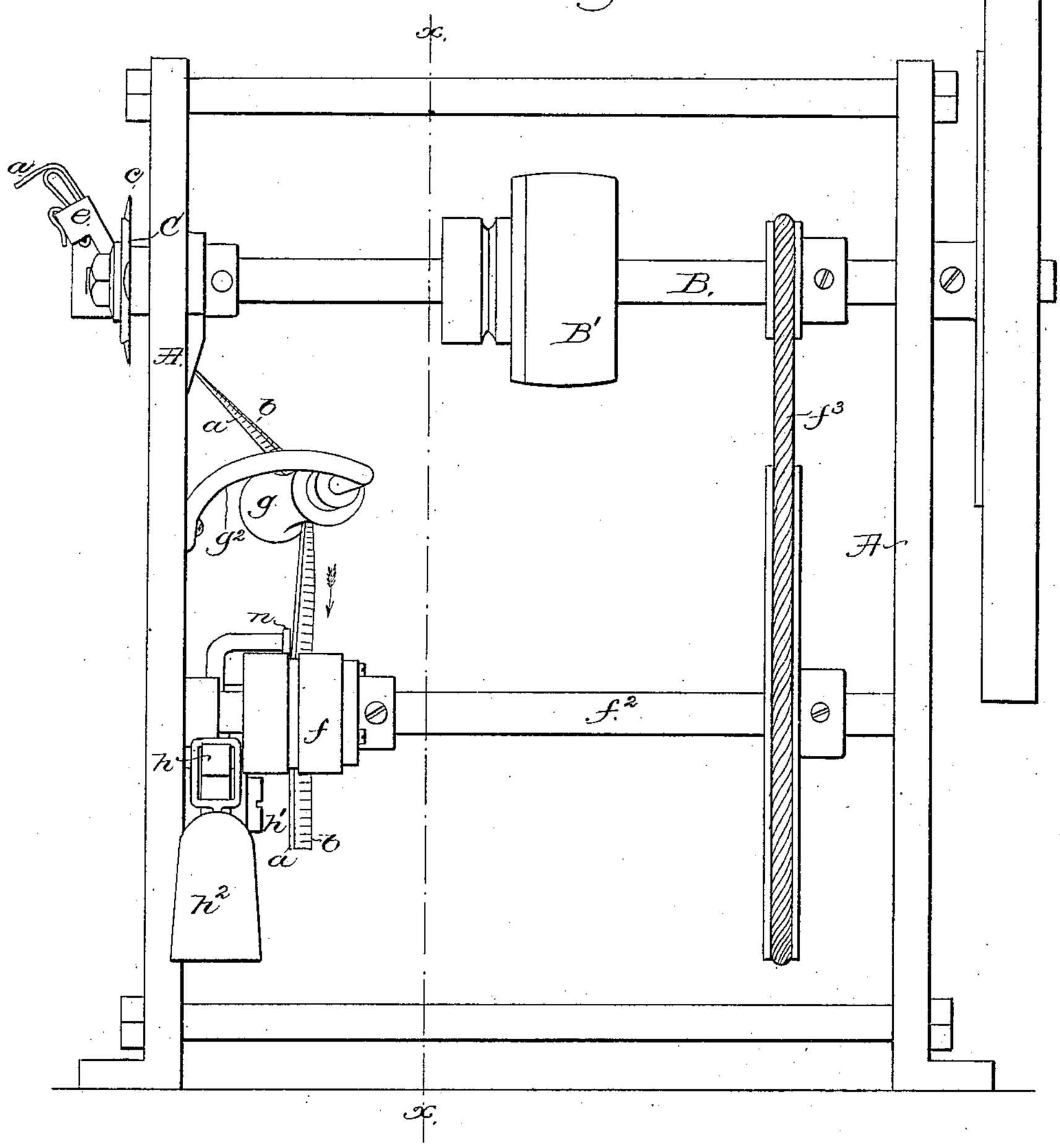
(No Model.) 2 Sheets—Sheet 1.

