

(No Model.)

F. R. LEWIS.
FABRIC CUTTING DEVICE.

No. 313,349.

Patented Mar. 3, 1885.

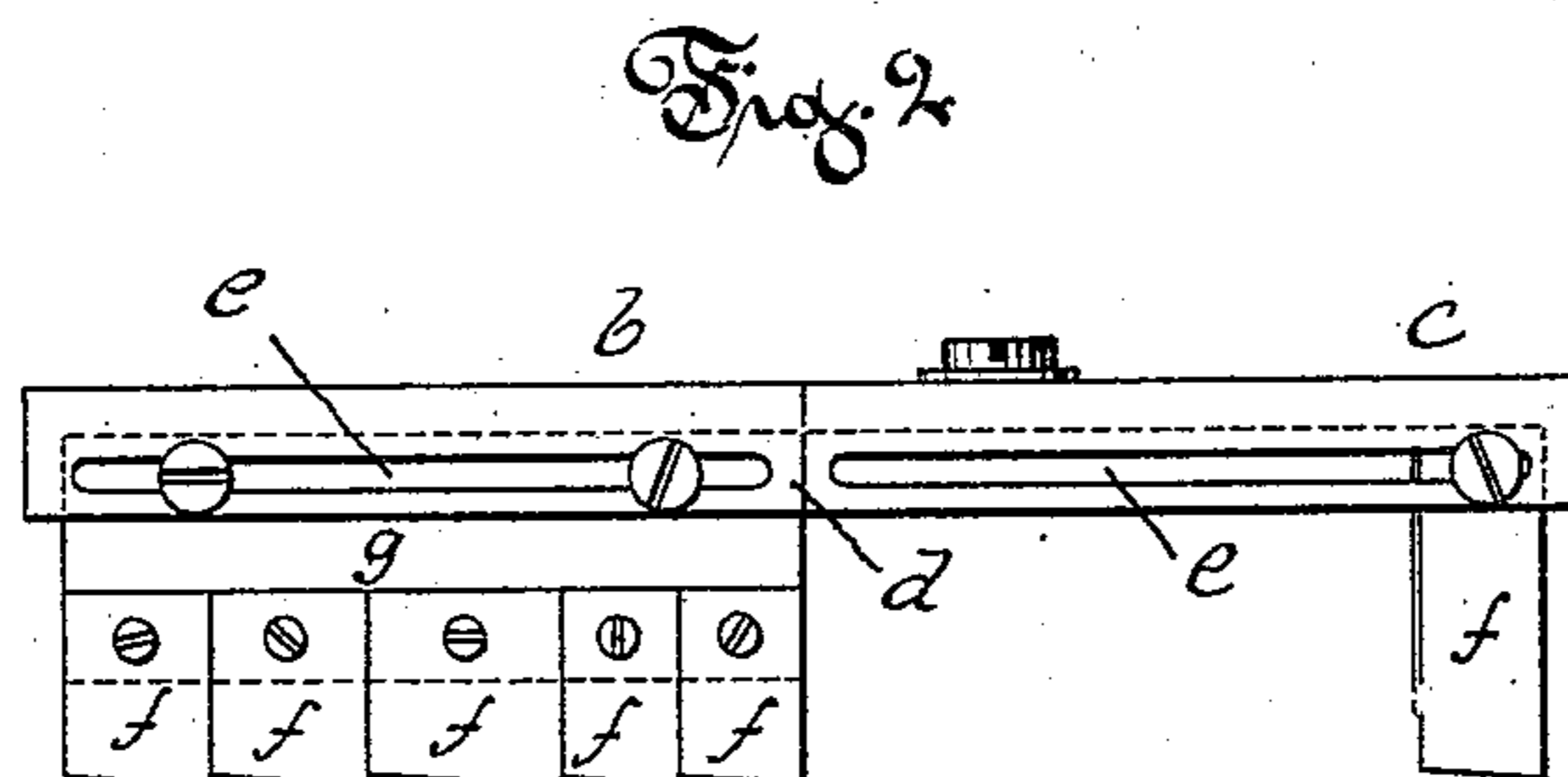
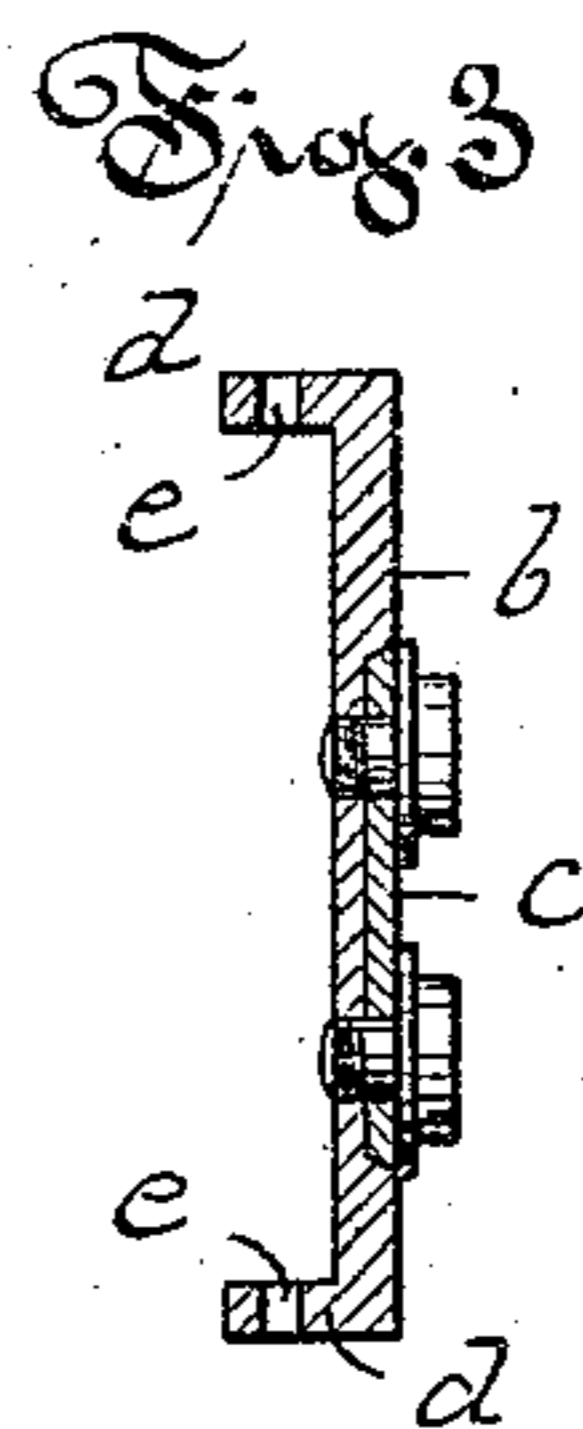
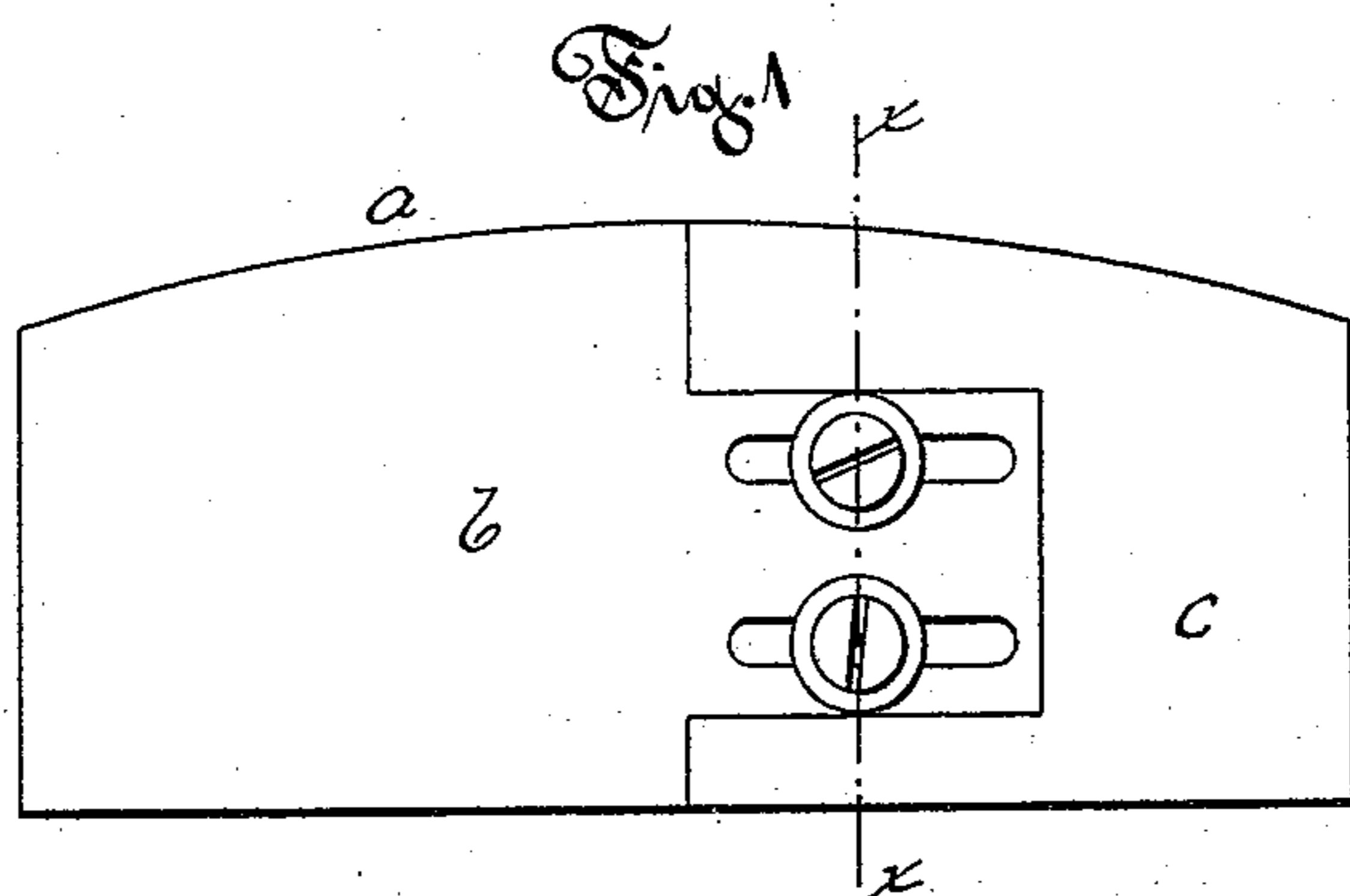


