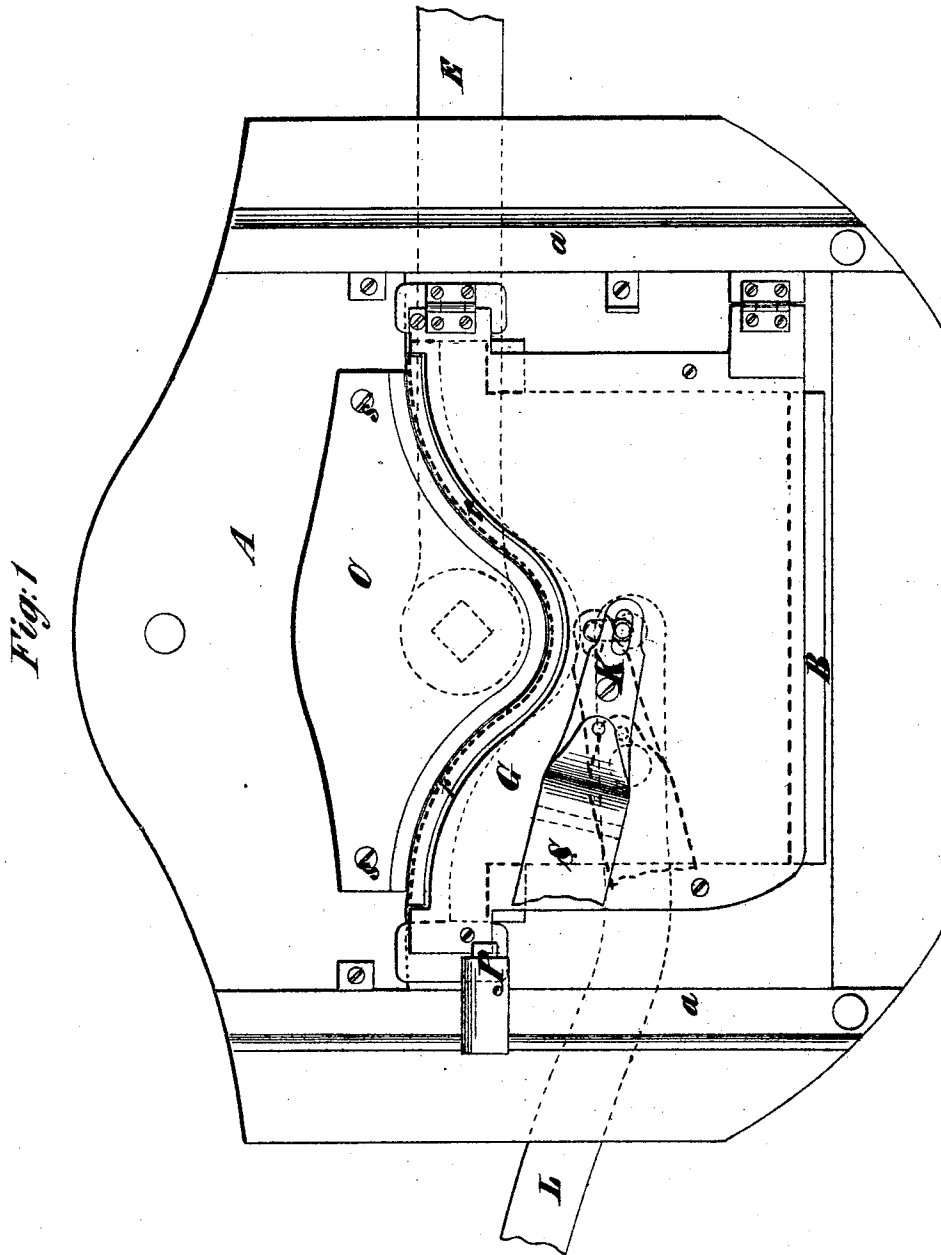


E. B. STIMPSON.
Machinery for Folding Leather.

No. 141,398.

Patented July 29, 1873.



