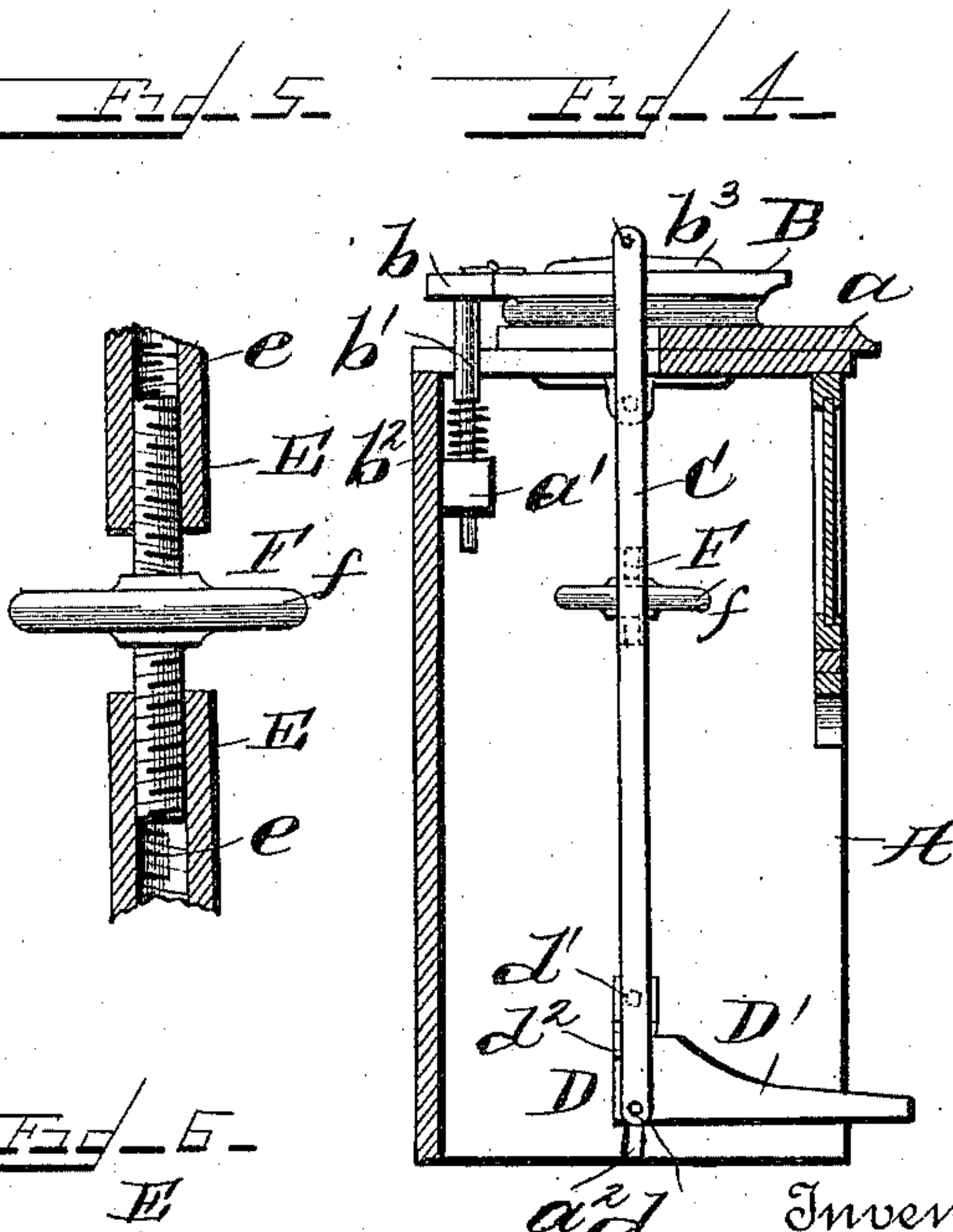
