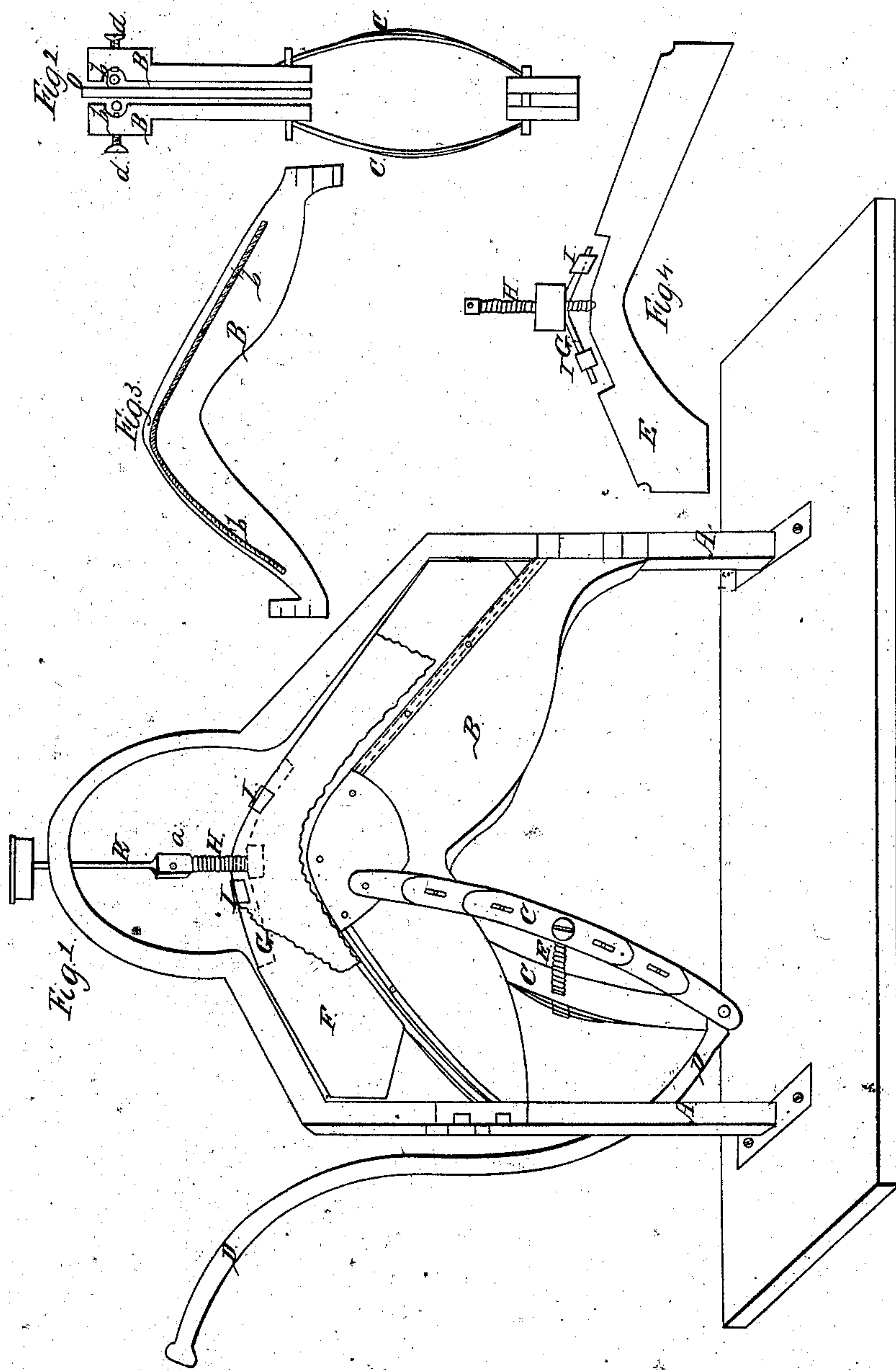


*H.B. Horton,*

*Crimping Leather,*

*Nº 12.794,*

*Patented May 1, 1855*





# UNITED STATES PATENT OFFICE.

HOSEA B. HORTON, OF NORTHVILLE, MICHIGAN.

## BOOT-CRIMPING MACHINE.

Specification of Letters Patent No. 12,794, dated May 1, 1855.

