

(Model.)

3 Sheets—Sheet 1.

A. COX.

Device for Forming Tin Pans.

No. 232,463.

Patented Sept. 21, 1880.

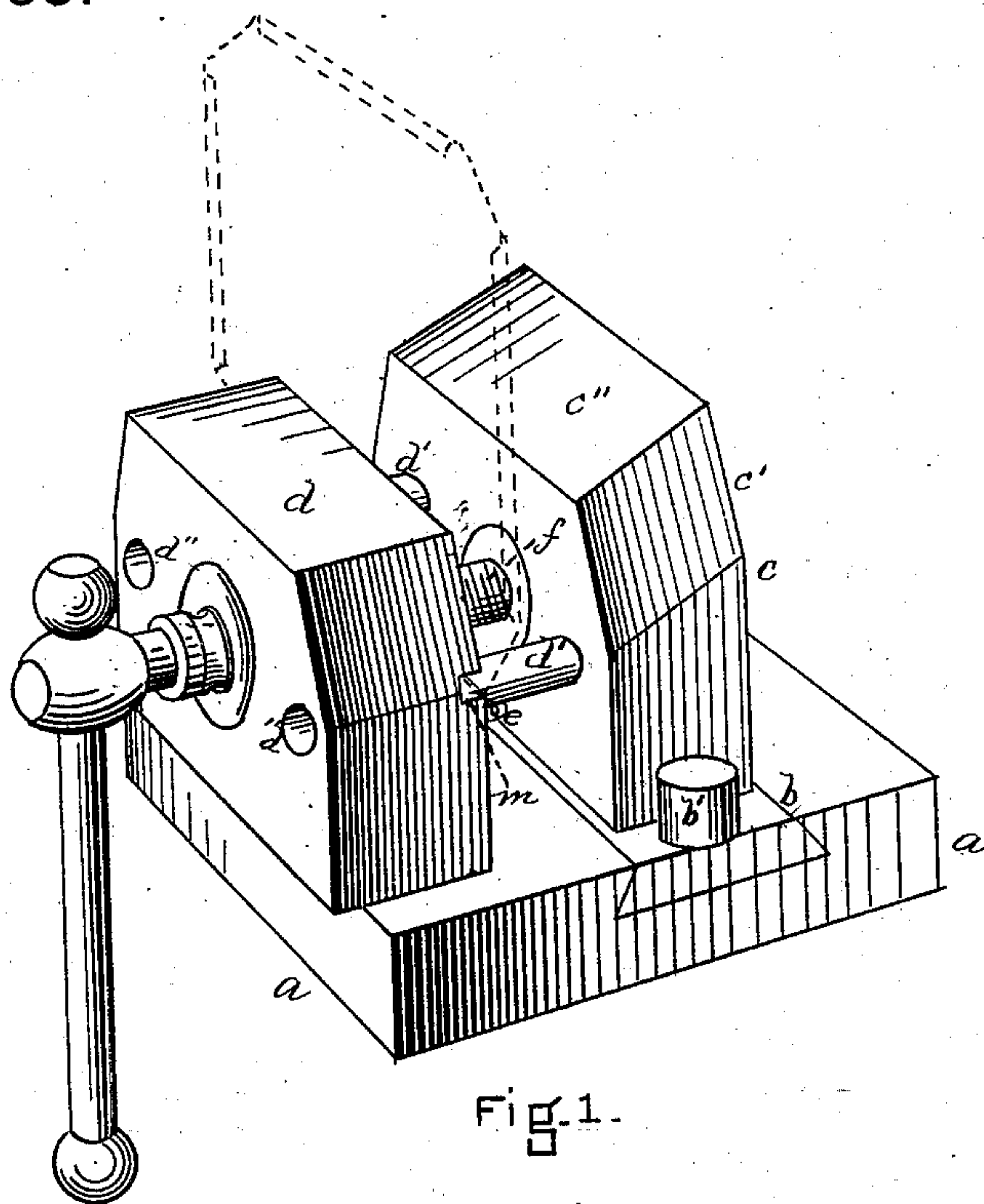


Fig. 1.

