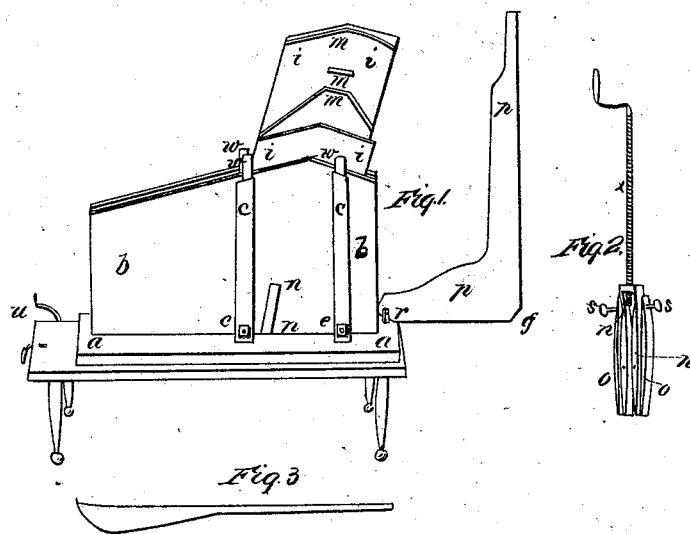


J. Van Winkle,
Crimping Leather,
N^o 164. *Patented Apr. 17, 1837.*



Witnesses:
Moore Chapin
and Hurlbath

Inventor:
J. Van Winkle

UNITED STATES PATENT OFFICE.

JESSE VAN WINKLE, OF ROCHESTER, NEW YORK.

MACHINE FOR CRAMPING LEATHER FOR BOOT-LEGS.

Specification of Letters Patent No. 164, dated April 17, 1837.

To all whom it may concern:

Be it known that I, JESSE VAN WINKLE, of the city of Rochester, in the county of Monroe and State of New York, have invented a new and useful Machine for Cramping Leather for the Legs of Boots; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in forcing leather by machinery to a cramping tool of proper shape and forcibly removing the wrinkles as to effectually cramp a boot leg, by a quick operation in a few minutes instead of proceeding in the slow ordinary way.

To enable persons skilled in machinery to make and use a machine of my invention, I will proceed to describe its construction and operation.

Let there be a platform (see *a a* on the drawings, Fig. 1) as the bed of the machine. Let there be two planks (*b b*) of proper shape and size, standing on their edge along the middle of the platform and fastened to it, and placed so far apart as to admit the leather and cramping tool between them. On the outer side of these planks let there be four posts (*c c*) two on each side, each opposite pair being connected by a screw bolt or rivet (*e e*) so as to sustain the pressure required. Let these posts stand close to the upright plank at the platform and be cut beveling so as to recede from the plank upward and then permit them to spread apart a little as the cramping tool is pressed down, and also to admit a wedge (*w*) between each post and the upright plank.

On the inner surface of the two upright planks let there be two oblique plates (*i i*) sliding in grooves extending from the bottom to the top of the upright plank, one plate in each plank and so placed that the inner face or surface of each plate will coincide with the inner surface of its plank. Let there be projecting narrow plates or bars (*m*) on the inner surface of these sliding plates curving around so as to work nearly at right angles to the instep or from the instep to the ankle of a boot leg when placed in the machine. These last named bars will press out the wrinkles from the boot leg. Let a like bar coinciding in a line with the topmost bar in the slide extend along on the upper part of the inner surface of each upright plank and along the perpendicular edge at the end next the cramp-

ing tool. The last named bars or projections will smooth the boot leg as it is pressed into the machine. In each upright plank let there be a mortise (*n n*) near the platform at the foot of the slide. By the aid of a lever (Fig. 3) inserted at the mortise (or by any power applied) the slides can be lifted up. At one end of the upright plank let a cramping tool (*p p*) of proper shape be placed, fastened at the toe by a hinge (*r*.) This tool may be of any metal or substance and be only so thick as to have necessary strength. At the end of the platform opposite the cramping tool a cord or strap with a ring at its end is fastened to a revolving bar with a crank (*i r*) at its end and aids to draw down the cramping tool.

A pair of compound pincers (Fig. 2) are to be used, and are of this construction: The inner halves of two pairs of pincers are fastened together at their feet (see *u, u*, on Fig. 2) forming a crotch. A screw rod (*x*) is made to pass through and turn in this crotch between the two pairs, with a crank at the end of the screw rod. The outer halves of the pincers (*o o*) are riveted to the inner halves and open on the rivets. At the foot of each outer half is a thumb screw (*s s*) by turning which the pincers may be made to grasp the leather.

To operate this machine, let a piece of leather cut in the proper shape for the front part of a boot be laid longitudinally along on the cramping tool, or on the top of the two upright planks the toe of said leather being placed at the toe of said cramping tool. Let the cramping tool then be brought down gently, pressing the leather doubled or folded in between the two upright planks. Let the cramping tool then be lifted a little, and in order to give shape to the leather let the compound pincers before described be used thus. Let the foot of the screw rod of the pincers rest on the heel (*g*) of the cramping tool, and let the two pairs of pincers be made to grasp the two corners of the leather at the bottom of the instep. Let the screw rod of the pincers be turned by the crank and the leather will be brought up close and fitted to the cramping tool. Let the cramping tool then be brought down again between the upright planks. To aid in doing this and to keep it down let the ring be put on the end (*h*) of the cramping tool and let the crank (*i r*) be turned. Let the wedges (*w*) then be driven between the

posts on the platform and the upright
planks. Let the sliding planes (*i i*) then
be lifted out of their sockets by the lever.
By this last process the projecting bars on
the inner surface of the slides will be made
to pass over the wrinkles of the leather at
the instep and ankles and will entirely re-
move them. The boot leather may then be
taken from the machine perfectly and neatly
cramped.

The upright planks are so called because
planks will be commonly used, but metal or

any proper substance may be used for any
part of the machine.

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

The slides or sliding planes, with the pro-
jecting bars or narrow plates for removing
the wrinkles from the leather.

JESSE VAN WINKLE.

Witnesses:

MOSES CHAPIN,

ARIEL WENTWORTH.