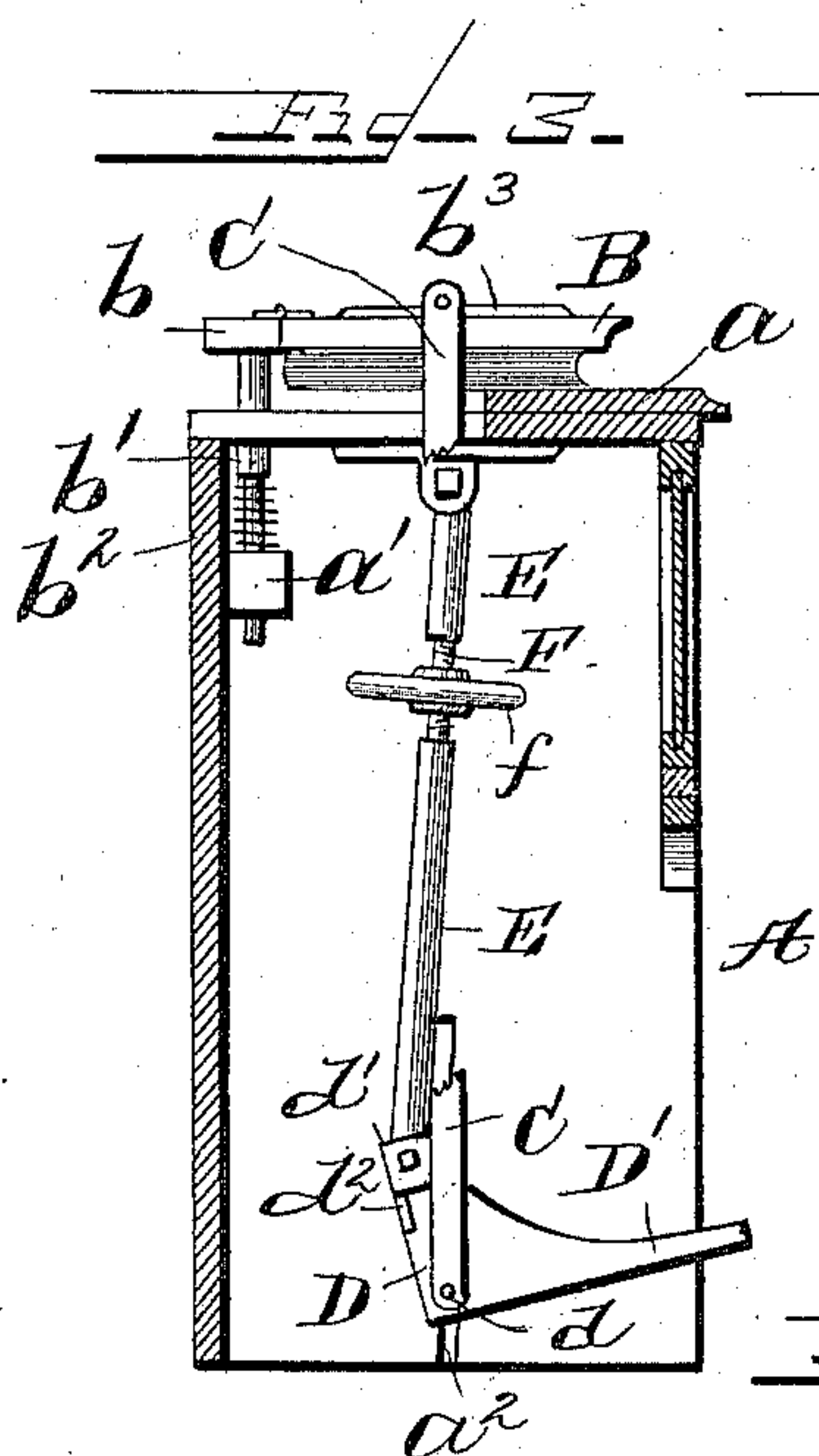
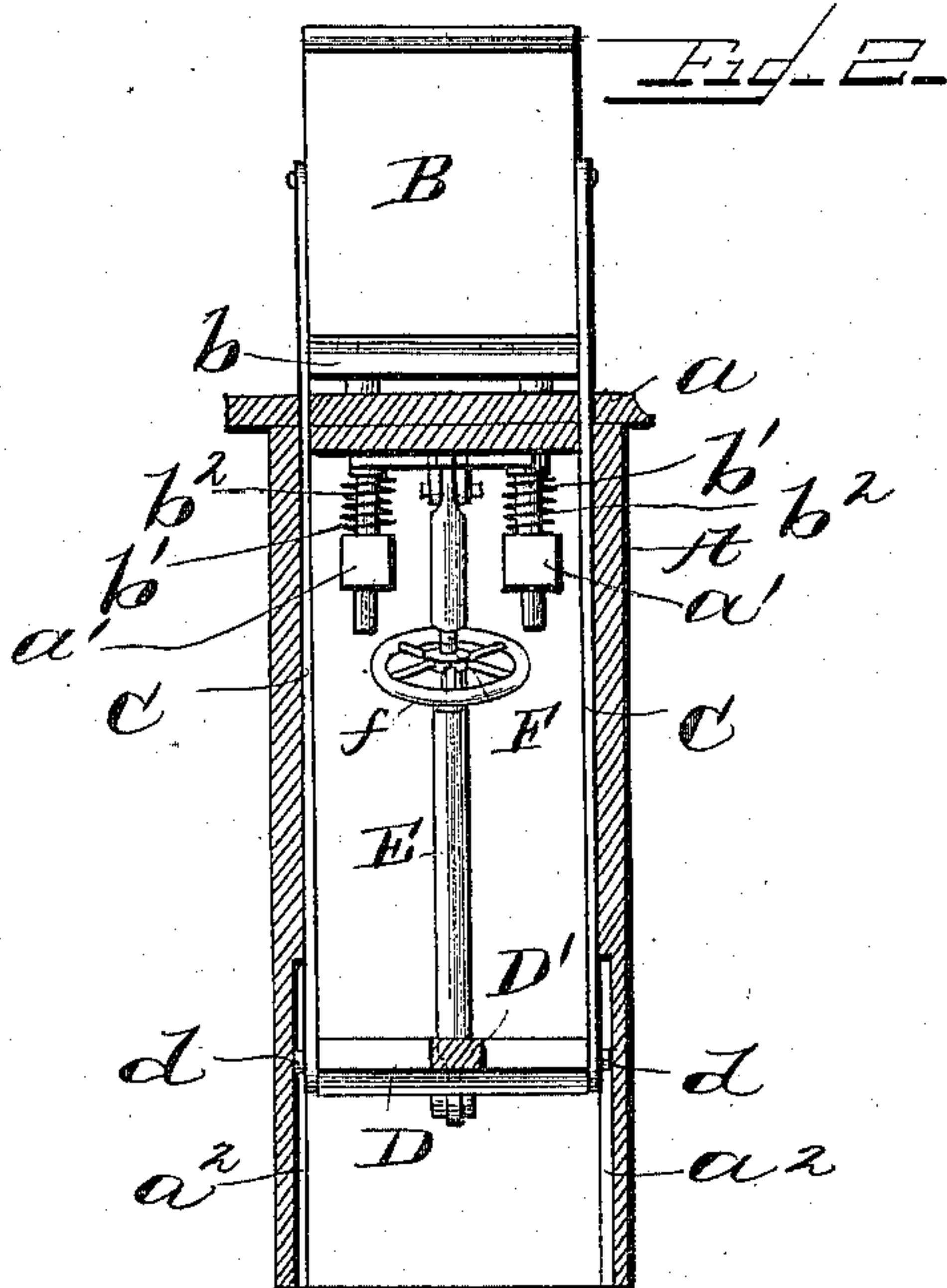
