

(No Model.)

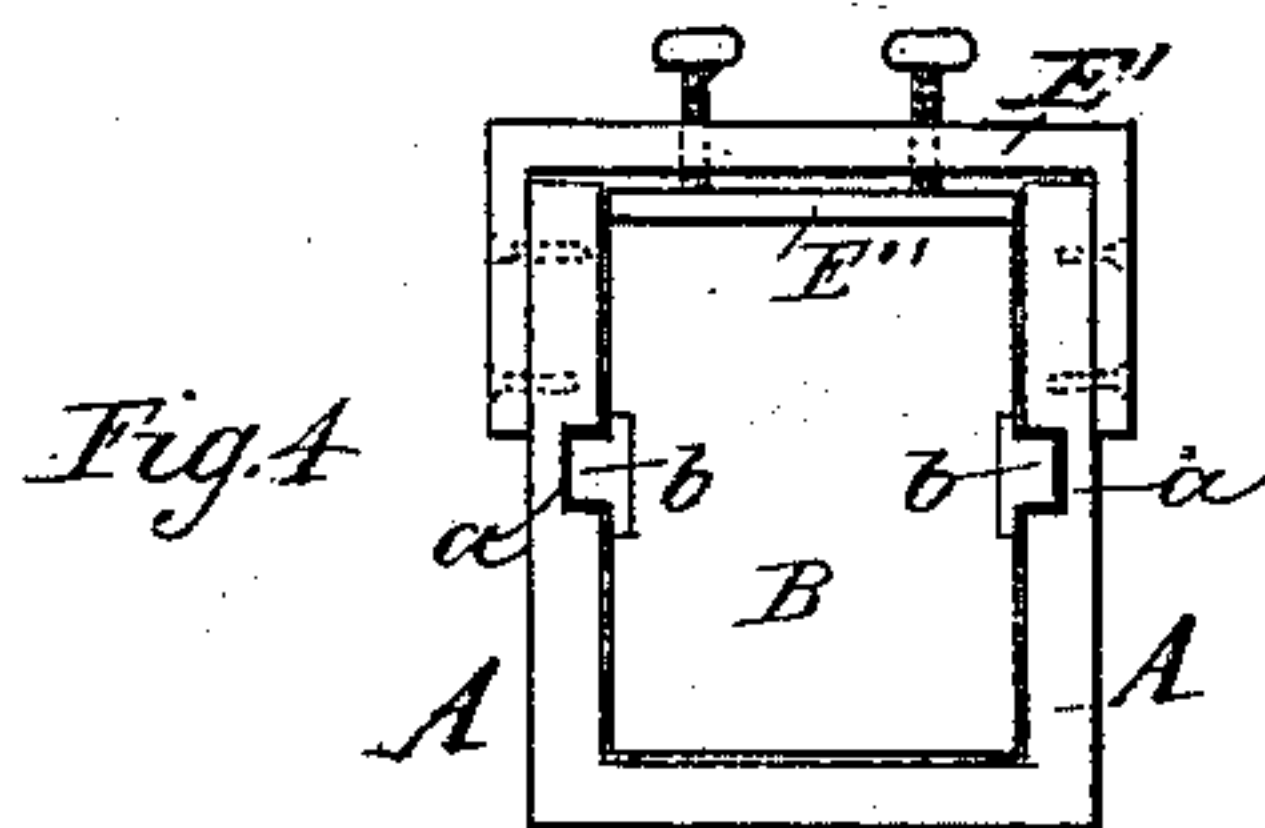
