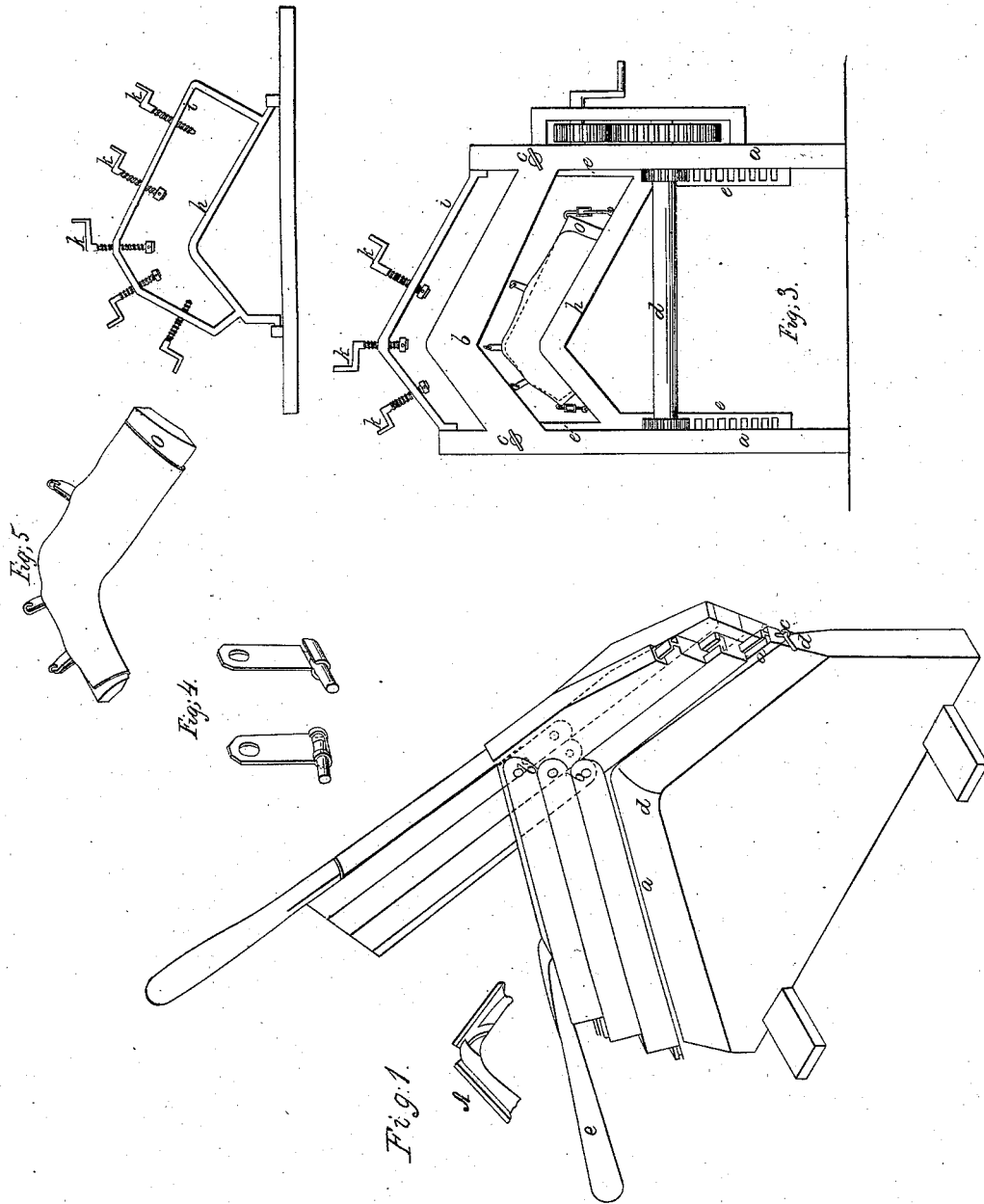


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*Boot Crimp,*

*N<sup>o</sup> 4,038.*

*Patented May 10, 1845.*



# UNITED STATES PATENT OFFICE.

REUBEN FAIRCHILD AND STARR FAIRCHILD, OF TRUMBULL, CONNECTICUT.

## BOOT-CRIMP.

Specification of Letters Patent No. 4,038, dated May 10, 1845.

*To all whom it may concern:*

Be it known that we, REUBEN FAIRCHILD and STARR FAIRCHILD, of Trumbull, in the county of Fairfield and State of Connecticut, have invented a new and useful Improvement in the Mode and Combination of Apparatuses for Crimping Boots; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms a part thereof, in which—

Figure 1 is an isometrical view, Fig. 2, sections, Fig. 3 modifications.