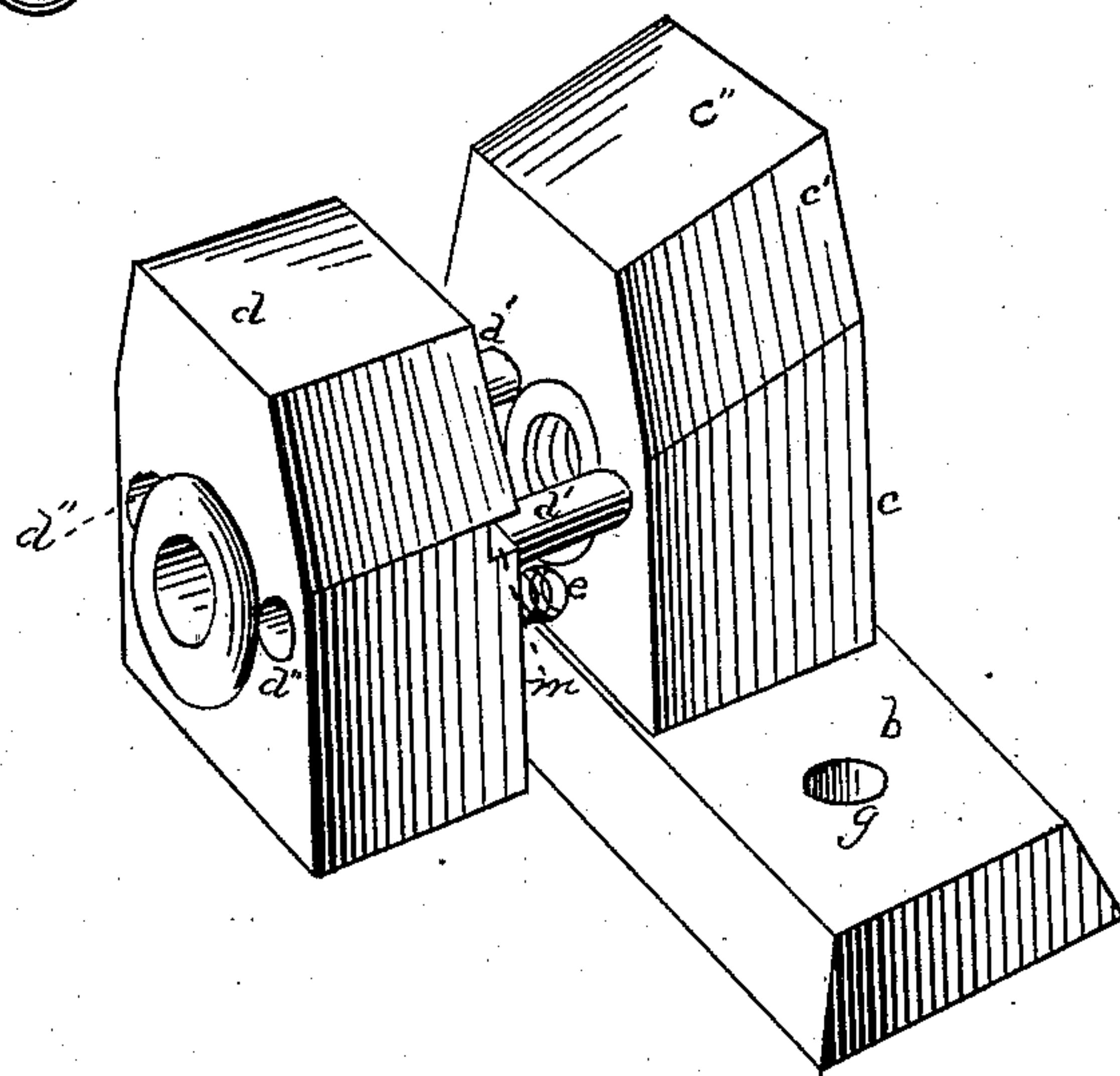


Fig. 2.

WITNESSES

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(Model.)

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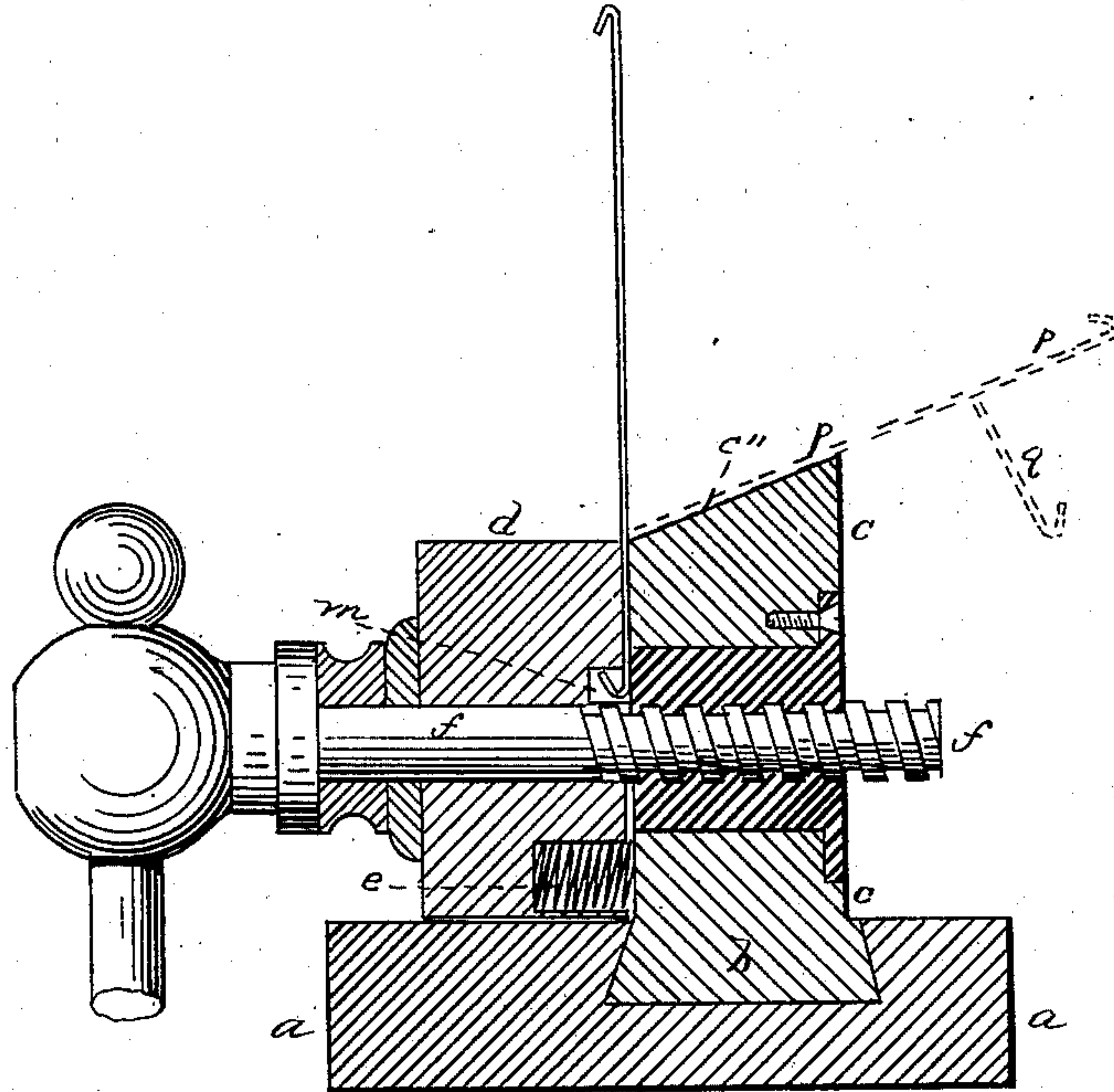