S. S. SPEAR.

MACHINE FOR SNIPPING LEATHER PIPING OR BINDING.

No. 300,812. Patented June 24, 1884.

Fig. 1.



Witnesses.
John F. C. Preinkert
Henry Marsh.

Inventor:
Samuel S. Spear
by Lemuel Gregory Atty's.

(No Model.) 2 Sheets—Sheet 2.

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Fig: 2.

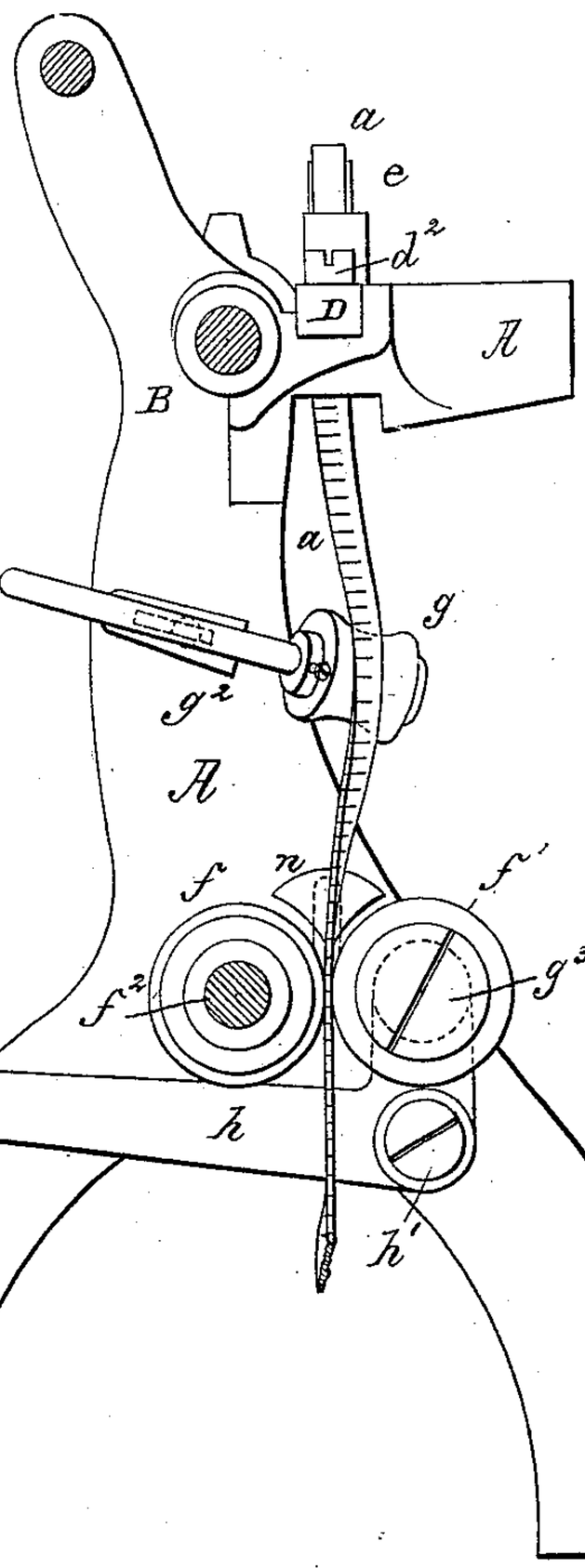


Fig: 3.

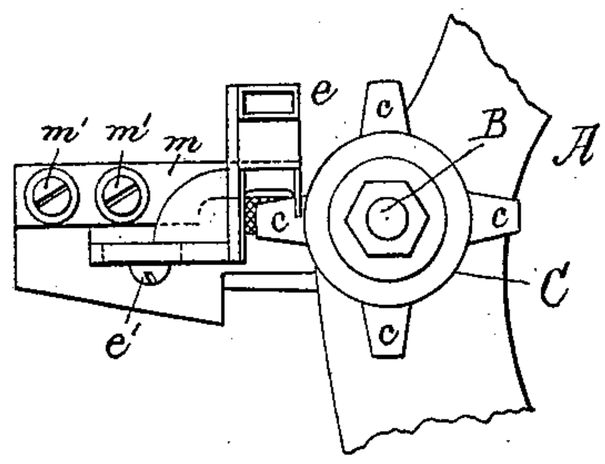


Fig: 4.

