

(No Model.)

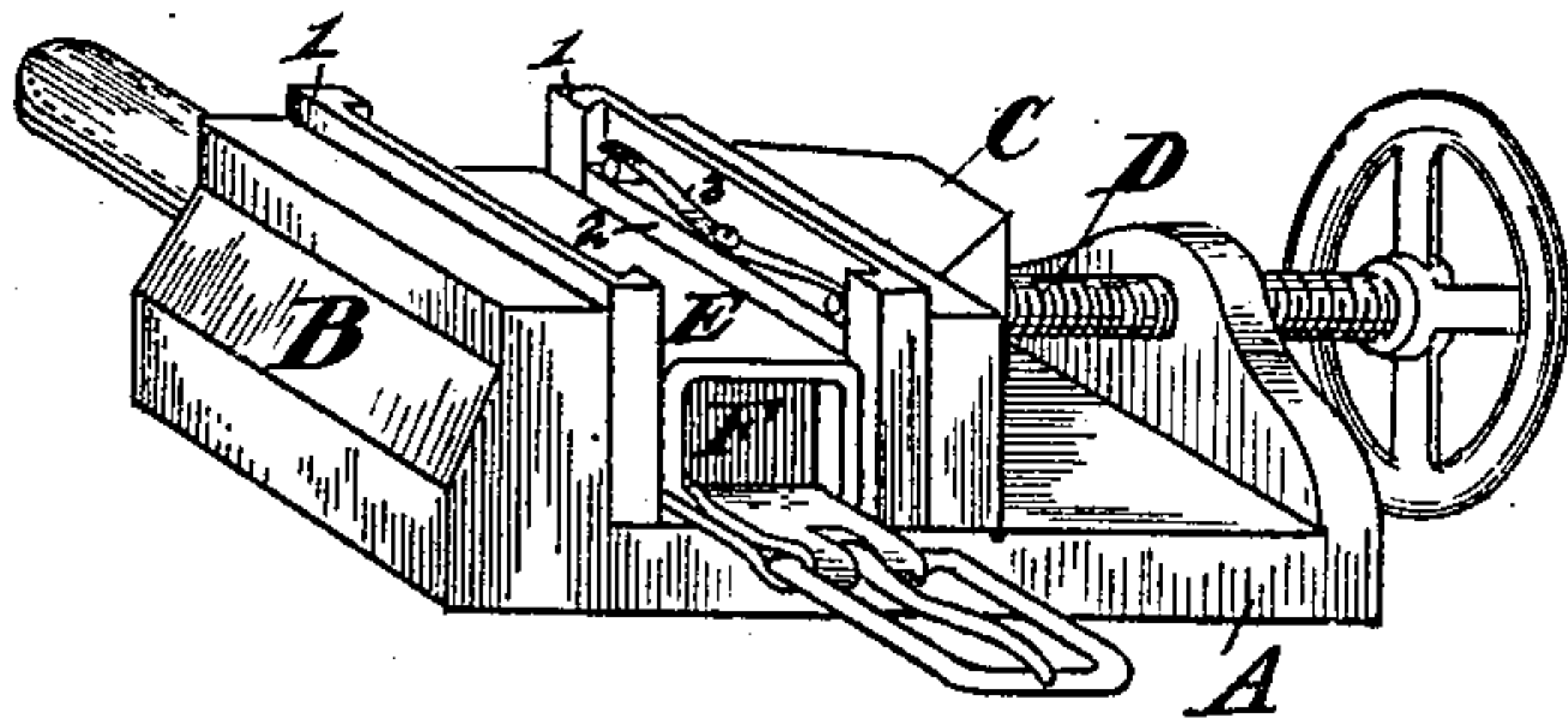
F. H. PERKINS & L. L. MILLER.

DIE FOR FINISHING BOX LOOPS.