Fig. 3.

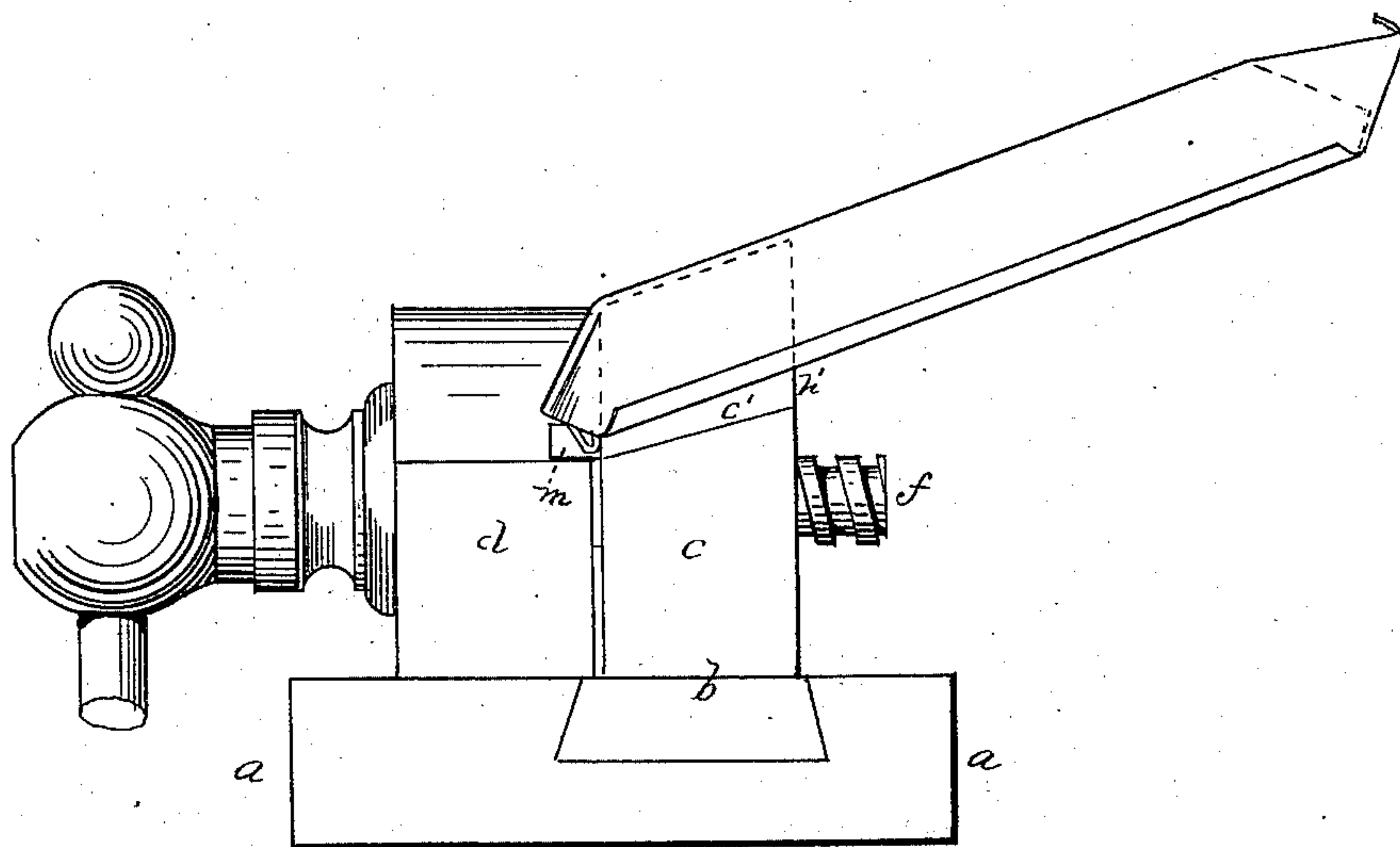


Fig. 4

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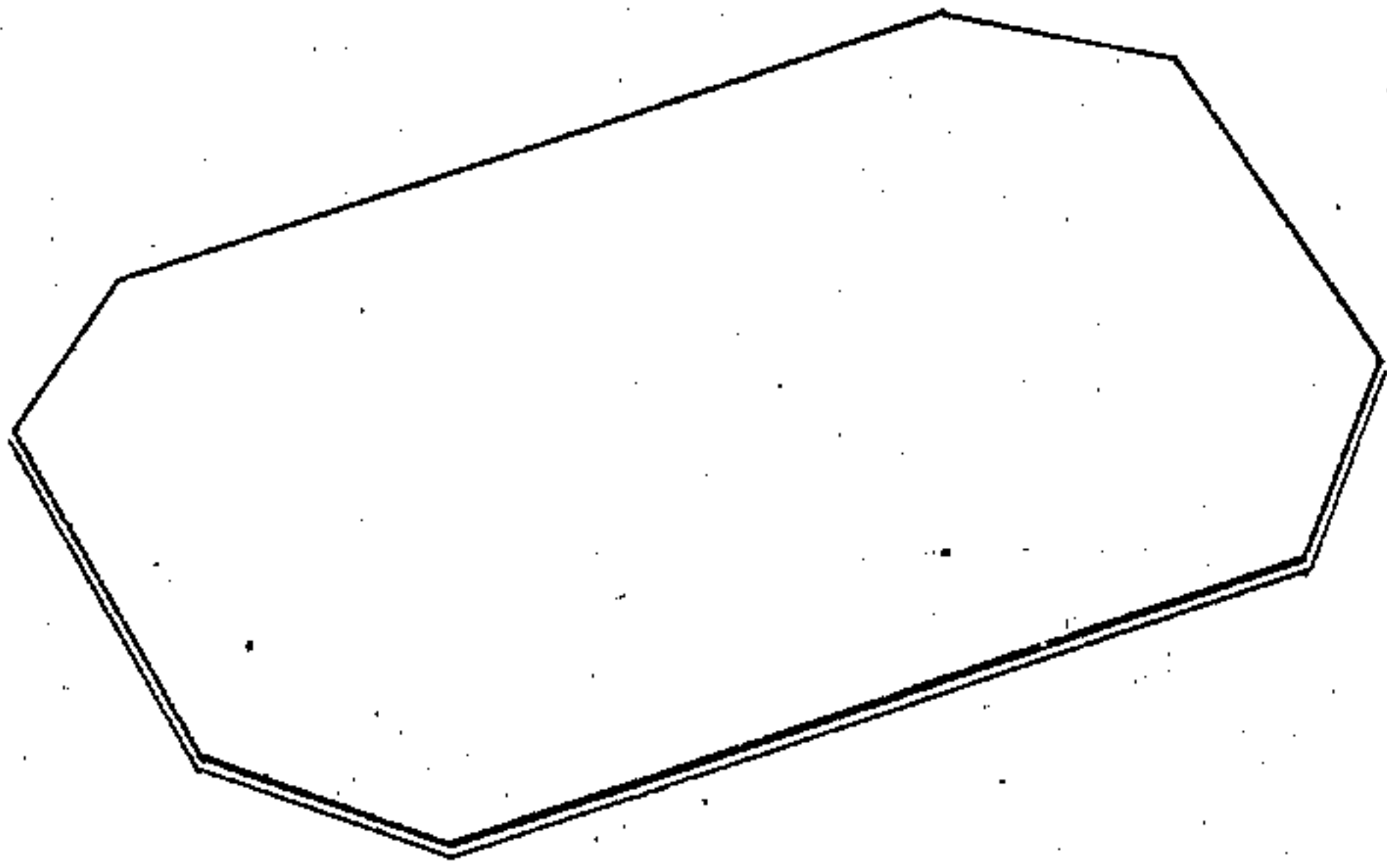


Fig. 5.