The nature of our invention consists in an apparatus jointed at or near the center, so that the leather to be crimped can be stretched thereon, and then bent into form which we consider our first operation; the other parts consist of a form with a guard or follower over the instep with, or without a groove cut on it to fit the inner edge of any common boot crimp, in whatever way they are or may be hereafter constructed or any part thereof, which prevents the leather when placed between them from wrinkling and forming an uneven surface in crimping, and making a more durable and strong crimp; when thus placed together, a bar is extended over the crimp, with crank screws hanging in or being screwed through said bar, or screws being inserted into the heel or back of the form, with a nut attached to attach a hook and eye thereon, which serves to draw the leather into the form required, said hook and eyes may in certain cases be projected over on the back of the form and when secured together hold the leather from giving back, and may be rubbed off by hand or it may be forced through between two cheek pieces and stretched into form and made smooth, where it is held by the arrangement and combination of said hooks, therewith in some instances without nailing, as hereafter more fully described, and detached from under the jaws.

The construction is as follows, Figure 1, shows the jointed crimp, it is composed of several strips of wood, iron, or other suitable material, which are placed side by side each other and tongue and groove, together, with dovetails groove and tongue; so that they can slide one upon the other, the inner strip (a) has a segment joint as shown at A detached, so as to present an even surface in

all positions opposite the above named joint, all the other strips are jointed as at (b), the inner strip has a hook (c) at one end that is hooked into a staple in the bar (d), when the crimp is in the position shown by the red lines, the outside strip has a handle (e) affixed to the end opposite the hook on the inner strip, by which it is borne down and all the joints bent as represented in the figure, (or it may be otherwise bent in form), the rounding edge of the inner strip (a) being forced upon the bar (d), the leather is stretched somewhat into the desired shape, or in some instances it may be completed on this instrument, a whalebone or other elastic material may be substituted for the inner strip (a).

Fig. 3, is a machine for perfecting the crimp, and is made as follows: A frame (a) is formed consisting of two upright posts framed into a base, with a groove cut on the inside of each post for a guard to slide in; near the top of said post are two jaw pieces (b), that extend from one post to the other, on each side of the above named groove and just far enough apart to have the guard leather &c., slide between them. These jaws have a triangular projection on their upper side, and their distance apart is regulated by set screws (c) in each post, on one side of the guard there is a shaft (d) below the jaw bearing a pinion near each end, these work into corresponding racks (e) on the guard, and outside the post on one side there is on the same shaft a spur wheel (f), that gears into a pinion (g) on a crank shaft, which when turned causes the gate to move up and down; the bar (i) is not permanently connected with the guard and does not pass down through the jaws but rests on the posts above as shown in Fig. (3), but it rests on the side pieces (e), of the guard when raised up to receive the leather above the jaws, as shown by the dotted lines.

The guard for passing through the above jaws may be composed of two side pieces in which the racks (e) are situated, with a cross piece (h) near the same shape on the upper side as the outline of the crimped leather when perfected, and corresponds with the front of the former (o), having a groove in its upper edge to act as a guard for the leather on the turn; over the former there is a bar (i) which has several screws (k) passing through it that serve to draw

the hooks, that the leather is attached to, up till they are brought over the edge of the former (o), when they are connected and hold the leather while the screw is detached. One of these hooks is shown detached in Fig. 4, it is a flat plate with an eye in one end, and the other curled up so as to receive the leather into it, and be fastened by a pin which is slipped into the hook. This guard is forced down by the crank or by any other plan that suits the construction and operation, the leather having been placed between the former and guard which protects its edge while being acted on by the screws and jaws between which it is clamped, when it has passed down below the former with the leather attached as shown in Fig. 5, is detached from the guard and laid away to dry. We also have discovered what might be called a variety of forms or shapes for crimping boots, which may be shown by taking hold of a piece of leather when crimped in its usual form and bringing it in a straight position with the crimped part, or bending it so the ends or leg and foot are brought together (or nearly so,) and forms may be made in any shape that the leather may form in undergoing this operation, or by slightly pressing it by hand to form any shape you desire, which crimps the leg on one side of the form and the foot on the other in same instances; as shown in Fig. 6, detached from the guard and jaws; (B) is the foot crimped on one side of the former (O), the dotted line (L) is the outline of the leather on the opposite side. The guard may be applied on the edge of

the form the whole length, or in part over or upon the instep, and it may be strained back in any manner that may suit the operator.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. Constructing the former in strips, with a series of joints at or near the center.

2. Also the combination of a guard with the former, over which the leather is to be crimped, the leather being placed between them, to prevent wrinkles, &c., as herein described.

3. We also claim the hooks Fig. 4, in combination with the screw and nut, and connected to the leather, so as to be brought over the back of the former and passed through between the jaws as set forth.

4. We also claim in combination with the above named guard and form the bar (i), in which the screws for drawing back the leather are situated, in the manner, and for the purpose before specified.

5. Also the passing of the form and leather down through the jaw piece, as herein set forth, with, or without a guard on the edge of the former.

6. We also claim the variety of ways for constructing forms as herein made known, in combination with the guard.

7. Also the application of cranks to screws, and used in crimping boots as herein before mentioned.

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STARR FAIRCHILD.

Witnesses:

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HESEKIAH S. NICHOLS.