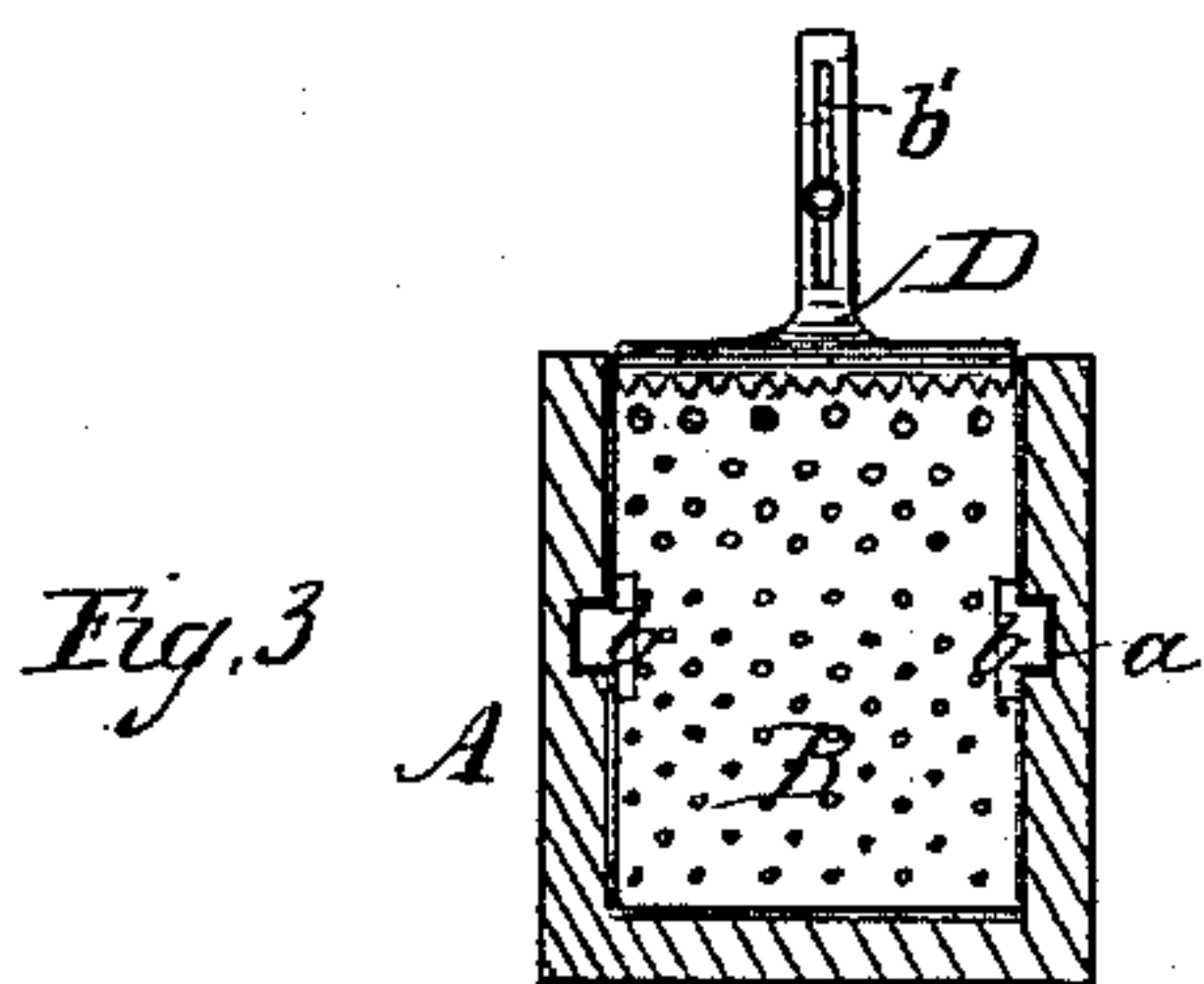
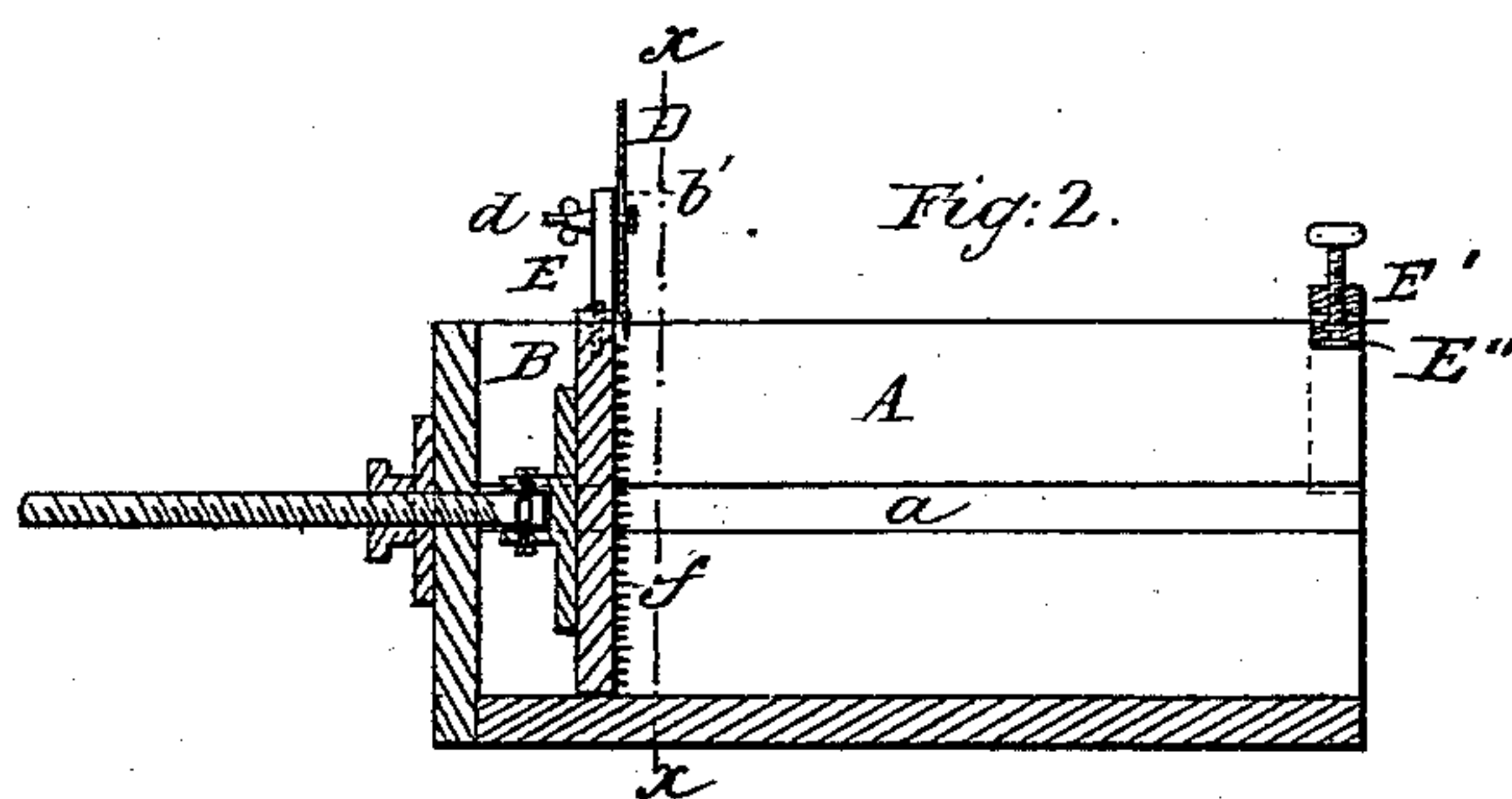
