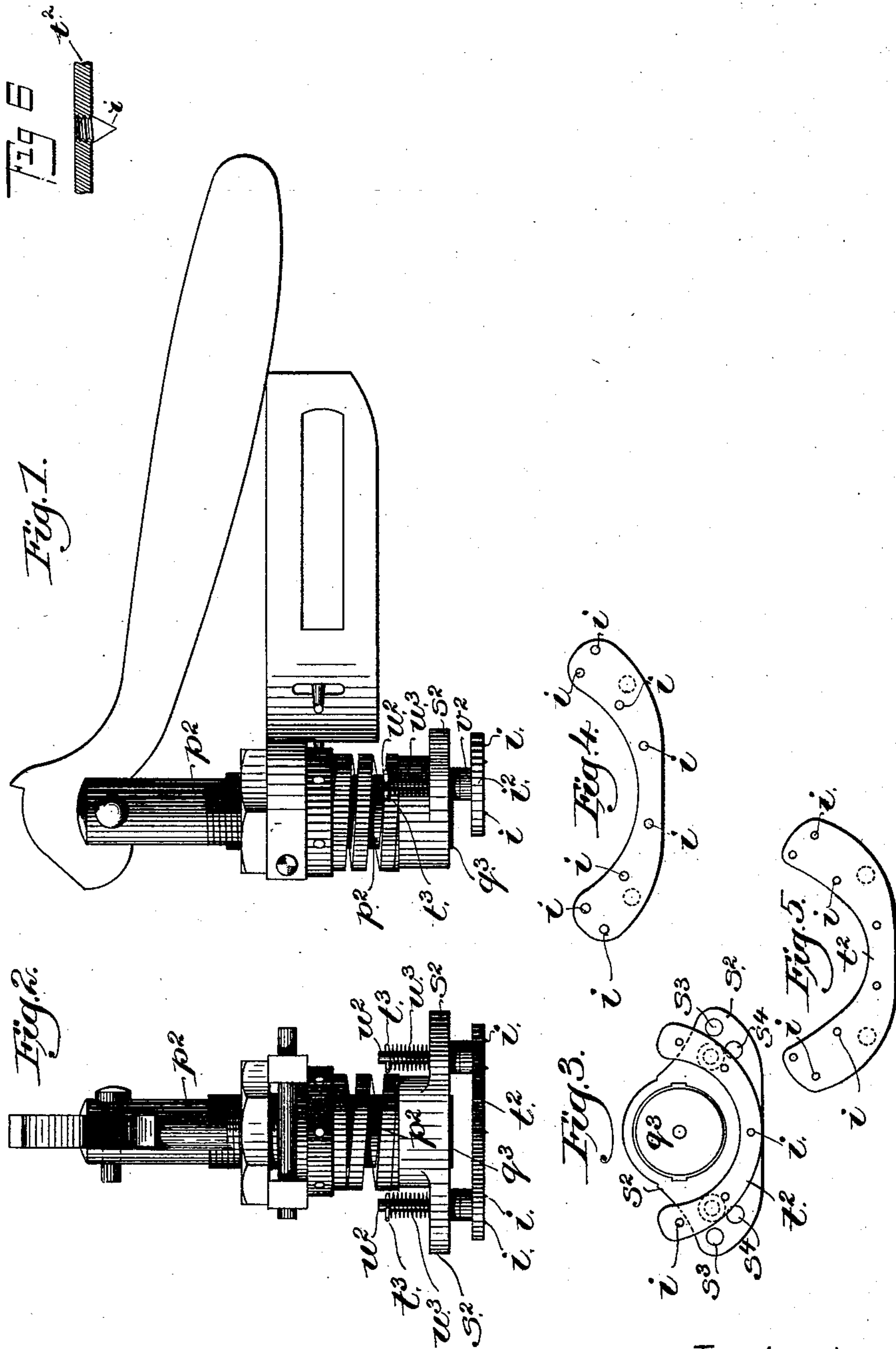


(No Model.)

A. E. STIRCKLER.
LASTING MACHINE.

No. 477,789.

Patented June 28, 1892.



Witnesses:

Edward F. Allen.
Oscar F. Hill

Inventor.

Albert E. Stirckler.
by Crosby & Gregory attys.

UNITED STATES PATENT OFFICE.

ALBERT EDW. STIRCKLER, OF NORTHAMPTON, ENGLAND, ASSIGNOR TO THE
CHASE LASTING MACHINE COMPANY, OF BOSTON, MASSACHUSETTS.

LASTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 477,789, dated June 28, 1892.

Application filed June 29, 1891. Serial No. 397,815. (No model.) Patented in England January 30, 1890, No. 1,648.

