

H. CHARMBURY.

LEATHER-CRIMPING AND FOLDING-MACHINE.

No. 182,060.

Patented Sept. 12, 1876.

Fig: 2

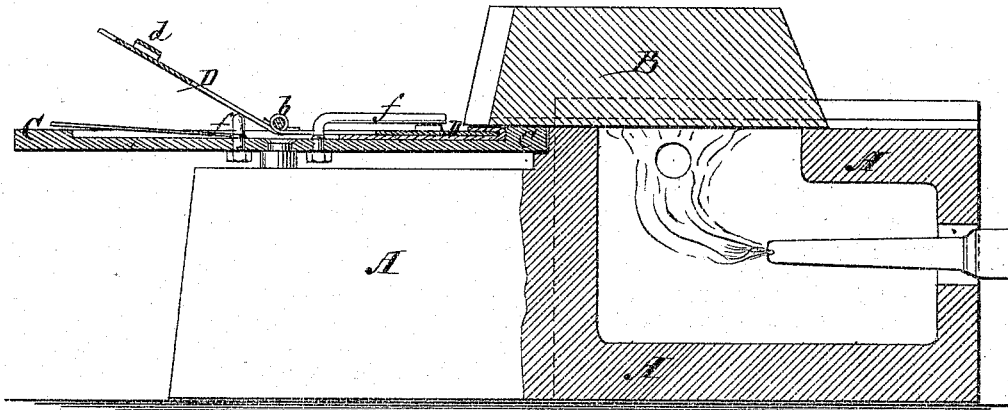
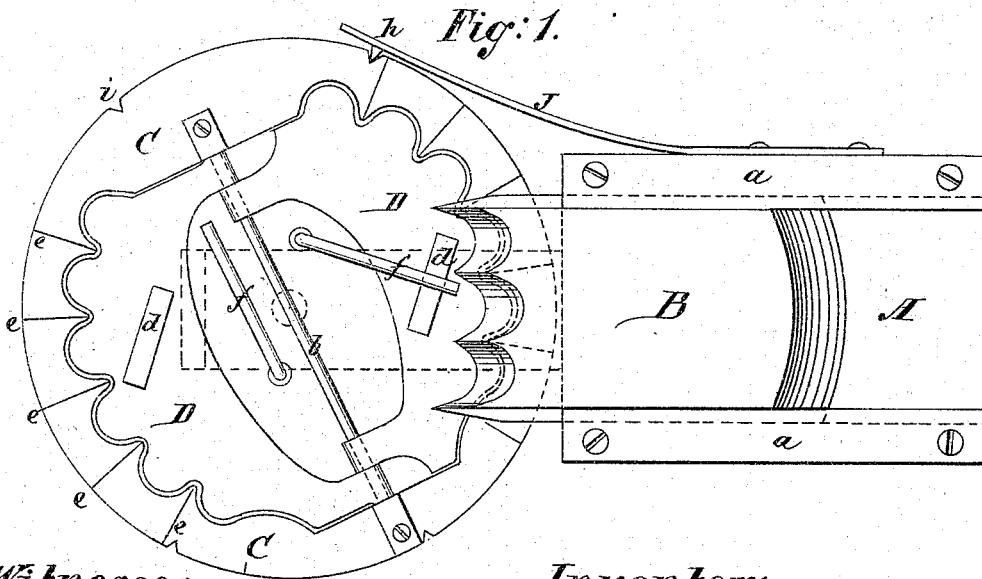


Fig: 1.



Witnesses:

Amos D. Mendenhall
Joseph Walker

Inventor:

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UNITED STATES PATENT OFFICE.

HENRY CHARMBURY, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN LEATHER CRIMPING AND FOLDING MACHINES.

Specification forming part of Letters Patent No. 182,060, dated September 12, 1876; application filed February 4, 1876.

To all whom it may concern:

Be it known that I, HENRY CHARMBURY, a subject of the Queen of Great Britain, but at present residing in the city of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Machine for Crimping and Folding Leather or other similar material or fabric used as a substitute for leather; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing, making part of this specification, in which—

Figure 1 is a top view of my said invention, and Fig. 2 is a longitudinal vertical section through the center of Fig. 1.