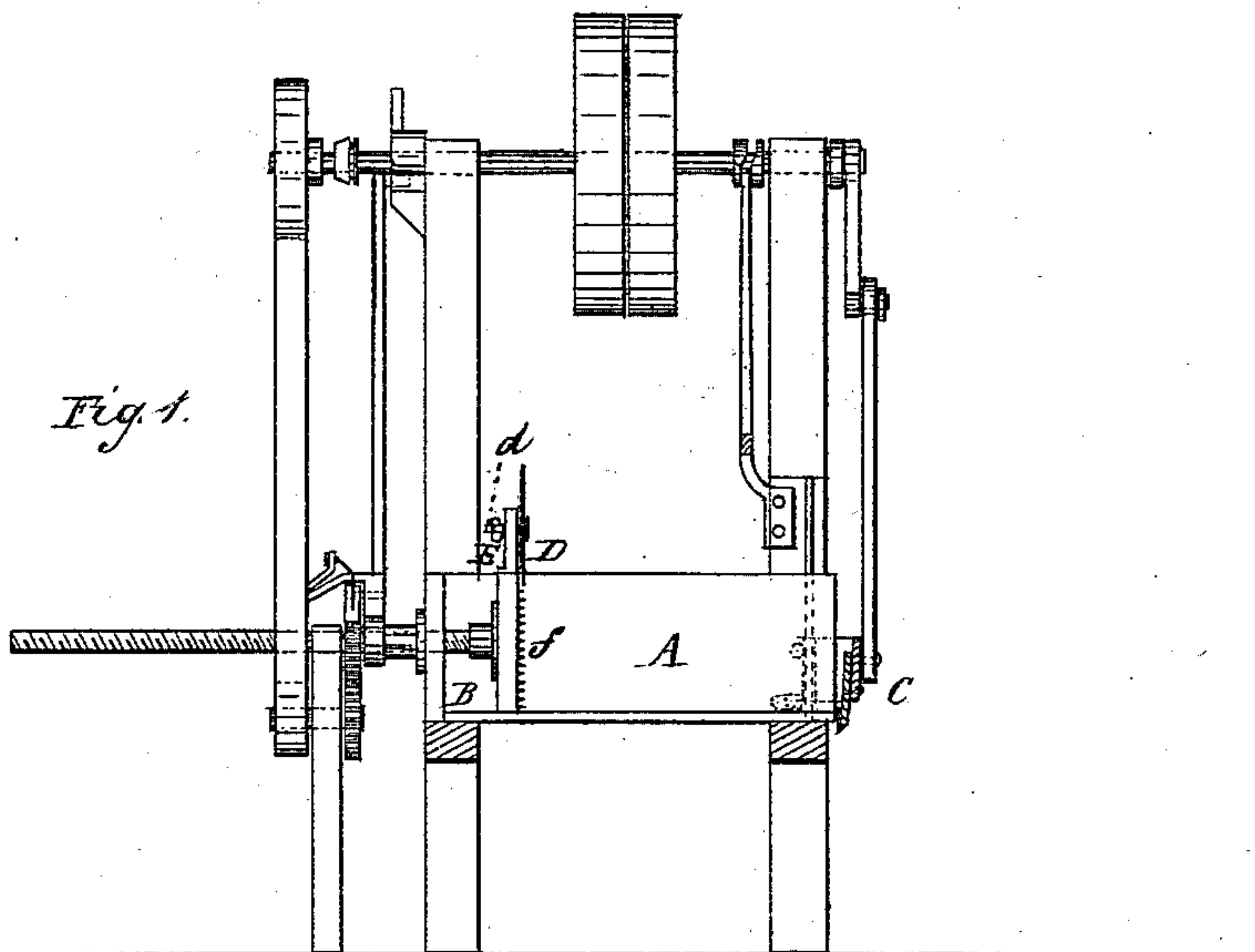
C. C. MILLER.