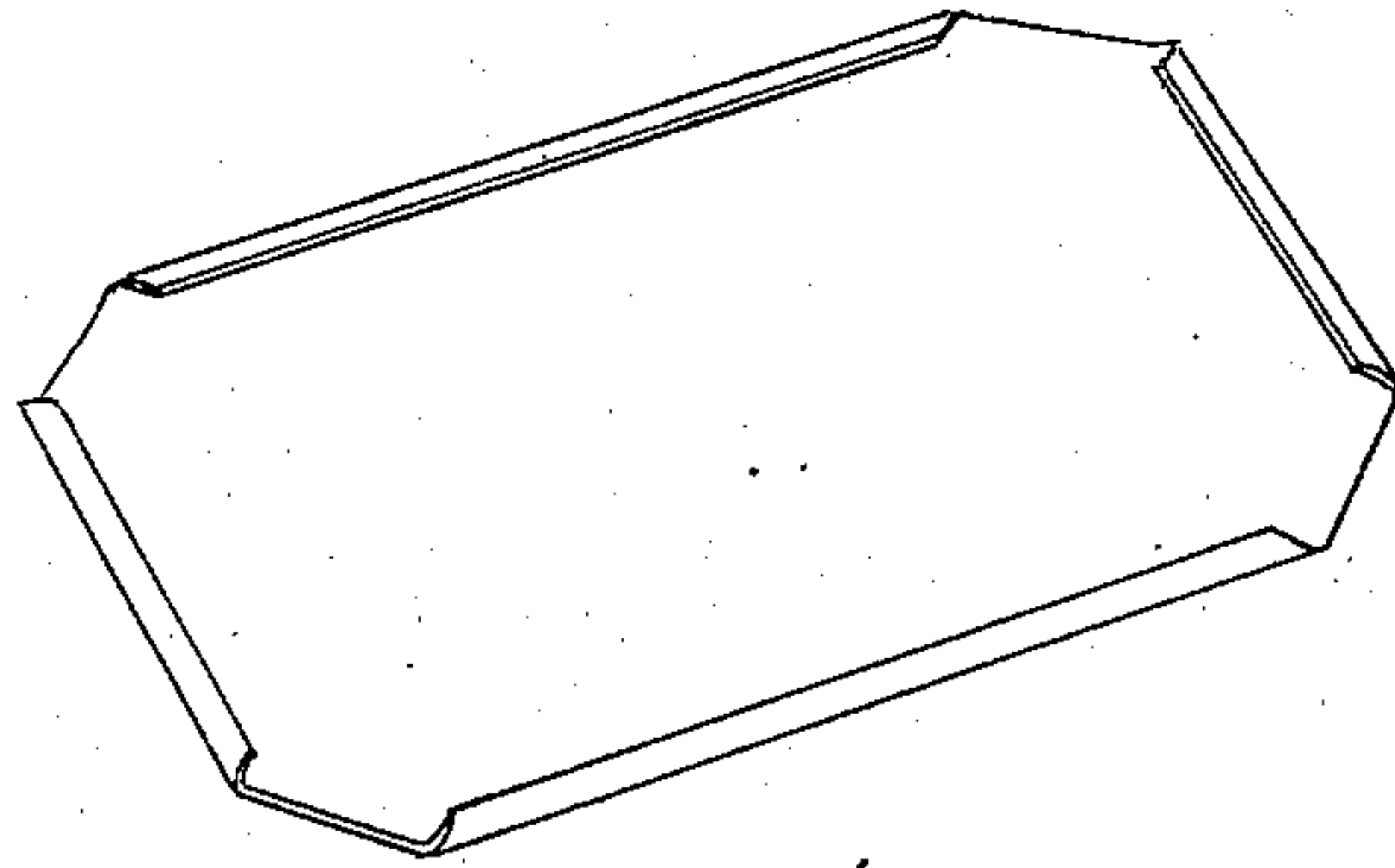


Fig. 6.

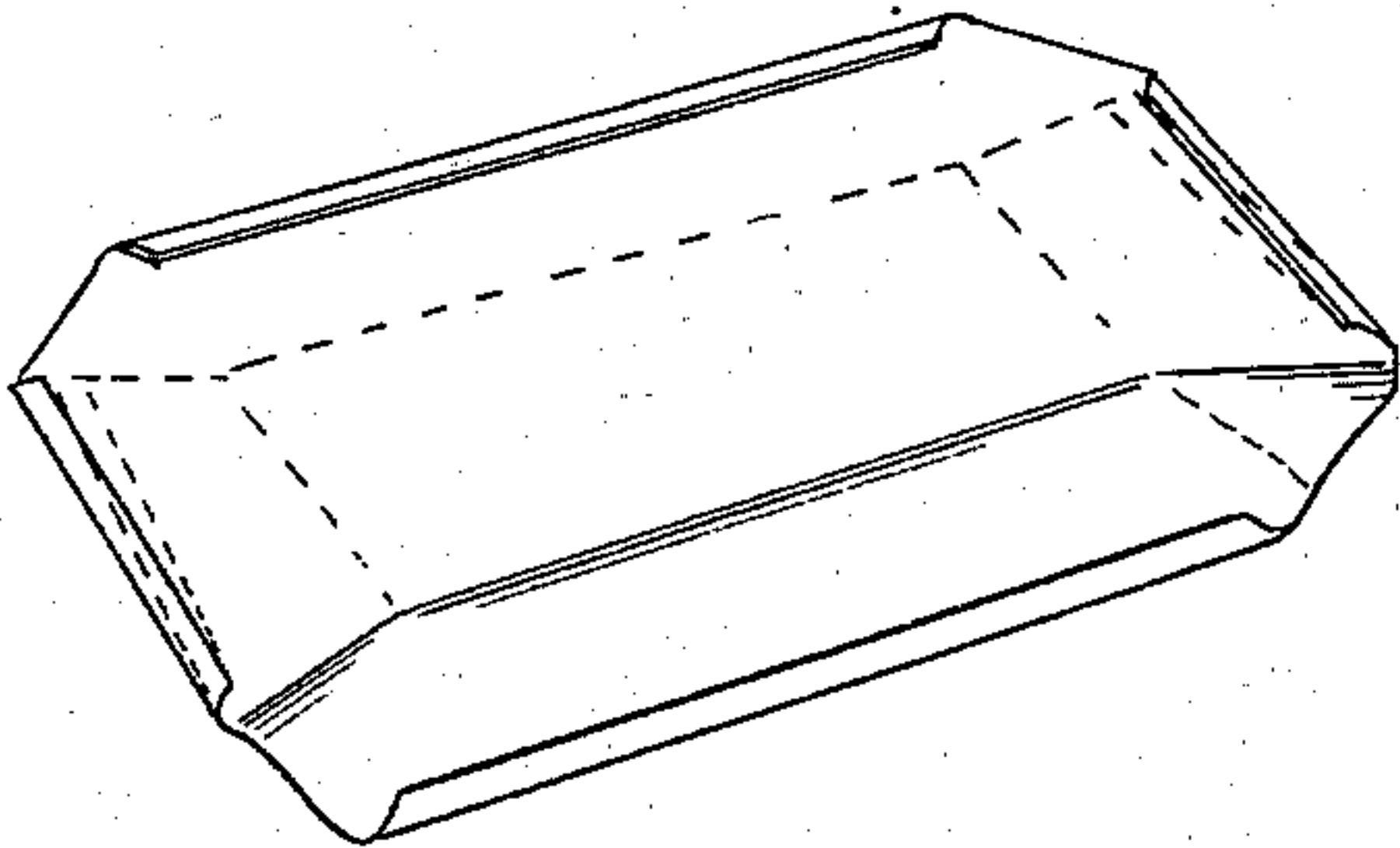


Fig. 7.