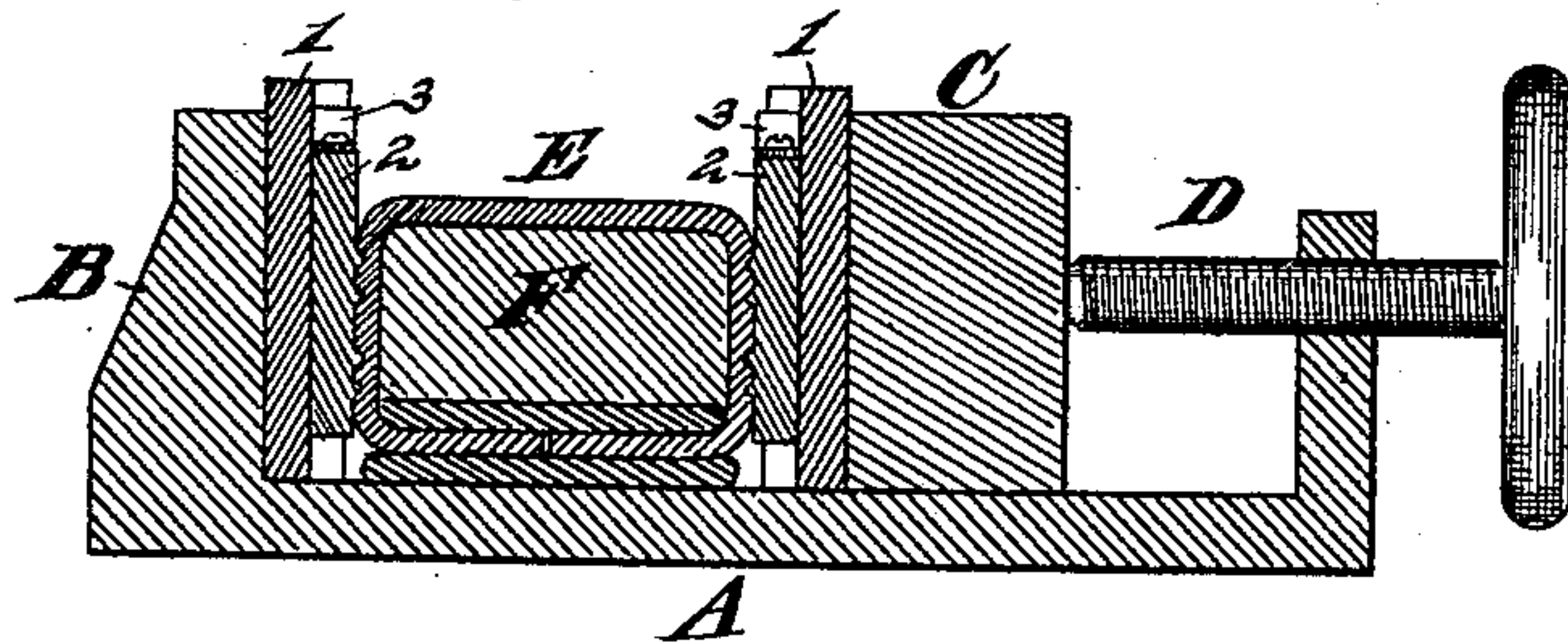
No. 377,267.

Patented Jan. 31, 1888.