To all whom it may concern:

Be it known that I, ALBERT EDWARD STIRCKLER, a citizen of the United States, residing at Northampton, county of Northampton, England, have invented an Improvement in Lasting-Machines, (for which I have obtained Letters Patent in England bearing date January 30, 1890, No. 1,648,) of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention has for its object to render machines for lasting boots and shoes more perfect and efficient in action than hitherto.

My said invention relates more especially to the class of machines such as are described in the specification of Letters Patent No. 337,925.

One part of my present invention relates to the clamp by which the toe end of the upper-leather is gripped to draw it over for attachment to the inner sole, and has for its object to give a greater grip on the leather of the upper, and so effect a more perfect drawing over of the leather in cases more especially where the upper-leather does not present a sufficient amount of material to be efficiently held by the clamp as at present arranged or in operating with soft leathers that require a considerable amount of stretch to give them a good appearance when lasted, and, further, to adapt the said upper plate of the clamp to receive lower plates (called "toe-rings") of different sizes and shapes.

According to my invention, I make the distance between the upper and lower plates adjustable, so that the lower plate, when the last is brought up toward the level of the upper plate, is situated so low down as to grasp between itself and the wiper-plates below it a greater portion of the leather of the upper than is possible with the ordinary arrangement, and when the last is afterward depressed the extra amount of leather is extended above the last to be wiped in by the action of the wiper-plates. I prefer to make teeth or projections on the under side of the lower plate of the clamp to give a firmer hold upon the leather. The adjustment of the distance between the upper and lower plates of the clamp may be conveniently effected by placing rings

or distance-pieces between the two plates, preferably threading them upon the bolts or pins which are fixed to the lower plate and slide in the upper plate, or by nuts screwed on the bolts or pins by which the plates are connected together.

In order to make the upper plate capable of accommodating lower plates of different shapes and sizes, I may either make the pins or bolts on all the different sized and shaped lower plates the same distance apart or I may make holes in the upper plate at different distances apart, so as to correspond to the different distances apart of the pins or bolts on the various lower plates.

Figures 1 and 2 of the accompanying drawings represent, respectively, in side elevation and front elevation a presser embodying my invention. Fig. 3 is an under side view of Fig. 2. Figs. 4 and 5 are plans of two differently-shaped toe rings or plates, and Fig. 6 is an enlarged detail showing one of the screw pins or projections i of the toe-ring.

Referring to Figs. 1, 2, and 3, s^2 is a plate fitted to slide up and down the hollow cylindrical piece p^2 of the presser. To the plate s^2 there is connected, by pins or bolts u^2 , a lower plate or toe-ring t^2 , between which and the wiper-plates below (not shown) the edge of the upper being lasted is nipped and securely held while the last is being forced by the disk q^3 into the upper. The toe ring or plate t^2 may be adjusted to any desired distance from the upper plate s^2 by interposing between the plate distance-pieces of the required thickness. In the drawings I have shown these distance-pieces as consisting of rings of metal v^2 placed on the pins or bolts u^2 , springs w^3 being interposed between the upper surface of the plate s^2 and pins or projections t^3 on the bolts u^2 to maintain the parts in contact and to admit of distance-pieces of different thicknesses being used, so as to increase or reduce, as required, the distance or height of the toe-plate t^2 above the last, according to the amount of upper-leather it is desired to wipe over the last, and also to vary, as required, the pressure of the plate on the leather.

To enable toe-plates of different sizes and shapes being used with the same upper plate

s², I provide in the said upper plate several pairs of holes, as at s³ s⁴, for the reception of the bolts or pins u² on the different-sized toe-rings shown in Figs. 4 and 5, or the upper plate may have only one pair of holes and the bolts or pins u² on the several toe-rings be all arranged in the same positions to enter these holes. The toe-rings are provided on their under or bearing surface with pins or projections i, so as to insure a firm hold on the leather while the last is being forced into the upper by the plunger q³. These pins or projections i are preferably formed on screws which screw into holes in the plates t², (see Fig. 6,) so as to be capable of being projected more or less, as required, from the face of plates, whereby the whole or any desired number of the points may be made to bear with equal pressure on the leather, whether the surface be flat or curved, or any number of the said points may be made to bear with greater pressure than the other points, if required, when, for example, the strain on the leather is required to be unequal.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

In clamping devices for holding the upper while the last is being forced thereinto, the upper plate provided with a series of openings, and interchangeable pressing-plates of different sizes having pins thereon to enter the openings of the upper plate registering therewith, and pins or projections extending from the under side of said pressing-plates, the said pins being independently adjustable at right angles thereto to project more or less therefrom, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT EDW. STIRCKLER.

Witnesses:

GEO. W. GREGORY,
A. S. WIEGAND.