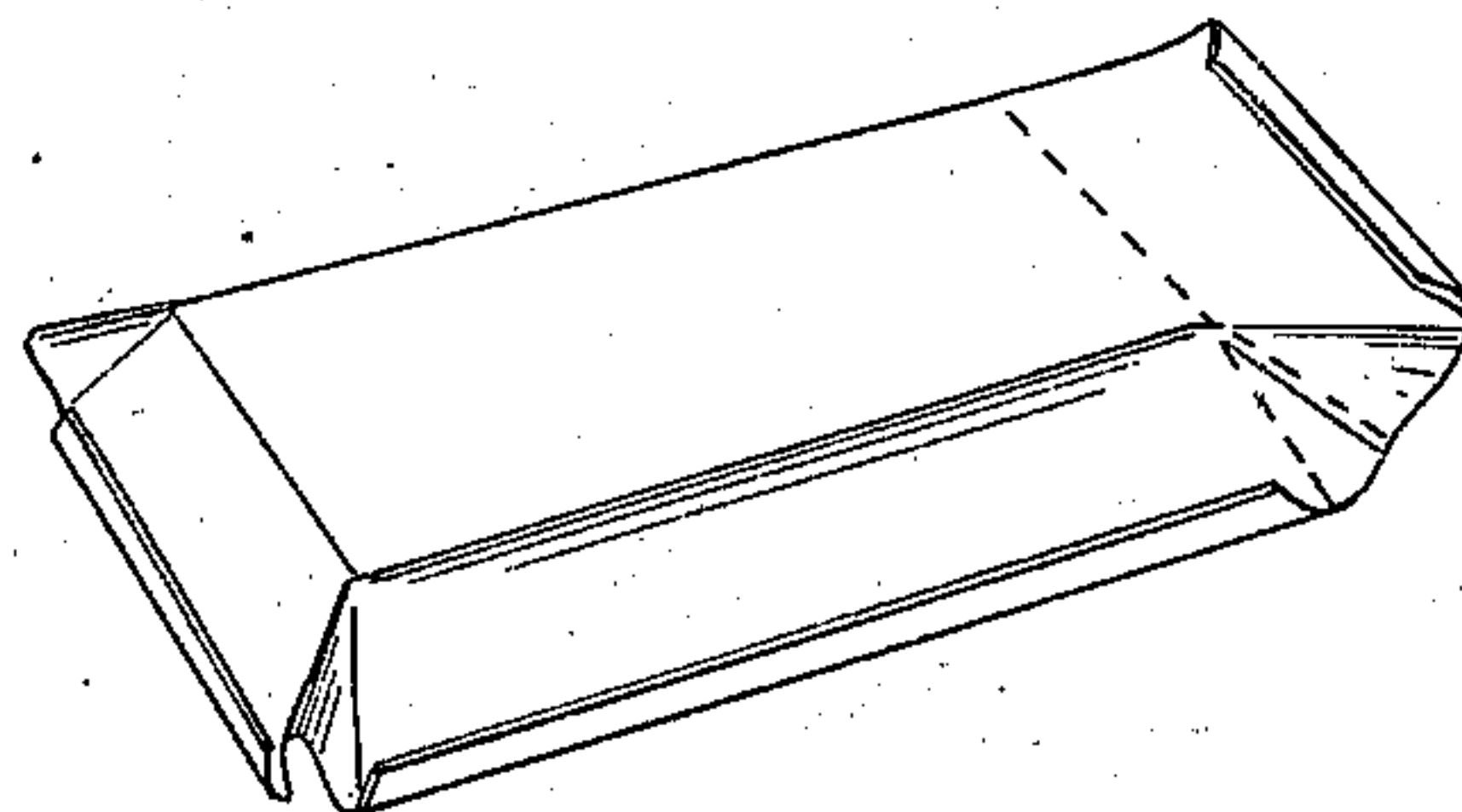


Fig. 8.

