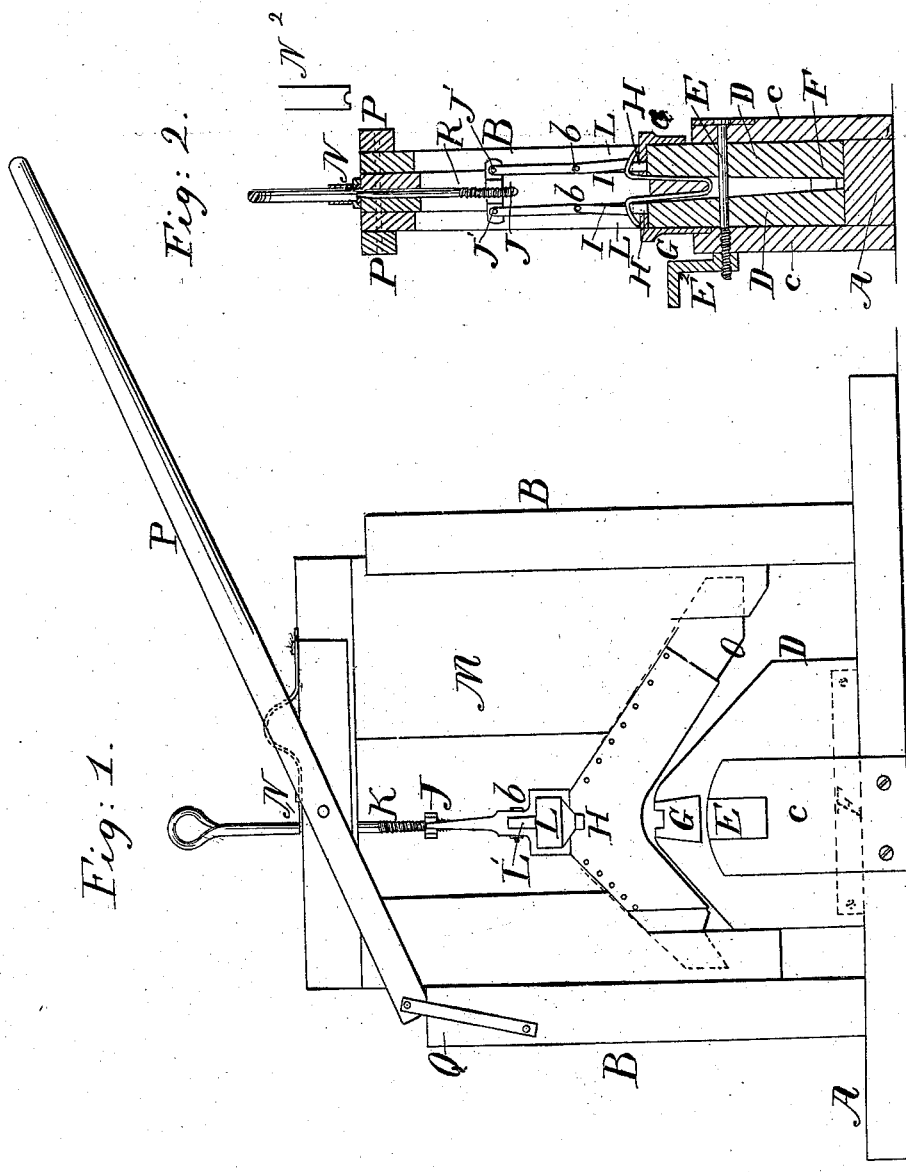


*C. White,*  
*Crimping Leather,*  
*N<sup>o</sup> 3,909.* *Patented Feb. 12, 1845.*



# UNITED STATES PATENT OFFICE.

COSMAN WHITE, OF GALWAY, NEW YORK.

## BOOT-CRIMP.

Specification of Letters Patent No. 3,909, dated February 12, 1845.

*To all whom it may concern:*

Be it known that I, COSMAN WHITE, of Galway, in the county of Saratoga and State of New York, have invented a new and useful Improvement in Machines for Crimping Boots, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a side elevation of the machine. Fig. 2 is a vertical cross section.