The object of my invention is to fold, crimp, and turn over the edge of leather or other material or fabric used as a substitute for leather, and employed in the manufacture of shoes, harness, pocket-books, traveling bags, and other like articles; and especially where it is desired to turn the edges of the leather, cloth, or fabric cut in curved points or scallops, or small curves upon a large curve, as in the case of button-shoes, for example, where the edges are scalloped or pointed, and curved around each button-hole, although the invention is applicable to the folding or crimping of leather or other fabric or material where it is desirable to scallop or curve, point and fold, or turn over the edge, whatever may be its outline.

My invention consists of a bed plate or frame fitted with a sliding, folding, and pressing iron, and combined with a movable disk or plate, fitted with clamps, and arranged in relation to the folding-iron in such manner as to bring the outside surface of the disk upon the same plane with the bottom surface of the folding and pressing iron, the front end of which is to be scalloped or made with curved points, and arranged to correspond with the scalloped or curved pointed edge of the material to be folded, and with the edge of the clamping-plates that hold the material while the folding is being done.

The substantial construction of this invention is illustrated in the drawing.

The frame or bed-plate is shown by A; the folding or pressing iron by B; the disk by C,

and the clamps by D D. These are the principal parts of the machine, and they are constructed, arranged, and operated in relation to each other substantially as follows: The bed-plate is made hollow, to admit a jet of gas under the folding and pressing iron, for the purpose of heating it, in case of need, and the top of said bed-plate is fitted with a pair of cleats, *a a*, to hold and guide the pressing-iron upon the bed-plate and disk C. The bottom side or edges of the iron is fitted with projections to correspond with and fit under the cleats *a a*, and slide in them. The front end of the iron is scalloped or curved pointed, either upon a curved or a straight line, as may be desired, to match the scalloped or curved pointed edge to be folded or pressed. The disk C is in this case circular, and is pivoted upon its axis in front of the folding end of the iron, and arranged to revolve about its axis with its top surface upon the same plane with the bottom of the pressing-iron, the periphery or out edge of the plate being supported upon a suitable bearing in the bed-plate in front of the folding end of the iron. The clamping-plates D D are sunken in the top side of the disk, which is cut out a depth equal to the thickness of the clamping-plate, and the thickness of the leather or other fabric when folded, so as to bring the folded surface of the leather flush with the top surface of the disk, as shown by Fig. 2 of the drawing. The clamping-plates are hinged across the center of the disk in the recess cut to receive them, upon a pivot-bar, *b*, and they are held down by means of swinging clamps *f*, pivoted to the disk, and arranged to bear against an inclined plane or cam, *d*, made upon the top of the clamping-plates D. The outer edge of the clamping-plates are scalloped or curved pointed to suit the edge of the leather or fabric to be folded, as is also the outline of the recess cut in the top of the disk, the clamping-plates being made to match the recess, but a trifle smaller, to leave room for the leather or other fabric between them, as shown by the drawing.

The operation is as follows: Let the disk be in the position shown by the drawing, and let the pressing-iron be moved back off of the disk; let the clamps D be raised up, the

leather inserted, and the clamp secured in the manner shown. The leather is then cut in the angles *eee*; the iron is then pressed forward and falls over the edge of the leather, and presses it down on the clamp; the iron is then shoved back, and the disk turned until the catch *h* on the spring *J* drops in the notch *i*; the iron is then shoved forward, and the edges of the other three points or scallops are folded and pressed down, as before, and so on, until the entire edges of both sides under the two clamps are folded. The front end of the iron in the drawing has but three scallops or curved points, but they may, of course, be increased or decreased in number, as circumstances may require.

Having now described the nature and extent of my invention, I claim and desire to secure by Letters Patent—

1. A disk, having a recess with a scalloped or curved pointed outline, in combination with a correspondingly-shaped folding-iron, to fold and press down the edges of the scallops or curved points of the fabric under treatment.

2. A curved pointed or scalloped clamping-plate, in combination with a disk, to secure the leather to be folded and pressed.

3. A disk, arranged to rotate about its own axis, in combination with a reciprocating folding-iron, the face of the disk and the folding-iron to be arranged upon the same plane.

4. One or more clamping-plates, made with a curved pointed or scalloped edge, in combination with a disk, arranged to rotate, and a pressing or folding iron, to fold and press the edges.

5. The spring *J*, in combination with the rotating disk, to fix it in the desired position.

6. A disk, provided with the grooves *eee* upon its face, to indicate the places to which the leather or other material is to be folded, substantially as specified.

HENRY CHARMBURY.

Witnesses:

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