E. CORBETT, F. W. COY & J. E. WHEELER.

MACHINERY FOR FOLDING AND CRIMPING LEATHER.

No. 191,837. Patented June 12, 1877.

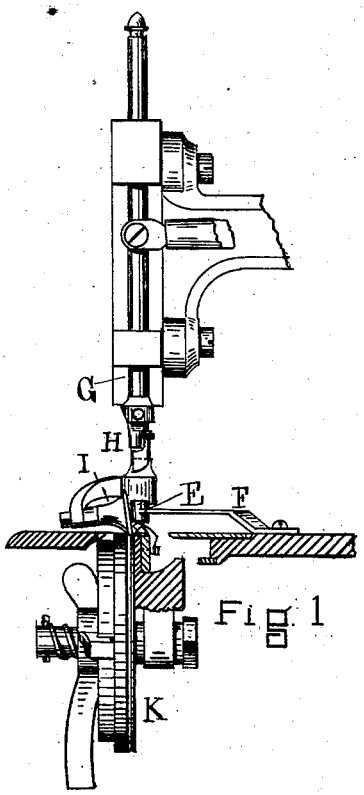

Fig. 1

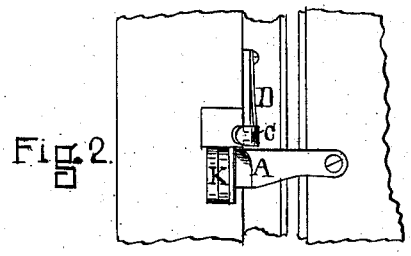

Fig. 2.

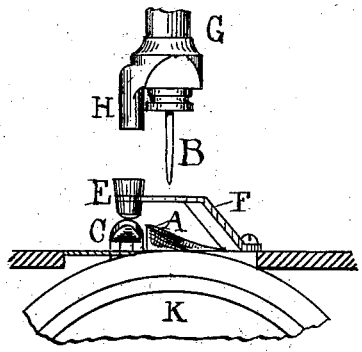

Fig 3.

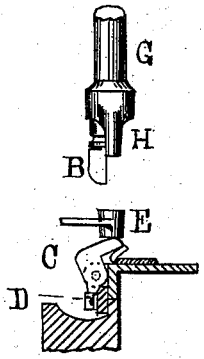

Fig. 4

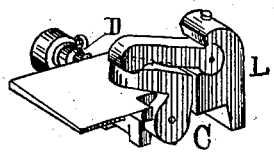

Fig. 5.

WITNESSES

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EDWARD CORBETT AND FREDERICK W. COY, OF BOSTON, AND JOHN E. WHEELER, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN MACHINERY FOR FOLDING AND CRIMPING LEATHER.

Specification forming part of Letters Patent No. **191,837**, dated June 12, 1877; application filed July 31, 1876.

To all whom it may concern:

Be it known that we, EDWARD CORBETT and FREDERICK W. COY, both of Boston, in the county of Suffolk and State of Massachusetts, and JOHN E. WHEELER, of Lynn, in the county of Essex, in said State, have invented an Improvement in Mechanism for Crimping Leather and other Materials, of which the following is a specification:

This invention is an improvement on the devices for crimping the uppers of boots and shoes described in the application of Edward Corbett, now pending in the Patent Office; and consists in the shaping of the work-support to assist the folding of the crimped edge by the folding device to be hereinafter described, the beveling of the knife or chisel to conform to the surface of the work-support, and the general arrangement of the cutting, creasing, feeding, and folding mechanism to feed, slit, crease, and fold the edge of the leather or material crimped.

Reference is made to the accompanying drawing, forming a part of this specification, in explaining our invention, in which—

Figure 1 is a vertical section of the machine. Fig. 2 is a plan of the folding mechanism. Fig. 3 is a front view. Fig. 4 is a reverse view of the folding mechanism, and Fig. 5 is modification of the same.

The work-support A is rounded up from the table, as shown in Fig. 3, and serves to partly turn the edge of the leather before the action of the folder. The slitting tool or chisel B is provided with a vertically-reciprocating motion, and is shaped upon its cutting-edge to correspond to the curvature of the work-support. Immediately beyond the raised work-support A is the folder, which consists of the jaw C, pivoted to swing to and from the table, the spring D, which tends to keep the jaw constantly lifted from the table, and the friction-head E, which is held by spring F over the jaw, and is designed to commnuicate the blow to the jaw from the knife-bar G as it descends, the knife-bar being provided with the projection H, which serves as a hammer. I is the revolving presser, and K the grooved feed-wheel.

The operation of the machine is as follows: The edge of the material to be crimped is fed by the feed-roll K to the slitting-tool B, and, as it feeds over the rounded work-support, the edge is turned upward in a position to be laid over and folded by the peculiar swinging in and descent of the jaw upon the table when struck by the friction-head E, which receives the blow from the hammer H. The groove in the feed-roll, with the presser-roll that revolves therein, creases the leather or other article crimped upon the line of the fold.

A modification of the construction of the folder is shown in Fig. 5, in which the jaw acts against a spring, and the head of the friction-arm rests upon the jaw, while the other end is held in the block L.

The advantage of this invention is that the article crimped is slit, creased, folded, and compressed in one machine, with one operation.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. In mechanism for crimping and folding leather and other materials, the work-support A, raised above the the table, curved substantially as shown, and adapted to serve as an anvil for the reciprocating cutter B, in combination with the feeding-rolls I K, whereby the edge of the material to be crimped is turned upward from the table as it feeds and is cut, substantially as described and shown.

2. In a machine for cutting and crimping the edge of leather and other materials, and in combination with the curved cutting block or anvil A, the cutting-tool B, having its cutting-edge formed oblique to its vertical edge-lines, to coincide with the curve of the cutting-block at the point of contact therewith, substantially as described and shown.

3. In a machine for crimping and folding the edge of leather or other material, the combination of the jaw C, spring D, friction-head E, and hammer H with the table or bed-plate, substantially as shown and described.

4. In a machine for crimping and folding the edge of leather and other material, the combination of the grooved feed-roll K, presser I, constructed and arranged to act in conjunction with said roll K, and vertically-re-

ciprocating slitting-tool B with the folding-jaw C and work-support A, all arranged to feed, crease, slit, and fold the edge of the work, substantially as described and shown.

5. In a machine for crimping and folding the edge of leather and other materials, the combination of work-support A, reciprocating cutter B, folding-jaw C, friction-hammer E, and contact-hammer H, all combined and arranged to operate substantially in manner as described and shown.

6. In mechanism for crimping and folding the edge of leather and other material, the combination of the folding-jaw C, hammer E, head H, and the reciprocating bar or carrier, all constructed and arranged to operate substantially in manner as described and shown.

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