The frame consists of a sill A and two posts B B and two pillars C C. The jaws D between which the cramp plays or moves up and down, instead of being attached to the sill as heretofore are supported by a horizontal screw between the two pillars C C one on each side of the jaws, having a horizontal screw E passing through the jaws and the pillars; which arrangement enables a spring F arranged between the jaws near the bottom to operate more effectually in forcing the upper part of the jaws against the leather on the cramp. On the upper part of the jaws iron plates G are fastened in which horizontal grooves are made into which cogs H or projections on the lower ends of the grippers I enter and play back and forth which keep the grippers firmly in their places and prevent them from moving about when crimping the boot-front. These grooves extend horizontally from the inside of the jaws to any desirable distance beyond the outside thereof. They also serve to adjust the position of the grippers for producing a correct action on the leather and to draw or strain it equally. The grippers I are composed of two plates of iron—each in the form of an inverted cross, the head of the cross being the aforesaid cog playing in the aforesaid groove in the plate G and the tail of the cross being the branch which is hinged as at J' to a horizontal cross head J containing a female screw, the arms of the cross containing a mortise with beveled sides to admit a hinged shutter L of less size having corresponding beveled sides so that when the ends of the leather to be cramped are inserted into the aforesaid mortises and the hinged shutters L are shut in upon the leather and the grippers are raised while the cramp is held down the straining of the leather will draw the shutter more firmly upon the leather and consequently grip it more strongly. The shut-

ters L are hinged to the plates by small bolts b passed through projections L' on the same which enter corresponding mortises in the plates. The screw K by which the grippers are raised and lowered passes through a round aperture in the head of the sliding frame M and enters a corresponding female screw in the bar J. The shank of screw K is grooved horizontally on its periphery to admit a spring dog N that is attached to and slides upon the top of the vertically sliding frame M which dog is made concave in the end as seen at N<sup>2</sup> that enters the groove in the screw. When the dog is in said groove and the screw is turned horizontally it will neither rise or fall vertically but will remain in the same place causing the grippers to ascend or descend according as the screw is turned to the right or left.

The sliding frame M is of a rectangular form made and arranged much in the usual manner having an opening in it to admit the crimping board O, which it elevates or depresses and an opening in the middle to admit the grippers and screw. It is connected to an open lever P which is attached by a strap Q and bolts to the head of one of the posts and is made to rise and fall in grooves made in the posts, the head or upper end of which passing through an oblong opening in the lever.

The jaws are connected by a screw E having a nut E<sup>2</sup> upon it so that the jaws may be adjusted to the thickness of the leather upon the crimping board.

The operation of this machine is as follows: It being properly adjusted and the boot front or leather spread out over the tops of the jaws D and grooved plates G the corners of the leather are passed through the openings in the grippers I and the shutters L closed and the gauge cogs H brought into the horizontal grooves. The lever P is then pressed down which forces down the sliding frame M with the cramping board O therein upon the leather which it forces between the jaws, and as it descends between said jaws the grippers approach each other gradually until they strike the sides of the cramp board when their inward motion is arrested; the gauge-cogs H during this operation moving along in the channels or grooves of the plates and retaining the grippers in a proper position. During the descent of the cramping board and leather between

the jaws the jaws gradually recede from each other at the upper end and approach at the lower end—the spring F between being contracted at the same time. Should the leather not be sufficiently strained turn the screw K to the right which will raise the grippers I and strain the leather, to any degree required. The leather is then tacked to the board—the clamps loosened—the spring dog N withdrawn from the circular channel in the screw—the screw depressed or let down—the sliding frame raised—the shutters of the grippers open and the end of the leather withdrawn. The cramping board with the leather nailed thereto is then removed and another board put in its place—the machine adjusted and the operation repeated.

What I claim as my invention and which I desire to secure by Letters Patent is—

1. The construction of the two hinged grippers for holding the ends of the leather

while straining it—that is to say being made with openings in the lower ends of the grippers beveled on the inside or wider on the outer than on the inner face, into which are fitted loosely hinged shutters of corresponding size and shape between which and the gripper the end of the leather is gripped—a projection or cog being formed on the lower end of each gripper that runs back and forth in the horizontal grooves in the plates in the head of the jaws—the upper ends of the grippers being hinged to the horizontal connecting bar containing the female screw into which is screwed the vertical male screw passing through the top of the sliding frame.

2. I also claim constructing the jaws with the channeled plates in the manner and for the purpose set forth.

COSMAN WHITE.

Witnesses:

JOHN BISHOP,  
MICHAEL MURPHY.