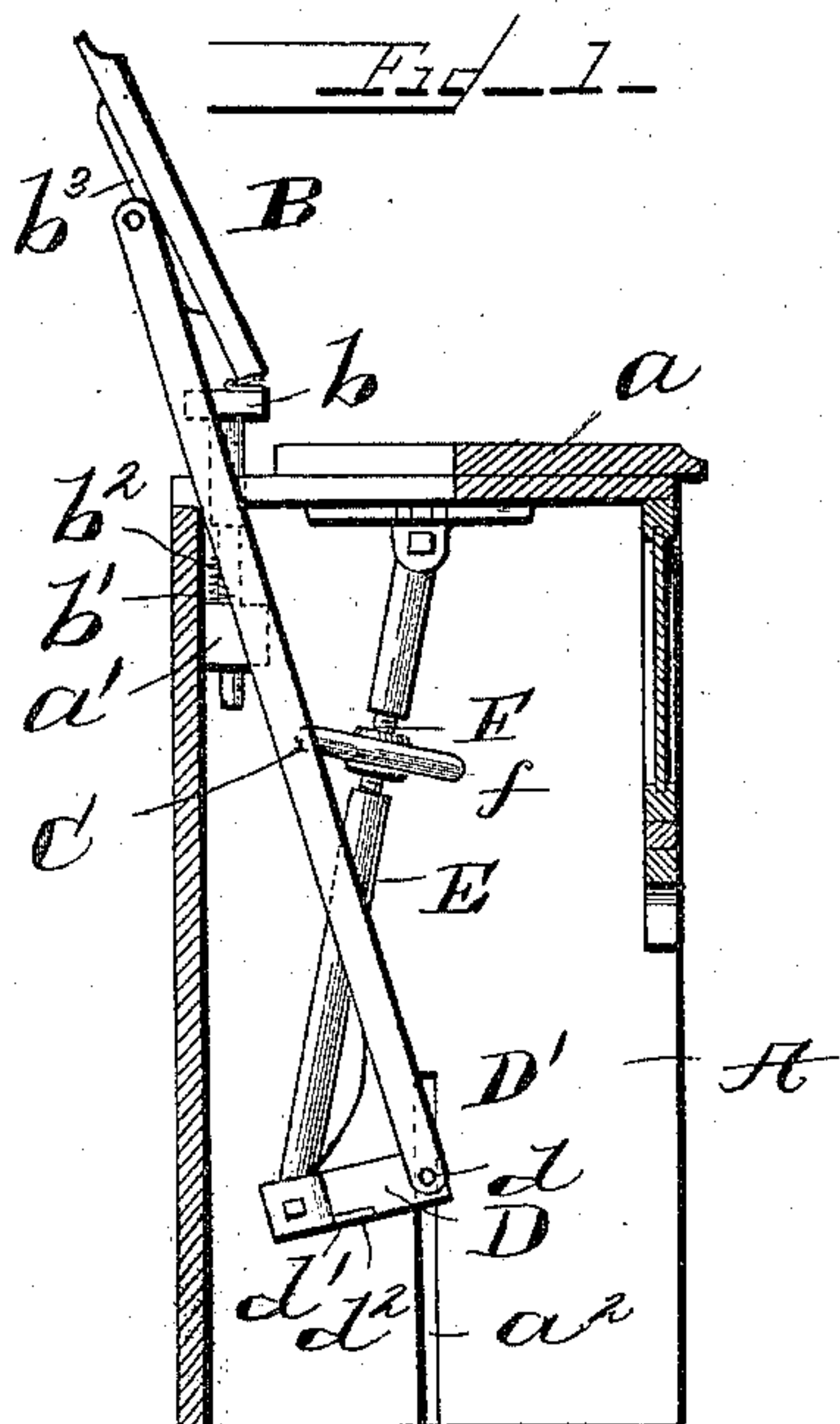