Witnesses:
Michael Ryan
Fred Harnes

E. B. Stimpson
by his Attorneys
Rowntree & Allen

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Fig. 2

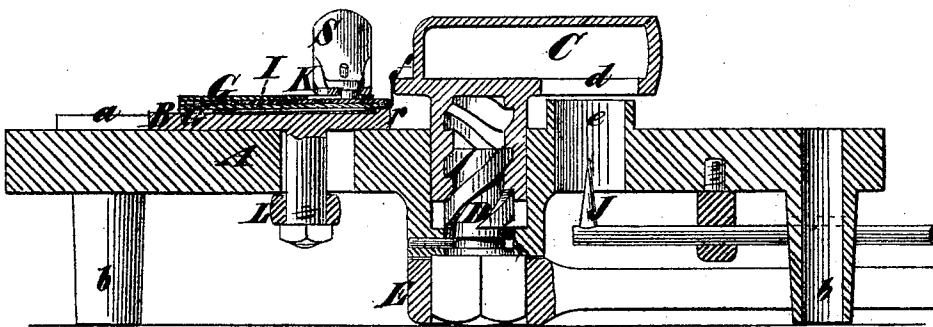
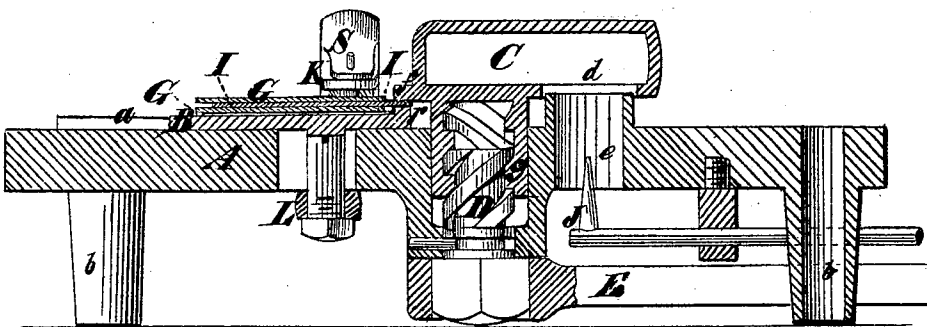


Fig. 3



Witnesses:
Michael Ryan
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UNITED STATES PATENT OFFICE.

EDWIN B. STIMPSON, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINERY FOR FOLDING LEATHER.

Specification forming part of Letters Patent No. **141,398**, dated July 29, 1873; application filed July 9, 1873.

To all whom it may concern:

Be it known that I, EDWIN B. STIMPSON, of the city, county, and State of New York, have invented a Machine for Folding Leather, of which the following is a specification:

This machine is designed for folding over the edges of leather, preparatory to making it into boots and shoes or other articles. It consists, essentially, of a traveling bed, on which the leather to be folded is placed, a hinged gate-like device for holding the leather in position, a tongue arranged within this gate-like holding device so as to be capable of being moved outward for the leather to be folded over it and inward independently, and a heated flat-iron, that is brought down on the leather after it is folded to fold it snugly, so that its fold will be maintained after the leather is removed from the machine.

In the accompanying drawing, Figure 1 is a top view of my leather-folding machine. Fig. 2 is a central longitudinal section of the same, illustrative of one stage of the machine's operation; and Fig. 3 is a like view, illustrating the final stage of the operation.

Similar letters of reference indicate corresponding parts in the several figures.