MACHINE FOR CUTTING BLOCKS OR CAKES OF SOLIDIFIED GLUCOSE,

SUGAR, OR SIMILAR ARTICLES.

No. 277,320.

Patented May 8, 1883.



Witnesses:
Julius Reinhardt
Philip A. Dault

Inventor
Charles C. Miller.
By *H. C. Dault*
Attorney

UNITED STATES PATENT OFFICE.

CHARLES C. MILLER, OF NEW YORK, ASSIGNOR TO JOHN C. BARNES AND
THEODORE SCHLOERB, OF BROOKLYN, N. Y.

MACHINE FOR CUTTING BLOCKS OR CAKES OF SOLIDIFIED GLUCOSE, SUGAR, OR SIMILAR ARTICLES.

SPECIFICATION forming part of Letters Patent No. 277,320, dated May 8, 1883.

Application filed March 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. MILLER, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented a new and useful Machine for Cutting Blocks or Cakes of Solidified Glucose, Sugar, and Similar Materials, of which the following is a specification.

This invention relates to improvements in the invention for which Letters Patent No. 273,875 were granted to me March 13, 1883; and the object of the present invention is to clamp or fasten the block or cake of glucose, sugar, or other material in the box in such a manner that it can be readily moved forward by the action of the follower, and at the same time is prevented from tilting or lifting away from the edge of the knife during the operation of cutting.

The invention consists in providing the box in which the block or cake is placed, and the follower working in the said box, with a clamp or clamps having a suitable adjustment, and arranged to hold the block or cake against the bottom of the box, but in such a manner as to permit the block or cake to be moved freely by the intermittent motion of the follower and without interfering with the action of the knife in cutting the cake.

It also consists in providing the face of the follower with devices for holding the block or cake.

In the accompanying drawings, Figure 1 represents a sectional side elevation of the machine with the improvements attached. Fig. 2 represents an enlarged sectional view of the box and follower with the clamps in position. Fig. 3 represents a cross-section of Fig. 2, taken on line *xx*, and showing a front view of the follower-clamp; and Fig. 4 represents a front view of the box, showing the clamp attached to the box.