*To all whom it may concern:*

Be it known that I, HOSEA B. HORTON, of the town of Northville, county of Wayne, and State of Michigan, have invented certain new and useful Improvements in Machines for Crimping Leather for Boots, &c.; and I do hereby declare the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming a part of this specification.

The feature that peculiarly distinguishes this improvement from others heretofore known, is in the introduction of an adjustable wire, or its equivalent in the face of the jaws, by which I am enabled more effectually to compress the wet leather, particularly when it is of a varied thickness, the machine performing the action of the hand hammer of "fencing" spreading or stretching the leather in those thin places, for the purpose of taking out the wrinkles therein. This has been attempted by an improvement in the jaws, by H. S. Davis in 1846, by rigid projecting teeth or scrapers, but to any one conversant with leather, it will be perceived that the rigid teeth will not answer, as frequently a thin place occurs that the paws would pass over without removing the wrinkle. The movable or adjustable wire, answering the purpose of the teeth or scraper, may be readily projected beyond the face of the jaw at any point found necessary to effect the desired object.

A second feature of novelty is in the arrangement and combination of the clamp or holder of the leather, when crimping, that the stretch shall be maintained by set screws, passing through the clamp, operating against the edge of the crimp form, or mold, thus preserving the crimp on the same, when the "former," with the leather clamped thereon is removed from the machine for the reception of another crimp and "former."

A, A, are uprights of a frame, made of metal secured to the floor by suitable flanges. They form ways for the jaws B, B, to slide on in the vertical movement thereof. These uprights join at the top, forming an arched frame. The jaws B, B, interlock or clasp upon the uprights A, A, having liberty of movement thereon and privilege of separation slightly from each other.

C, C, is an elliptic spring, one end embracing the jaws, the other connected with a lever D, by which the jaws are made to slide

up and down, and to slick over the wet leather, this spring serving as a pitman and means of compressing the jaws toward each other, the grasp being regulated by a screw bolt E, passing from blade to blade of the spring.

F, is the crimp form, or mold, which is slipped between the uprights, and sustained in place by the angles of the frame, and a thin cross girt below it, this cross girt O, (seen in Figure 2) serving also as a guide to the jaws and means of keeping them slightly open.

G is an angularly formed metal clamp conforming in a degree with the back edge of the crimp form and to which it is applied; it is tapped with a screw nut through which passes the male screw H.

I, I, are clamps which being placed over the edge of the "angle-clamp" with the leather on each side thereof between I and G. On being slightly driven with a hammer, the leather is locked to the clamp. The center clamp is placed at the angle of G through which the screw H freely passes.

K, is a turn wheel whose stem passes through the arch of the frame, and has an open link *a*, through which a pin is inserted.

When the screw H, is to be turned, and on the removing of the pin the crimp form may be detached.

Fig. 3 shows the inside of one of the jaws in which a wire *b b*, is laid in a groove near the edge of the jaws, the wires also shown in cross section Fig. 2.

*d, d*, are set screws tapped in the thickness of the jaws whose ends project the wire opposite them, as may be desired by turning the screws, and thus bring the pressure of the jaws upon thin places of the leather, which otherwise would escape the crimping of the jaws were they not thus made to conform to the thickness of the leather.

The operation of crimping is as follows: A piece of wet leather having been laid across the jaws, it is by the raising of them through the lever D, forced upon the "crimp form" F. By the repeated sliding up and down of the jaws on the leather, it is slicked smooth and embraces the crimp form. Should there be noticed any thin places in the leather and that the wrinkle is not perfectly removed, the nearest set screw is turned and the wire *b, b*, made to project beyond the face of the jaw opposite the screw. This is all that is necessary. Having forced



the edges of the leather above the crimp form and on to the angle iron G, clips or clamps I<sup>1</sup>, I<sup>1</sup>, are driven over. Now in turning the stem K by one hand, and with it the screw H, while the jaws are moved by the other hand, the screw H, by pressing against F, draws tight the leather on the crimp form and completes the operation.

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

The adjustable wires *b b* (made so by set

screws *d d*) on the face of the jaws B, B, arranged substantially in the manner and for the purpose set forth.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

HOSEA B. HORTON.

Witnesses:

W. S. CLARK,

CHS. P. WANNALL.