Fig. 6



Fig. 4

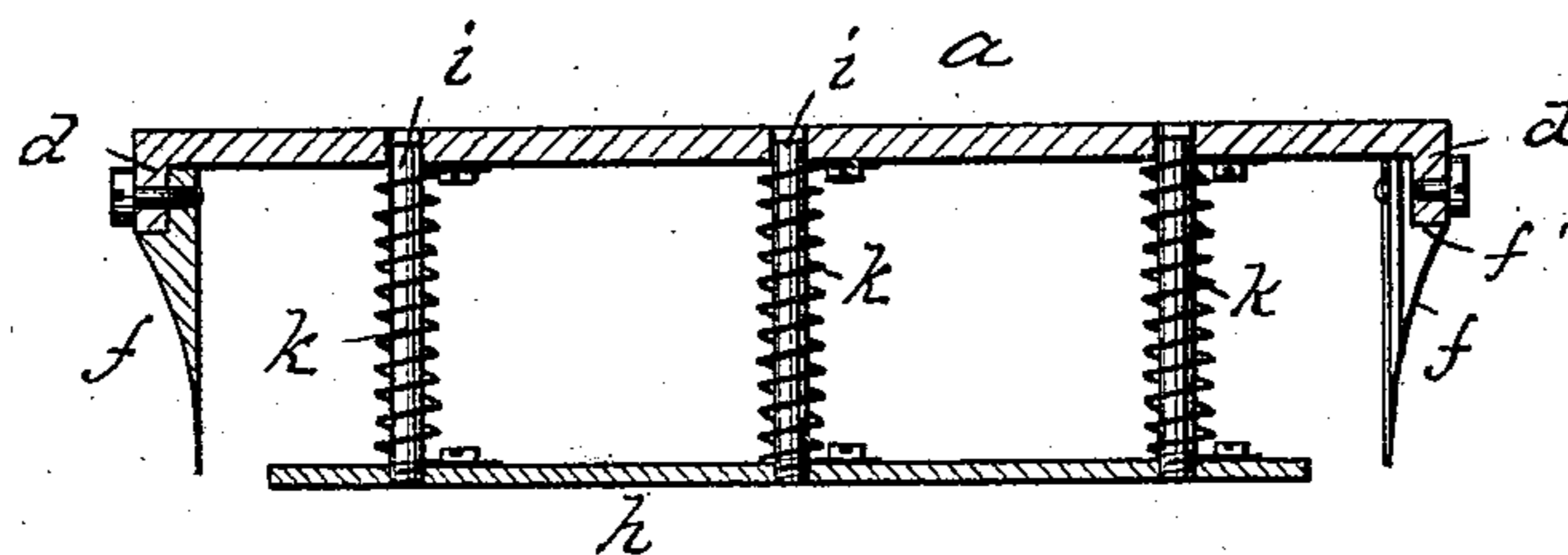
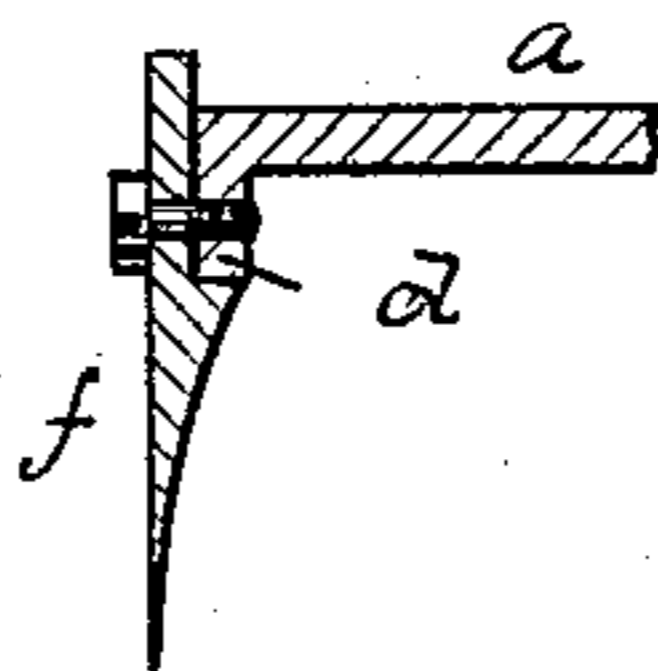


