I. Bissell, Crimping Leather. Patented Aug. 28, 1860.

Witnesses.

UNITED STATES PATENT OFFICE.

DAVID BISSELL, OF DETROIT, MICHIGAN.

CRIMPING-MACHINE.

Specification of Letters Patent No. 29,757, dated August 28, 1860.

To all whom it may concern:

Be it known that I, David Bissell, of Detroit, in the county of Wayne and State of Michigan, have invented a new and Im-5 proved Crimping-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

10 Figure 1 is a side elevation of my improved machine for crimping the fronts of boots. Fig. 2 is an end elevation of the same. Fig. 3 is a transverse section taken through Fig. 1 in the vertical plane indi-15 cated by the red line x, x. Fig. 4 is a view of one of the gripping dogs. Fig. 5 shows the inside of one of the clamping plates in perspective.

Similar letters of reference indicate corre-

20 sponding parts in the several figures.

This invention is an improved machine for crimping or shaping the fronts of boots before they are stitched up, in which the leather while wet is stretched over a former 25 of the proper shape, and the former is drawn down between two clamping jaws, smoothing and crimping the leather and giving to it the proper shape.

My invention consists in a novel manner 30 of applying lateral pressure to the jaws, and at the same time stretching the leather tightly at the instep portion as will be hereinafter

described.

To enable those skilled in the art to fully 35 understand my invention, I will proceed to describe its construction and operation.

In the drawings, A is a table on which the crimping machinery is mounted, the legs of which are to be firmly secured to the floor on 40 which the machine rests. On the top of the table rests two clamping jaws B, B, which are attached to lugs projecting from the table top by screws a, a, and nuts b, b, by which latter the jaws B, B, may be adjusted 45 laterally, that is, set farther apart or brought closer together. Besides these two adjusting screws there is another, lettered c, which | it, and its edges are gripped between these 100 has sliding nuts c', c', with blocks e, e, of india rubber interposed between the nuts 50 and the jaws B, B; the hand wheel d, is used in this case to adjust the jaws laterally. The object of the rubber pieces is to admit of a slight yielding action to the jaws when un-

even uppers or fronts are crimped. Should it be found necessary rubber blocks may be 55 used for the lower adjusting screws a, a, in the same manner as for the screw c.

D is the former under which the leather fronts to be crimped are stretched while in a wet state. g, g, are gripping dogs applied 60 to the former for stretching the leather and holding it on the former during the operation of crimping it,—one of these dogs is shown by Fig. 4. The former D has a handle D', applied to one end, and its other 65 end is pivoted to the back part of the table at h, as shown in Fig. 1, and in using it after the leather is stretched over it and clamped by the dogs g, g, it is drawn down between the jaws B, B, said jaws being 70 previously adjusted by the lateral adjusting screws before described. At this stage of the operation two supplemental jaws E, E, (shown in Figs. 3 and 5) are brought to act upon the leather with a clamping action 75 by means of two levers G, G, which are pivoted at i, i, to the jaws B, B, and acted upon by a foot treadle H. The springs j, j', are used to return the parts back to their original position after the pressure on the 80 foot lever is taken off.

The supplemental gripping jaws E, E, have lugs projecting from them which lugs pass through slots in the jaws B, B, and when the lateral pressure is put upon them 85 these lugs are forced against the surface of the leather on the former, while the former is drawn down between the jaws B, B, and operate so as to take out the wrinkles and make the leather smooth on the former. 90 The dogs g, g, may then be set farther back so as to keep the leather in its stretched and smooth state, springs k, k, Fig. 3, are introduced between the plates E, E, and outside of the jaws B, B, which force the lugs back 95 from the leather when the levers G, G, are released.

In operating this machine the leather front is placed on the former after wetting dogs g, g, g, and drawn tight on the former. The former is now drawn down between the jaws B, B, which are adjusted as described to receive it, and while the former is being drawn down, the lugs on plates E, E, are 105 forced against the leather in the manner described which stretches the leather smoothly on the former.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is—

The supplemental jaws E, E, with their lugs, as described, in combination with the

jaws B, B, levers G, G, and treadle H, arranged combined and operating in the manner herein set forth.

DAVID BISSELL

Witnesses:

JEROME CROUL, Wm. F. Belman.