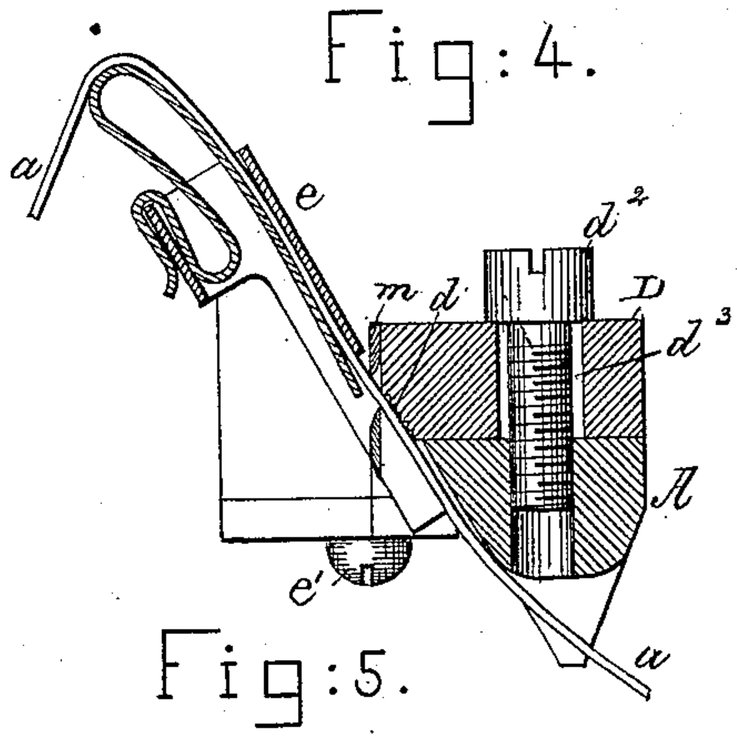


Fig: 5.

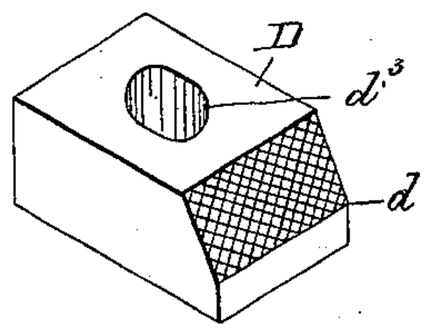
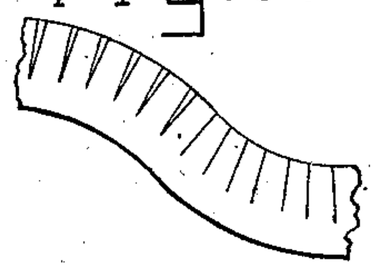


Fig: 6.



Witnesses.

Arthur Lispenden.

Henry Marsh.

Inventor.

Samuel S Spear

by Crosby Gregory Attys

UNITED STATES PATENT OFFICE.

SAMUEL S. SPEAR, OF SOUTH WEYMOUTH, MASSACHUSETTS.

MACHINE FOR SNIPPING LEATHER PIPING OR BINDING.

SPECIFICATION forming part of Letters Patent No. 300,812, dated June 24, 1884.

Application filed January 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. SPEAR, of South Weymouth, county of Norfolk, State of Massachusetts, have invented an Improvement in Machines for Snipping Leather Piping or Binding, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a machine by which to automatically snip or cut the edge of piping, such as described in United States Letters Patent No. 285,850, granted to me October 2, 1883, to which reference may be had. The piping described in that patent has its inner edge snipped to form a series of tongues with beveled contiguous edges, whereby when the piping is applied to other than straight edges the said snipped edges will readily slide or move more or less one over the other and enable the piping to be quickly applied to the edge of the article being piped or edge-finished, no matter what may be the contour of the said edge or the abruptness of its outline.