Fig. 5



Witnesses
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UNITED STATES PATENT OFFICE.

FREDRIQUE R. LEWIS, OF TROY, NEW YORK.

FABRIC-CUTTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 313,349, dated March 3, 1885.

Application filed April 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, FREDRIQUE R. LEWIS, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Fabric-Cutting Devices; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

Figure 1 is a top view of a form to which my adjustable blades are attached. Fig. 2 is an edge view of straight side of same. Fig. 3 is a view in cross-section of same on line *xx* of Fig. 1, blades removed. Fig. 4 is a view in section of a form and follower. One blade is shown in section, the other in side view to show groove. Fig. 5 is a sectional view of a blade so secured to a form as to project above its upper surface. Fig. 6 is a face view of a slotted blade.

My invention relates especially to the class of devices used for cutting completely through leather, paper, textile fabrics, and the like when disposed in superimposed layers.

It consists in the improved expansible form, by the use of which I am enabled to quickly adapt it for different sizes of blanks, in the special method of holding and adjusting the removable blades, and in the improved form of the blades that renders them readily removable from and adjustable along the edge of a form of any desired outline or construction.

In the accompanying drawings, the letter *a* denotes a form as a whole made up of part *b* and part *c*, overlapping each other, and provided with slots and clamping-bolts, by means of which the parts are held at any desired length of form, or made similarly expansible by any other ordinary means. The edges of the form *a* are provided with a flange, *d*, in which one or more long slots, *e*, are made. The removable blades *f* are adapted to be secured to the flange of the form by any ordinary means, as by screws or bolts in a succession of single blades placed side by side, so that their lower edges form a continuous cutting-edge. The blades may be fastened sin-

gly directly to the flange of the form, or groups of two or more may be secured to a bearer, *g*, which is fastened to the flange of the form in like manner as a single blade. The bearer serves as a convenience in rapidly making up a complete cutter, (meaning by this a form that is so fitted with blades that their edges form a continuous cutting-edge of any desired outline, as for cutting out a collar-blank or a cuff-blank;) but it serves a more important use in bridging the space between the parts of the form when the expansible form is opened, and thus support the blades with their edges in the proper plane.

The blades may be attached to a form, so that their upper ends bear against the under side of the form within the flange, a shoulder, *f'*, upon the flat side of the blade being in contact with its lower edge, or they may project above the upper surface of the form, as seen in Fig. 5, and in this latter case their upper edges are in the plane of and bear against the lower surface of a platen that is used to operate the cutter as a whole in cutting.

The blades are adjustable along the form by means of the slot and clamp-screw passing through it, and interlock or tongue together laterally for mutual support. The particular means for attaining this object are not material, the tongue and groove being, however, preferable. The follower *h*, having guides *i* and springs *k*, is thrust upward by the material operated upon in cutting, and, by means of the springs, presses out the blanks from within the form when the cutter is raised after cutting. In many cases I make the blades adjustable by the alternate method of using blades having a transverse slot upon a pin fixed upon the form, or they are used in combination with the slotted flange and a connecting bolt or screw.

I claim as my invention—

1. In a fabric-cutting device, in combination, the expansible form *a* and laterally-adjustable blades *f*, attached to the form, all substantially as described.

2. In a fabric-cutting device, in combination, form *a*, having flange *d*, with slot *e*, and laterally-adjustable blades *f*, all substantially as described.

3. In a fabric-cutting device, an expansible

form having blade-supports, in combination with a bearer, *g*, and blades *f*, adjustable along the form, with means for securing them to the form, all substantially as described.

4. In a fabric-cutting device, in combination, a form, *a*, and removable blades fastened to the form, and supporting each other against lateral play, one or more of said blades having a transverse slot, whereby that blade is laterally adjustable without removal from the form, all substantially as described.

5. In combination, a cutter-form, *a*, having a blade-supporting flange, *d*, with slot *e*, and the series of blades *f*, having each a shoulder, *f'*, and a transverse slot, and means for attaching the blades to the form, all substantially as described. 15

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