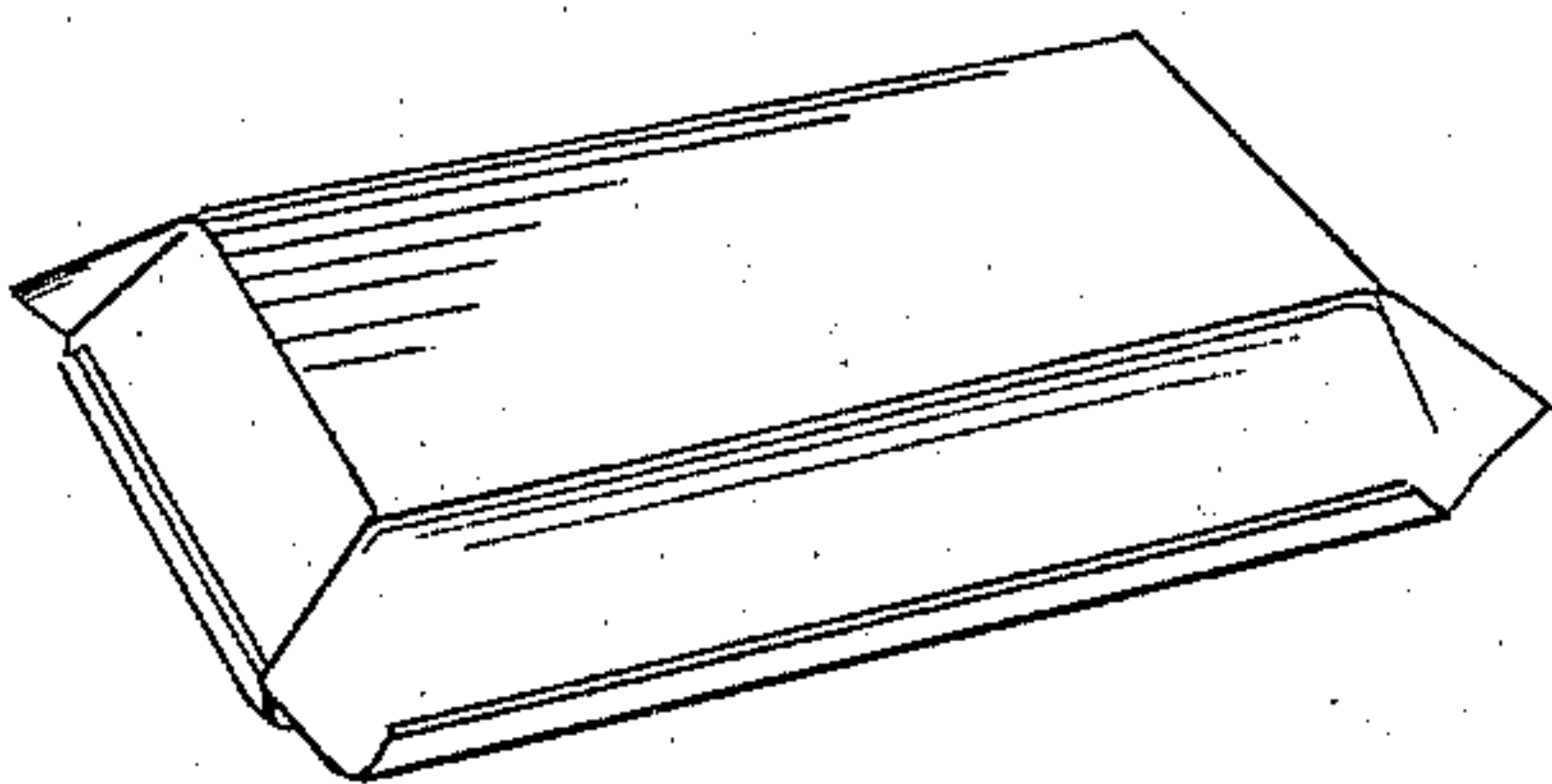


Fig. 9.