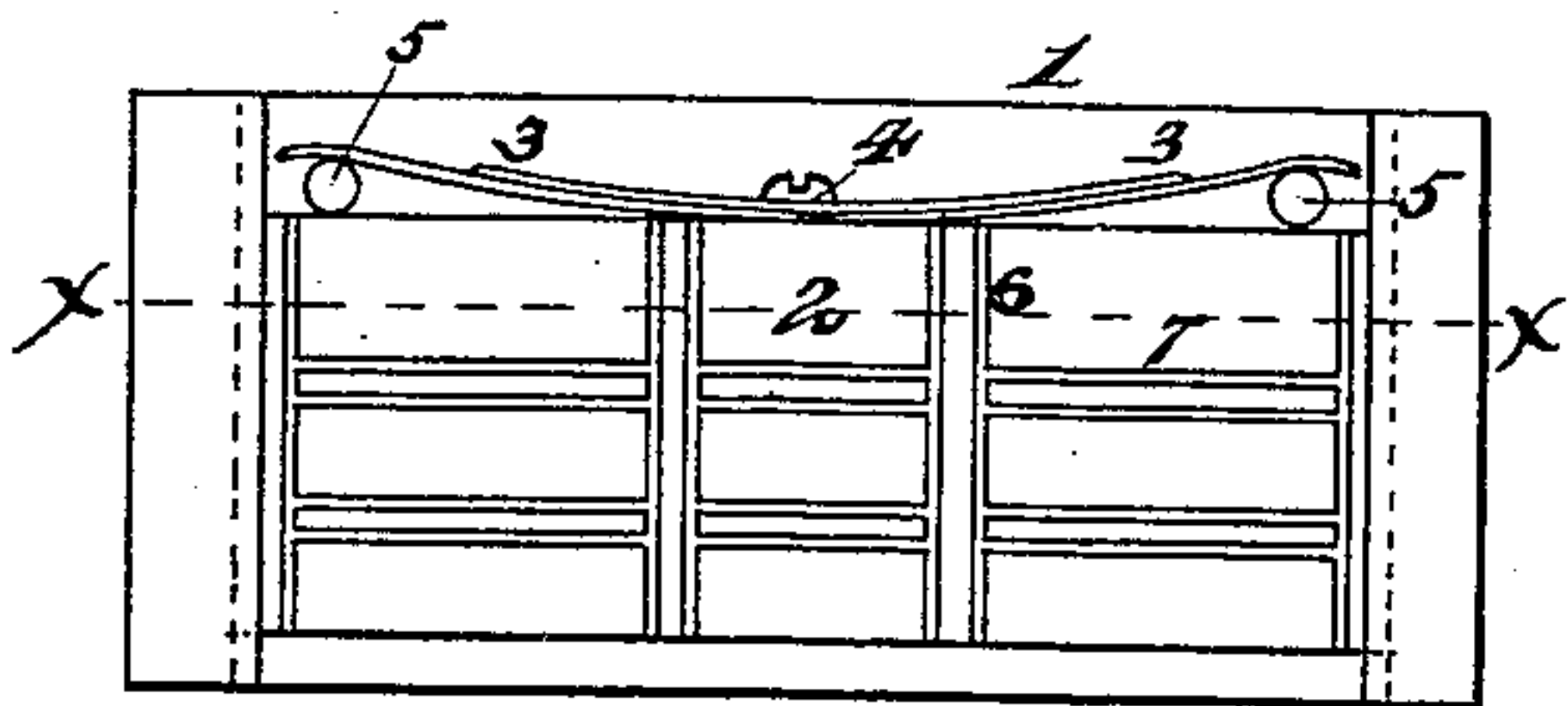
*Fig. 1.*



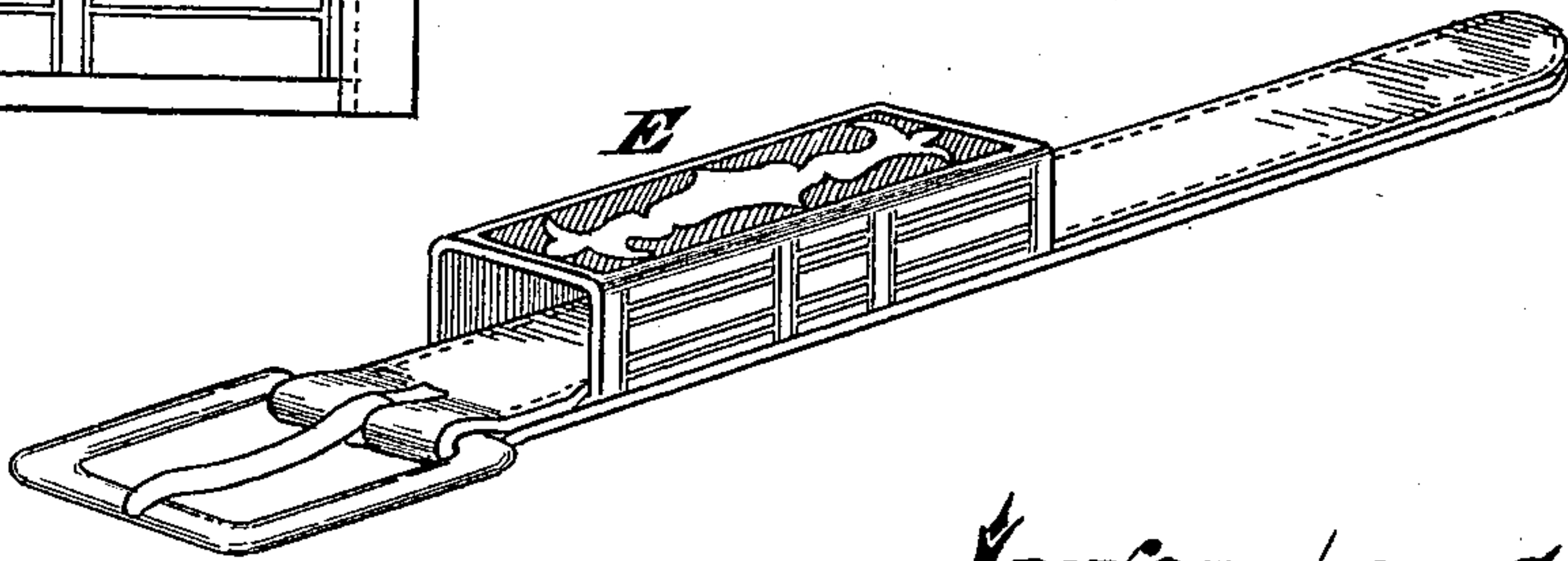
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

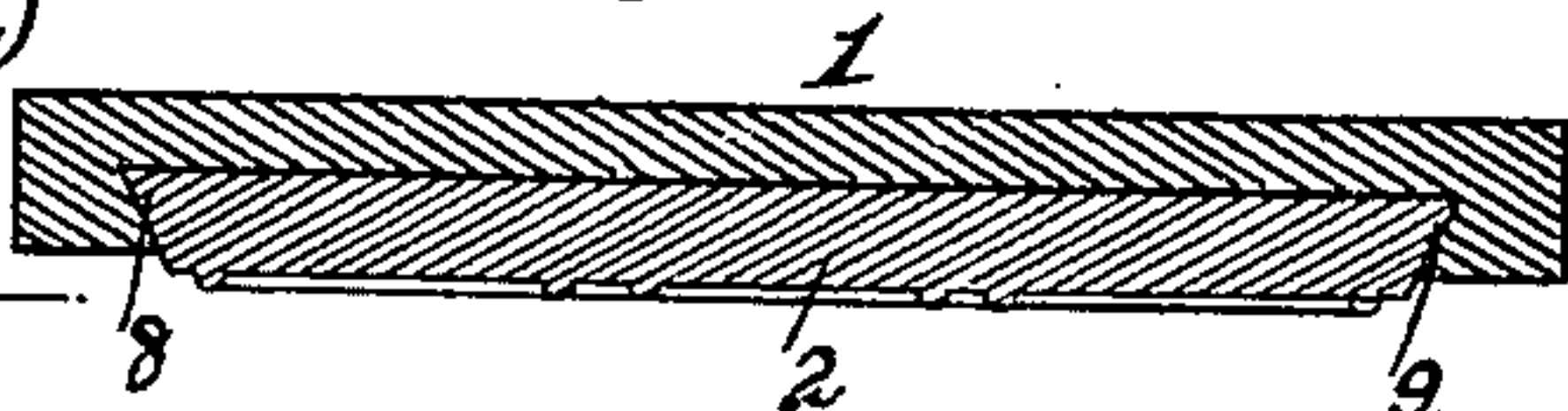


*Attest*

*J. Watson (Sind)*

*M. E. Millikan*

*Fig. 5.*



*Inventors*

*Frank H. Perkins*

*Louis L. Miller*

*by Todd & Bond -  
their Attorneys*



# UNITED STATES PATENT OFFICE.

FRANK. H. PERKINS, OF COVINGTON, AND LOUIS L. MILLER, OF NEWPORT,  
KENTUCKY.