A is the base or body of the machine. It is flat on the top, save for two guides or warps, *a a*, near its side edges, that direct the movements of the traveling bed B of the machine. This base-piece is erected on legs *b b*, and somewhat about the middle of its length it is provided with a socket for the reception of the shank *g* of the flat-iron C before mentioned. This iron consists of a hollow casting, in front shaped to correspond with the profile of the edge of the leather to be folded, and along its front thus shaped is a narrow flange, *f*. Its shank constitutes a screw-threaded socket, in which works a screw, D, of quick pitch, operated by a lever, E. This lever may be secured directly to the shank of the screw, or may be pivoted to the base-piece, and be geared with the screw by segmental racks, one on its end and another on the shank of the screw. The turning of this screw within the shank of the iron raises or lowers it according to the direction in which it is turned. There is in the iron, in rear of its shank, a mouth-like opening, *d*, opposite which, in the

base-piece, there is a corresponding opening, *e*. A gas-jet, J, is arranged under this opening *e* for the purpose of heating the iron. The sides of the iron work on studs *s s*, that guide the iron in its up and down movements. The traveling bed B consists simply of a flat plate, shaped at the edge adjacent to the iron to correspond with its front profile. It has, at its front edge, a fillet-like rim, *r*, which coincides in width with the flange *f* on the front of the iron. It is moved back and forth on the base-piece by means of a lever, L, pivoted to the base-piece, and connected with the bed by a pin passing to it through a slot in the base-piece. A gate-like device is hinged to one side of the bed B for the purpose of holding the leather down on it. It consists of two flat plates, G G, united at the side edges, and fitted with an interposed tongue, I, as it is called, which consists simply of a thin plate. The tongue and the plates G G are all shaped to conform to the front profile of the iron. A spring-catch, P, on the base-piece holds the clamping device down in position till, by the travel of the bed, it is carried beyond the reach of said catch. The tongue I is operated by a lever, K, which is pivoted to the outer of the two plates G G, and connected with the tongue by a pin passing through a slot in the aforesaid plate. In order that the tongue may be locked when thrown out, its operating-lever is furnished with a supplementary lever, S, pivoted to it near its fulcrum. The forward end of this lever carries a pin that passes through the main lever and impinges against the upper plate G, and, when the tongue is thrown out, enters a hole in the said plate, and thereby locks the tongue to the plate. Its pin is held against the plate by a spring inserted between the two levers in rear of their junction.

The leather to be folded has its edge trimmed to the proper shape, and is then placed on the traveling bed B of the machine, with its edge in contact with the front of the iron C. The holding device G G is then brought down on it, and secured by the catch P. Next, the tongue I is thrown out by its lever K, and it holds the leather down on the rim *r* of the bed. After this the lever E is manipulated to raise the iron, and the edge portion of the leather,

which before rested on the top of the flange *f* of the iron, is, by the raising of the iron, turned up at a right angle against the front of the flange, as shown in Fig. 2. The traveling bed B is now thrown forward by its lever L, so that its rim *r* is brought under the flange *f* of the iron, and the edge of the leather is thus folded over the edge of the tongue. The tongue is then withdrawn from the folded portion of the leather by pushing forward the lever K. By this time the holding device has passed beyond the control of the catch, and can be raised from the leather. The iron is brought hard down on the folded leather, as shown in Fig. 3, and is held there for awhile.

By being heated the iron is enabled the better to fold the leather and to afford permanence to the fold.

In order to fold leather in certain other shapes the iron C will be made in sections, and so also will the tongue I be made. Both will be operated by small levers.

What I claim as my invention is—

1. The machine for folding leather, composed of the reciprocating bed B, the holding

device with its tongue I, and the iron, shaped to conform to the intended profile of the leather, and having a reciprocating movement in a plane perpendicular to that of the bed's motion, the whole combined and organized substantially as and for the purpose specified.

2. The iron C, formed with a flange, *f*, extending along its front at its bottom edge, whereby the leather is first turned up, and is afterward folded over and pressed down, substantially as herein described.

3. The combination of the socket-like shank *g* of the iron C, the screw D working therein, and its operating device; essentially as and for the purpose set forth.

4. The combination, with the lever K pivoted to the upper of the plates G G, and connected with the tongue, as described, of the supplementary lever S pivoted to the aforesaid lever, and provided with a pin to lock into the plate G just mentioned, essentially as and for the purpose set forth.

EDWIN B. STIMPSON.

Witnesses:

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MICHAEL RYAN.