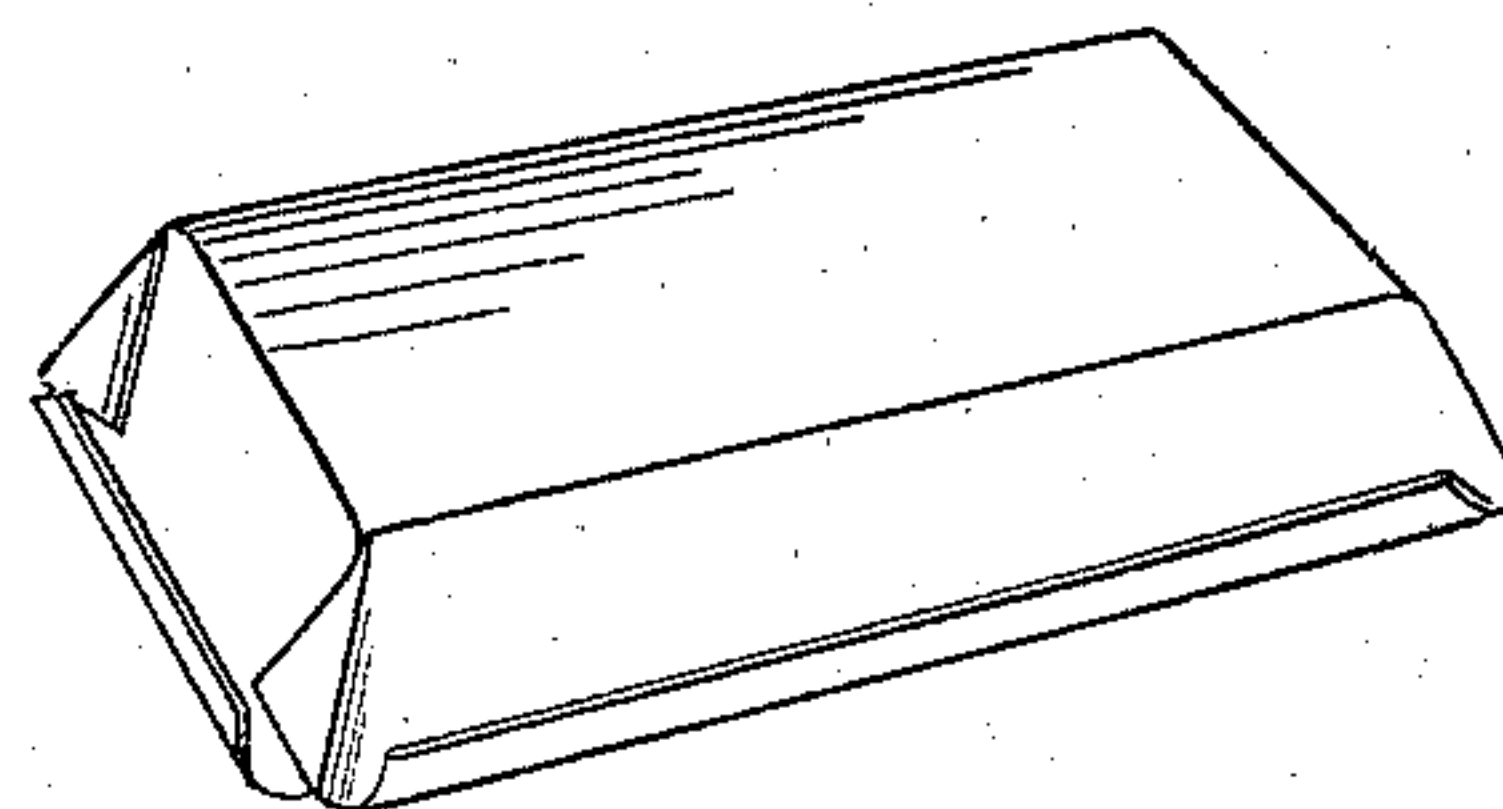


Fig. 10.

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UNITED STATES PATENT OFFICE.

ALLAN COX, OF BOSTON, MASSACHUSETTS.

DEVICE FOR FORMING TIN PANS.

SPECIFICATION forming part of Letters Patent No. 232,463, dated September 21, 1880.

Application filed March 4, 1880. (Model.)

To all whom it may concern:

Be it known that I, ALLAN COX, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved
5 Device for Forming Tin Pans, of which the following is a specification.

This device is intended to obviate the necessity of making tin pans which are too deep to be stamped out by hand; and it consists of
10 two sets of blocks or forms, arranged, constructed, and operated as below set forth.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a view of the blocks for forming
15 the sides of the pan in position for use. Fig. 2 is a view of the blocks for forming the ends detached. Fig. 3 is a transverse section of the side blocks or forms in operation. Fig. 4
20 is an end elevation of the end blocks in operation. Figs. 5, 6, 7, 8, 9, and 10 show the pan in its various stages, from the blank in Fig. 5 to the complete pan in Fig. 10, as more fully described below.

The following is a description of the side
25 forms shown in Figs. 1 and 3.

a is a platform or base, intended to be firmly secured to a bench or other stationary support. *b* is a sliding base, held in a dovetailed groove in the platform *a* by removable pins *b'*. *c* is
30 a stationary form secured to or integral with the sliding base *b*, provided with beveled top *c''* and ends *c'*, for forming the sides of the pan. *d* is a movable block having beveled ends, provided with a groove, *m*, and openings *d''*,
35 for the admission of the guides *d'*, projecting from the form *c*. A spring, *e*, is set into the block *d* and presses against the form *c*. The block *d* is moved toward the form *c* by a screw, *f*, the guides *d'* keeping it in position and the
40 spring *e* throwing it back as the screw is unscrewed from the form *c*.

The end forms are shown in Figs. 2 and 4, and consist of the sliding base *b*, provided with the hole *g* for the admission of the pin
45 *b'*; form *c*, for forming the ends of the pan, having beveled ends *c'* and top *c''*; sliding block *d*, having beveled ends; spring *e*, and openings *d''* for the guides *d'*, and groove *m*.

The operation of making a tin pan by means
50 of my device is as follows: A blank of the

