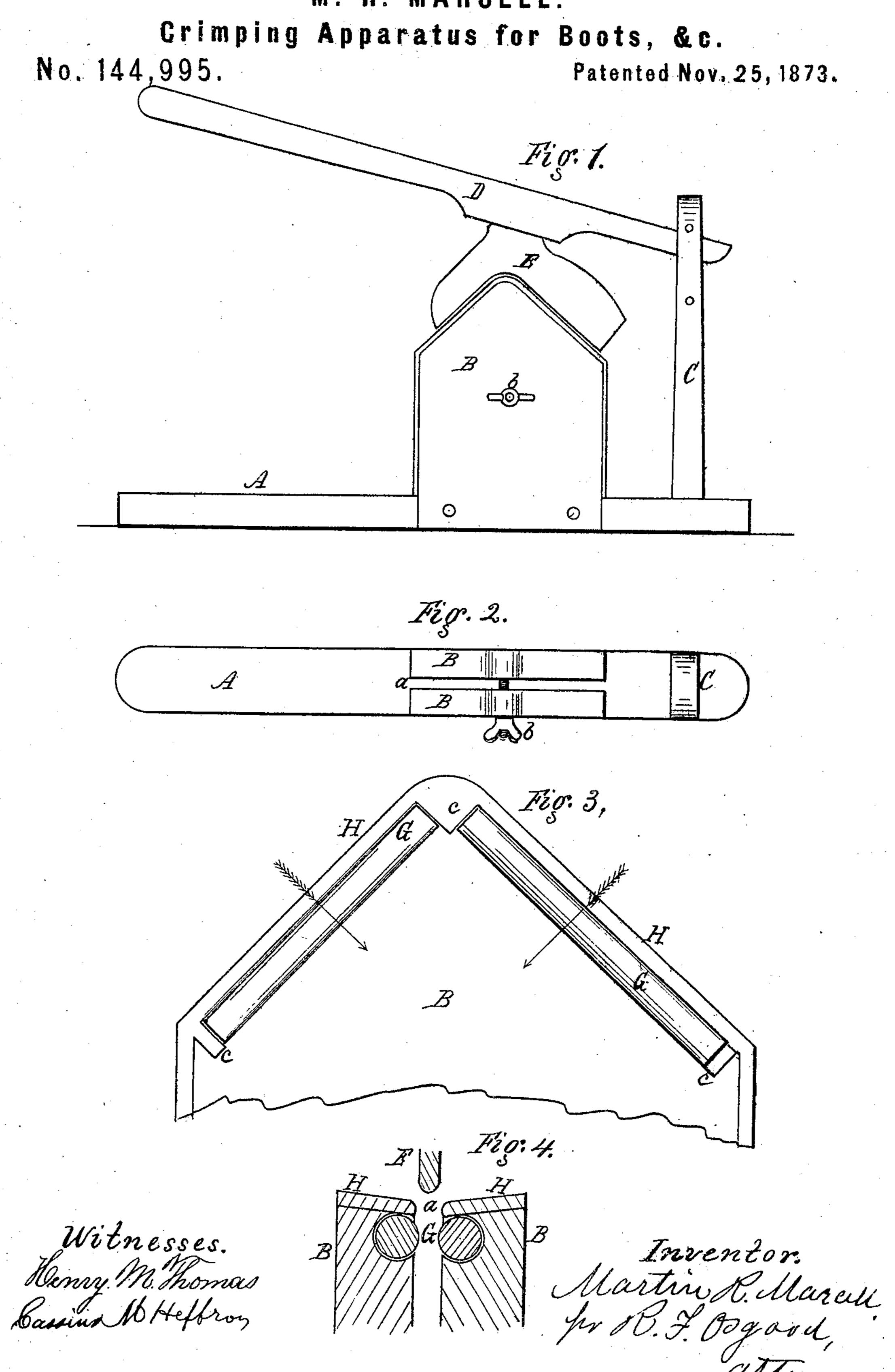
M. R. MARCELL.



## UNITED STATES PATENT OFFICE.

MARTIN R. MARCELL, OF DANSVILLE, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO WARREN H. CASE, OF SAME PLACE.

## IMPROVEMENT IN CRIMPING APPARATUS FOR BOOTS, &c.

Specification forming part of Letters Patent No. 144,995, dated November 25, 1873; application filed April 23, 1873.

To all whom it may concern:

Be it known that I, MARTIN R. MARCELL, of Dansville, in the county of Livingston and State of New York, have invented a certain new and useful Improvement in Apparatus for Crimping Boot-Legs, and for similar uses; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

My invention consists in combining, with a crimping apparatus, a set of rollers which stand out from the faces of the crimping-jaws, so as to take the contact, as hereinafter de-

scribed.

In the drawings, Figure 1 is a side elevation of my improvement; Fig. 2, a plan, with the lever removed from place; Fig. 3, an enlarged view, showing the inside of one of the crimping-jaws; Fig. 4, a cross-section of the tops of

the crimping-jaws.

In general construction, this apparatus is similar to others in use. A is the bed; B B, the crimping-jaws; C, the lever-standard; D, the lever, and E the crimping-block. The crimping action is produced by placing the leather over the tops of the crimping-jaws and forcing down the crimping-block into the throat a, between the jaws. This throat is gaged by a screw and nut, b.

Heretofore the inner surface of the jaws has been made plain and straight, and the leather, in passing down, has rested in contact with the jaws its whole depth. The consequence is that, owing to the unequal strain and drawing up, wrinkles are formed in the leather, and

much difficulty consequently ensues.

To obviate this, I insert in the inner surfaces of the crimping-jaws, and near their tops, rollers G G, which project a little beyond the faces of the jaws, as shown in Fig. 4, and thus serve to receive the contact of the crimping-block as it passes through, and relieve the leather of any contact after it has passed below the roll-

ers. The rollers are preferably arranged in line with the inner edges of the crimping-block, so that the strain on the leather will be direct and away from the apex of the angle, so as to draw smoothly and prevent wrinkling. The rollers have short journals or gudgeons, which rest in bearings cc, the latter preferably forming a part of metallic straps H H, which

encircle the edges of the jaws.

By this improvement I am enabled to crimp boot-legs with much less labor and with a better result than has heretofore been done. The rollers not only relieve the friction, but, by acting in line with the entrance and passage of the crimping-block, draw out all the wrinkles and produce a perfectly smooth surface. They also draw the material from the apex of the angle, and prevent the thickening and accumulation of the material at that point which usually occurs.

In addition to the ordinary crimping action, I also roll the leather as it passes through,

which flattens it to place.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. In an apparatus for crimping leather, the combination of the rollers G G with the jaws B B, or equivalent, when said rollers are set in the inner faces of the jaws, and project therefrom to receive the contact of the crimping-block, substantially as and for the purpose specified.

2. In combination with the jaws B B and rollers G G, the encircling straps H H, as and

for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

MARTIN R. MARCELL.

Witnesses:

SETH A. HEDGES, J. S. MURDOCH.