

Machines for Crimping and Folding Leather.

Patented Oct. 21, 1873.

This perspective view shows the machine's frame, which includes a vertical support and a horizontal base. A curved blade is mounted on the frame, and a handle is attached to its end. Various adjustment screws and bolts are visible, labeled with letters such as A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, and a. The machine is designed to be adjustable in its position and orientation.

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IMPROVEMENT IN MACHINES FOR CRIMPING AND FOLDING LEATHER.

Specification forming part of Letters Patent No. **143,783**, dated October 21, 1873; application filed May 3, 1873.

To all whom it may concern:

Be it known that we, GEORGE PLATTS and JOSEPH WALDEN, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Machine for Crimping and Folding Leather; and we do hereby declare the following to be such a full, clear, and exact description of the same, as will enable any one skilled in the arts to which it most nearly appertains to make and use the same, reference being had to the annexed drawing, making part of this specification, in which—

Figure 1 is a top view, and Fig. 2 a transverse vertical section taken on the line A through Fig. 1.

The object of our invention is to facilitate the folding, embossing, and crimping of the edges of leather used in the manufacture of shoes, harness, traveling-bags, or any other article made of leather, or similar material, in the manufacture of which it may be desirable to fold, or crimp and press down the edges of the leather, or emboss the same; and our invention consists of certain mechanism to accomplish that object.

This mechanism consists, first, of a shoulder, A, which may be made adjustable, or not, to suit the design of the maker, and it may be made with a straight or curved face to suit the form of fold to be made, and it may be embossed to raise or indent figures on or in the work. The drawing shows the face of the shoulder plain, and curved at both ends. This shoulder is the bearing against which the leather is folded and pressed; and, second, of a ram, B, which is made with a face to correspond in shape and size to the face of the shoulder, and which may also be embossed. This ram is fitted in grooves made in the inside of the frame, and is connected, by means of a rod, D, to the eccentric shaft N, by which it is moved to and fro, the shaft being actuated by the handle F, to which it is attached. The office of this ram is twofold. It forms a parallel groove between its own face and that of the shoulder in which the fold of the leather is made, and it forces the fold up against the shoulder after it is made, and in connection with the shoulder it establishes the form of the fold—that is, it makes it curved or straight, as the case may be; and, third, of a gage, C, which is fixed by set-screws to the top of the ram. This gage is made adjustable, and

has a front face or edge to correspond in shape and length to the face and length of the ram. The office of this gage is to determine the width of the fold; and, fourth, of a folding-blade, I, secured to a swinging frame, H, attached on pivots on each side of the frame. This folding-blade is made of thin steel, and is formed and arranged on its frame to fit the groove between the face of the shoulder and the face of the ram. The office of this blade is to press the fold of the leather in the groove between the ram and shoulder, and hold it there until taken by the ram; and, fifth, of a heating attachment, by which the shoulder and ram can be heated more effectually to set the fold of the leather. This heating attachment consists of a gas-pipe, L, fitted with burners arranged under the shoulder and ram, in a trough arranged to keep the flame from coming up between the shoulder and ram, and on the leather when the machine is in operation.

In operating this machine, the piece of leather or cloth to be folded is laid on the top of the shoulder with its edge against the face of the gage. The ram being turned back to its extreme limit, the folding-blade is then brought down and forces the leather in the groove. The ram is now brought forward to take the fold, when the blade is removed, and the ram pressed home on the fold, which completes the operation.

The heating attachment is not necessary unless the leather is thick and stubborn.

Our invention is, of course, applicable to the folding of other materials as well as leather, and the frame may be made of any suitable form.

Having now described the construction and operation of our machine, we claim and desire to secure by Letters Patent—

1. The shoulder, the ram, the gage, and the folding-blade, combined as shown and described, to perform the functions in folding and pressing the leather herein set forth.
2. The heating attachment, in combination with the shoulder and ram, substantially as described.

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Witnesses:

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