shape shown in Fig. 5 is folded by an ordinary folding-machine until its edges are turned up, as in Fig. 6. It is then placed sidewise between the block *d* and form *c*, as shown in
Figs. 1 and 3, its lower edge resting on the
55 guides *d'* and its lower fold lying within the groove *m* in the block *d*. The block *d* is then, by means of the screw *f* and suitable lever, pressed tightly up, clamping the blank between it and the form *c*. The blank, usually
60 by means of a flat piece of wood, is bent over upon the beveled top *c''* of the form into the position shown by broken lines *p p*, Fig. 3, and the shape shown in Fig. 7. The block *d* is then released and the pan reversed, so as to
65 bend the opposite side. The above operation is repeated and the pan assumes the position shown by broken lines *p q*, Fig. 3, and the broken lines in Fig. 7.

The sides having been formed, the next operation is to form the ends. The pins *b'* are
70 taken out and the block and form *d c* removed and the end block and form shown in Figs. 2 and 4 put in their place, being secured therein by the pins *b'* in the openings *g* of the base *b*.
75 The partly-made pan shown in Fig. 7 is placed endwise between the block *d* and form *c*, resting on the guides *d'*, its folded edge in the groove *m*; the block *d* is screwed against the form *c*, and the pan pressed over into the position shown in Fig. 4, and becomes of the
80 shape shown in Fig. 8. The opposite end is treated in the same manner.

The corners are hammered down against the ends (beveled for the purpose) of the block *d*
85 while the pan is in the position shown in Fig. 4, as seen in Fig. 9, and then are hammered down against the ends of the pan in any ordinary manner, making the perfect pan shown in Fig. 10.

Wire can be inserted in the fold around the edges, if desired.

By means of my device the pans are made very quickly and with great nicety at the corners. Forms of different sizes are, of course,
95 used for different-sized pans.

Either wood or iron may be used in the construction of the device, as desired.

My device may be applied to the manufacture of sheet-metal pans of any kind.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

5 The hereinbefore-described device for forming tin pans, consisting of the platform *a*, sliding base *b*, supporting-form *c*, having its top and end beveled, as shown, movable block *d*, having the groove *m*, guide *d'*, spring *e*, and

screw *f*, all constructed and arranged substantially as and for the purpose shown and described. 10

ALLAN COX.

Witnesses:

HENRY W. WILLIAMS,
JOHN M. ROBERTSON.