Referring to the drawings, A represents the box which receives the block or cake, said box being placed in the frame-work of the machine and provided with guide grooves or ways *a*.

B represents the follower, having guides *b* on its edges, which run in the ways *a* and serve to keep the follower steady in its motion.

The follower is connected with a screw-shaft,

which, by means of mechanism operated by the main shaft of the machine, communicates intermittent motion to the follower, and thereby the block or cake is moved forward the proper distance to be operated upon by the reciprocating knife C.

The construction and operation of the several parts of the machine above referred to having been fully described in the specification of my said Letters Patent, no description thereof is required in this specification.

D represents the adjustable clamp, which is attached to the follower. It consists of a T-shaped piece of metal, the cross-head of which is about the same width as the face of the follower. This clamp is placed on the follower in an inverted position, so that the edge of the cross-head which is serrated is opposite the face of the follower. The shank of the clamp is provided with a slot, *b'*.

To the top of the follower is fixed an upright, E, provided with a bolt-hole. The clamp is connected with the upright by means of a bolt, *d*, passed through the slot in its shank and the hole in the upright, and secured by means of a thumb-nut or other suitable device. By means of the slot and the bolt the clamp can be secured in different positions up and down, and thereby its serrated edge may be adjusted to clamp cakes or blocks of various sizes.

It will be observed that the serrated cross-head of the clamp is bent out from the shank and projects slightly beyond the face of the follower, whereby it is adapted to take a firm hold of the butt-end of the block or cake; but at the same time its projection is so slight that the knife can cut so nearly to the butt that only a thin plate remains uncut. By means of this clamp the block or cake can be held down against the bottom of the box at the rear end, and thereby it is prevented from tilting or shifting when the knife comes in contact with its forward end and presses the same in the act of cutting it.

At the front of the box is placed another clamp, which is formed of a bar, E', placed across the box, and having its ends bent down and fastened to the sides of the box, and a movable or adjustable plate, E'', connected

with the fixed bar by set-screws, by means of which the said plate can be raised and lowered at will and secured in any desirable position. This clamp acts upon the front end of the cake 5 and holds it firmly against the bottom of the box. It may be used in connection with the follower-clamp D, or in place of it.

As a further means of preventing the movement of the cake, the face of the follower may 10 be studded with sharp points or pins *f*, projecting about the same distance from the face as the adjustable clamp D.

Blocks or cakes of glucose, sugar, &c., not being invariable in size nor perfectly rectangular, it is necessary that the block should be 15 held firmly, and in proper position for the knife to act upon it effectively and cut off portions of invariable thickness. The clamps herein described have this effect, and at the 20 same time do not interfere with the action of the knife nor the movement of the follower.

To fasten the block or cake it is placed in the box and forced back until the pins or points in the follower enter its butt-end. The 25 clamp D is then lowered, and its teeth having been driven into the top of the block, it is secured in place by means of the bolt and nut. If the front clamp is used, it is next forced down against the top of the front end of the 30 block, which is thereby firmly clamped against the bottom of the box, and as it is intermittently forced forward to the knife by the follower, it is effectually prevented from tilting

at the rear by the force of the blow of the knife, and from being thrown forward or lifted 35 by the jar.

I do not claim, broadly, the use of a clamp to hold the block or cake in connection with the follower, as I am aware that such a clamp has 40 been used; and my invention comprehends solely the use of a clamp to hold the block or cake against the bottom of the box and in front of the follower, so as to hold the same firmly without interfering with its motion forward, and in such position that the knife can 45 operate upon the block or cake without liability of coming in contact with the follower.

I claim—

1. In combination with the intermittently-moving follower B, the standard E, adjustable 50 serrated clamp D, and a suitable device for fixing the clamp in position, substantially as specified.

2. In combination with the follower B, provided with the pins or points *f*, an adjustable 55 clamp attached to the follower, for the purpose specified.

3. In combination with the follower B and box A, adjustable clamps connected with the follower and box, respectively, for the purpose 60 substantially as herein specified.

Dated New York, March 19, 1883.

CHARLES C. MILLER.

Witnesses:

JULIUS REHWOLDT,
J. DOUGLAS BROWN.