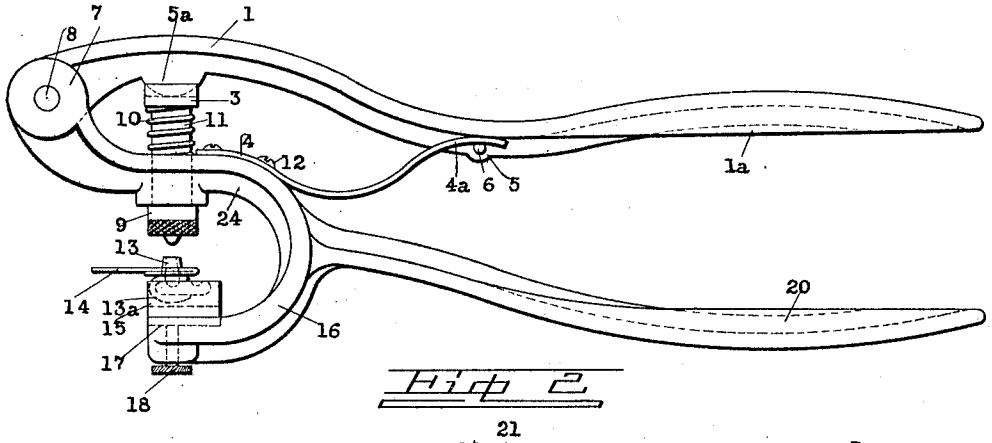

Fig 2

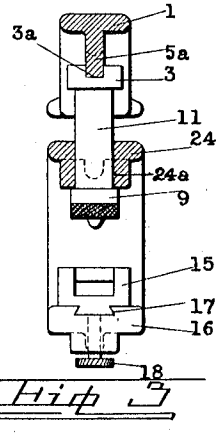

Fig 3

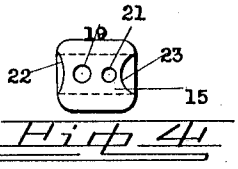

Fig 4

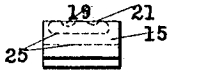

Fig 5

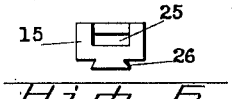

Fig 6

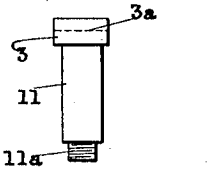

Fig 7

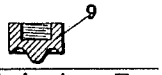

Fig 8

Witnesses;

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UNITED STATES PATENT OFFICE.

PIUS BAMMER, OF GRANTS PASS, OREGON.

HOOK-SETTING MACHINE.

1,035,140. Specification of Letters Patent. Patented Aug. 13, 1912.

Application filed May 1, 1911. Serial No. 624,400.

To all whom it may concern:

Be it known that I, PIUS BAMMER, a subject of the Emperor of Germany, residing at Grants Pass, in the county of Josephine and State of Oregon, have invented certain new and useful Improvements in Hook-Setting Machines, of which the following is a specification.

This invention relates to improvements in hook setting machines, and has for its object to provide such a device for setting the eyelets of hooks, studs, etc., in shoes and the like, which can be conveniently operated by the hand, which is inexpensive in construction, and which is effective for the purpose designed. I accomplish these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a top view of my improved hook set. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a transverse sectional elevation of the jaws showing the plunger in place. Fig. 4 is a top view of an improved hook anvil. Fig. 5 is a side view of the anvil. Fig. 6 is a front elevation of same. Fig. 7 is a detail view of the plunger. Fig. 8 is a sectional elevation of a plunger tip.

Similar characters indicate similar parts in each of the views.

In the drawing 20 is a relatively stationary member, the rear end of which is conveniently shaped to be grasped by the hand. The front end thereof is forked, having a downwardly and forwardly projecting arm 16 to form an anvil support; and an upwardly projecting arm 24, having the aperture 24^a in alinement with the recess or slot 17, in the anvil support. The arm 24 is extended a convenient distance beyond said aperture, and the extremity 7 is elevated to form a bearing for the operative jaw or member 1, which is pivotally secured at 8, and has a free end 1^a shaped in conformity with the handle 20. The aperture 24^a is adapted to receive the plunger 11, which is provided at its lower end with screw threads 11^a, upon which is secured the plunger tip 9. About the plunger, upon the upper face of the arm 24, is secured the spring 10, bearing against the head 3, by means of which the plunger is held normally away from the anvil 15, the upward movement being limited by the tip 9. At the front end of the arm 16, in its upper side, is formed a downwardly expanding recess or slot 17, adapted to receive the correspondingly formed projection 26, of the anvil. This projection is inserted at the front end of the slot and when the anvil reaches the desired position, it is secured by means of the set screw 18. In the upper face of the head 3 is formed a depression 3^a adapted to receive the cam projection 5^a formed on the rib 5, at the lower face of the member 1. Upon the rear portion of the arm 24 is secured a spring 4, by means of screws 12, the rear end of the spring being forked, the members 4^a thereof engaging the rib 5 and bearing against the handle 1^a. In said rib 5 is provided a transverse bar 6 to hold the spring in place thereon and to prevent the handles from separating beyond their operative limits.

The anvil 15 is especially designed for setting hooks. The body is provided with a longitudinal aperture 25, and in the upper face is formed at one end, a shallow recess 22 and at the other end a deep recess 23, adapted to receive large and small hooks respectively, the face of the anvil being provided also with the large and small recesses 19 and 21, to receive the tip of the plunger. Fig. 2 shows the anvil in place with a hook 13^a inserted into the aperture 25, and the eyelet 13 thereof, through the fabric 14, in place on the anvil, to be set. A single movement of the handles together forces the tip upon the eyelet, clenching it in the fabric. The spring 4 returns the handles to their normal positions and the spring 10 will then raise the plunger from the eyelet. It is apparent that the anvil may be inserted into its socket 17 with either end foremost, as may be desired; and also that the device is adapted for setting eyelets and studs, as well as hooks.

Having thus described my invention so that others skilled in the art to which it pertains, may make and use the same, what I claim, and desire to secure by Letters Patent, is—

1. In a hand tool for setting shoe hooks and the like, a jaw having oppositely disposed arms at one end, one of which is extended forwardly and upwardly beyond the other, an anvil secured in the shorter of said arms, a plunger having a groove in its upper face and mounted to reciprocate in the other arm, a jaw pivotally secured to the front end of last mentioned arm, a cam lug secured on the lower side of said jaw and adapted to operate in said groove, and a

spring secured upon one of said jaws and slidably connected to the other for holding the jaws normally apart and for limiting the range of their separation.

2. In a hook set, a body portion having two arms oppositely disposed at one end, an anvil secured in one arm, a plunger having a depression in its upper face and mounted to reciprocate in the other of said arms, a member pivotally secured to said body portion and having a cam surface operating in said depression, and a spring secured upon the body portion and slidably connected with the pivoted member, whereby the latter is held normally away from the body portion and its range of movement is limited.

3. In a hand tool for setting shoe hooks and the like, a jaw having oppositely disposed arms at one end, one of which is extended forwardly and upwardly beyond the other, an anvil secured in the shorter of said arms, a plunger mounted to reciprocate in the other arm, a jaw pivotally secured to the front end of the last mentioned arm, a spring for normally holding said jaw and plunger at their upward limit, means connecting the upper jaw with said plunger whereby the plunger is brought perpendicularly upon its seat, and a spring secured upon one of said jaws and slidably connected to the other for holding the jaws normally apart and for limiting the range of their separation.

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

PIUS BAMMER.

Witnesses:
R. L. BARTLETT,
G. S. CALHOUN.