Figure 1, in side elevation, represents a machine embodying my present invention; Fig. 2, a section thereof on the dotted line *x x;* Fig. 3, a partial front end view showing the cutter or blade, piping-guide, stationary blade or throat co-operating with the movable cutter, and part of the frame-work. Fig. 4 is a section of Fig. 3 on the dotted line x^2 x^2, the spring or tension device being added; Fig. 5, a perspective of the block D; and Fig. 6 represents a small piece of piping made in accordance with my invention.

The frame-work A, of proper shape to contain the working parts, has a main shaft, B, provided with a pulley, B′, to receive a suitable driving-belt. The shaft B at its front end is provided with, as herein shown, a rotating cutter, C, having four blades, *c*, which, in the rotation of the said cutter, co-operate with and pass between the rest-plate *m* and the corner or edge *d* of a throat-block, D, adjustably attached to the frame A by screw d^2, the blades *c* and edge of the said throat acting as the two members to effect the snipping of the edge of the leather piping or binding. The face of the block D below the edge *d* is serrated or roughened to act upon the piping as the latter is first struck by the blade, to thus assist in preventing backward movement of the piping as the blade passes through it from one to its other side in a diagonal direction, the throat-piece D being so shaped and located with relation to the line of movement of the blade and the piping *a* as to present the latter thereto in such position as to insure the passage of the blade through the edge of the piping in such direction as to produce tongues *b*, with beveled contiguous edges. Preferably the piping *a* will be passed through a guide, *e*, made adjustable by screw *e′*, and a tension-spring, e^2, will be applied to the guide and be made to act upon the piping, as best shown in Fig. 4, to prevent it sagging and to keep it properly distended for the action of the blades against it, the piping being preferably drawn through the said guide and past the cutter by feeding mechanism, shown as two rollers, *f f′*, the former being attached to the shaft f^2, driven, as herein shown, from shaft B by a belt, f^3, the piping being extended over a guide or directing roller, *g*, on a bent arm, g^2.

The roller *f′* is herein shown as covered with india-rubber, and as supported on a stud, g^3, attached to a lever, *h*, having its fulcrum at *h′*, and provided with a weight, h^2, to regulate the pressure of the feeding-rollers upon the piping.

I have shown a rest-plate or finger, *m*, as connected with the frame by screws *m′ m′*, the edge of the said rest-plate being disposed a little above or at the side of the plane of the corner *d*, so that the piping will be supported in different planes at each side of the line or plane of movement of the blades *c*, in order that the latter may strike the piping at such an angle with relation to the line of movement of the latter as to cut through the same diagonally, as described in the said patent, and form tongues with contiguous edges beveled in the same direction. A suitable edge-guide, *n*, located between the two rollers *f f′*, receives against it the folded or finished edge of the piping or binding. The width of the tongues will be more or less in accordance with the relative speed of movement of the cutter and the piping.

I claim—

1. In a machine for snipping piping or binding, a cutter and means to support the piping or binding while being acted upon by the cut-

ter, substantially as described, whereby the piping or binding is presented to the cutter at an angle to the plane of its movement, to enable the cutter to pass diagonally through the edge of the piping or binding and form tongues having contiguous beveled edges, as set forth.

2. In a machine for snipping piping or binding, the block D, provided with the corner *d*, and roughened at d^2, combined with a cutter, to operate substantially as described.

3. A block to sustain the binding or piping opposite the cutter, and a cutter for snipping the said binding or piping, combined with feeding mechanism to move the said piping or binding, substantially as described.

4. The guide to receive the piping or binding, and the feeding mechanism to move the same, combined with the intermediate cutter, and the support for the piping or binding opposite that side of it acted upon by the cutter, the parts being located with relation to each other substantially as described, whereby the blade is made to cut through the edge of the piping or binding diagonally, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL S. SPEAR.

Witnesses:
G. W. GREGORY,
B. J. NOYES.