## DIE FOR FINISHING BOX-LOOPS.

SPECIFICATION forming part of Letters Patent No. 377,267, dated January 31, 1888.

Application filed November 22, 1887. Serial No. 255,914. (No model.)

*To all whom it may concern:*

Be it known that we, FRANK. H. PERKINS, of Covington, and LOUIS L. MILLER, of Newport, Kentucky, have invented certain new and useful Improvements in Dies for Finishing Box-Loops, of which the following is a specification.

The object of our invention is to provide means for ornamenting the sides of a buckle on a box-loop with any desired figure or configuration.

Previous to our invention only vertical configuring lines could be formed by the side pressing-dies on account of the vertical movement of the loop by the action of the top die. If other than vertical ornamenting-lines were employed, the leather was abraded and the finish injured. Our invention obviates this difficulty, all of which will be explained in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of our improvement in position for operation. Fig. 2 is a central vertical section of the same. Fig. 3 is a plan view of the side die. Fig. 4 is a perspective view of a finished buckle. Fig. 5 is a central cross-section on line *x x*, Fig. 3.

In the finishing of a box-loop a former is placed within the hollow of the loop. The loop is then placed between the two side dies, which are forced up to shape the sides, and then the finishing-die is brought down upon the top by screw-pressure or other suitable means to press it in shape and leave any desired ornamentation. As the action of the top die forces the loop downward, it has been necessary to have the side dies either plain or only provided with vertical lines. We have obviated this movement by making automatic-moving side dies, which we have illustrated as employed with one form of screw-press.

A represents the bed of the press; B, the stationary side; C, the movable side platen; D, the screw for forcing the platen C sidewise.

E represents the box-loop supported on the face of the platen A.

F represents the opening in the loop, in which is inserted the sustaining-piece. These

parts are all of ordinary construction, our invention relating to the construction and operation of the side dies, each of which is the counterpart of the other, and they are constructed as follows:

1 represents the frame of the die.

2 represents the moving configured die, which is suspended by means of the spring 3, secured to the moving die by screw 4, with the ends resting on the pins 5 at either end of the stationary die.

6 7 represent beads for forming the configured lines in the sides of the loop. The finishing-die 2 is held against longitudinal movement by means of the ways 8 9, which are preferably of V-shape form, receiving the bevel-edges of the die 2. The spring 3, being very flexible, allows die 2 to readily rise and fall in the operation, which is performed as follows: The loop E is inserted in the press. A filling-piece is inserted in the loop, and the side dies placed against the loop, as shown in Figs. 1 and 2. The screw is turned to press the loop between the side dies. This pressure is sufficient to force the beading into the sides of the loop. While the side dies are held in this position, a top die with a finishing-surface is placed on the top of the loop and pressure is applied to force it down and complete the shape of the loop. It is desirable to have the side pressure applied first, so that the top pressure will leave the loop flat on the top. As the sides of the loop are compressed by the action of the top die, the edges would be marred if other than vertical lines were used; but by suspending the finishing-die 2 upon the flexible spring within the supporting-ways the pressure applied by the top die carries these side dies, 2, down with the compression of the sides, leaving the surfaces perfectly finished, and a neater and better appearing loop is furnished than hitherto employed.

We have not shown the top-ornamenting die nor the screw for compressing the same, as they are well known in the arts.

Having described our invention, what we claim as new is—

1. In a press for finishing box-loops, the

vertically-movable side dies, 2, each supported by a flexible spring, substantially as described.

5 2. In a die for forming box-loops, a side die composed substantially of the stationary frame 1, and the vertically-moving die 2, suspended upon a flexible spring and adapted to move in ways formed in the frame, substantially as described.

In testimony whereof we have hereunto set to our hands.

FRANK. H. PERKINS.  
LOUIS L. MILLER.

Witnesses:

M. E. MILLIKAN,  
J. WATSON SIMS.