F. H. CUTLER, Dec'd.

F. M. INGLEHART, Executor.
COPYING PRESS.

No. 533,213.

Patented Jan. 29, 1895.



Witnesses

G. A. Fauberschmitt,
E. P. Hubbard

Inventor

Fred H. Butler.

By
Whitaker Priest Attorneys.

UNITED STATES PATENT OFFICE.

FRED H. CUTLER, OF BUFFALO, NEW YORK; FRED M. INGLEHART
EXECUTOR OF SAID CUTLER, DECEASED.

COPYING-PRESS.

SPECIFICATION forming part of Letters Patent No. 533,213, dated January 29, 1895.

Application filed August 9, 1892. Renewed December 29, 1894. Serial No. 533,349. (No model.)

To all whom it may concern:

Be it known that I, FRED H. CUTLER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Copying-Presses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in copying presses and consists in the novel features of construction and combination of parts hereinafter fully described.

In the accompanying drawings I have illustrated one form in which I have contemplated embodying my invention and said invention is fully disclosed in the following description and claims.

In the said drawings, Figure 1 represents a side view of my improved copying press, the inclosing casing being shown in section. Fig. 2 is a front view of the same showing the casing in section. Fig. 3 is a view similar to Fig. 1 showing the parts in position just before operating the press. Fig. 4 is a similar view showing the press after it has been operated. Fig. 5 is a detail view partly in section of the adjusting mechanism for one arm of the toggle lever of the press. Fig. 6 is a detail section of a part of the device.

In the drawings A represents a casing of any desired form, provided with a top *a* which forms the support or bed upon which the articles to be pressed are placed.

B is the platen which is preferably hinged so that it can be raised out of the way when not in use. In order to provide for pressing copying books and other material of different thicknesses the platen B is hinged to a yielding support *b*, which is connected to the casing by the vertical rods *b'* engaging suitable guiding apertures in the top *a* of the casing and in guide blocks *a'* provided on the interior of the casing, said rods *b'* being provided with the springs *b²* which are compressed when the platen and its support are drawn down.

The platen may be made of metal or of wood having a reinforcing back *b³* of metal as shown and to the said platen are connected

two links or bars C C. The links C C have their lower ends connected to a cross bar D which is provided with trunnions *d d* passing through the links C C and engaging vertical guiding grooves or recesses *a²* in the sides of the casing. A portion *d'* of said cross bar out of the plane of the trunnions *d d* is connected by an adjustable arm E with a fixed point of resistance, as the under side of the top *a* of the casing. The trunnions *d d* of the cross bar D are preferably located adjacent to one edge of the same, and the arm E is secured to said cross bar adjacent to the other edge so that the cross bar and the arm E form a toggle lever.

The cross bar D is provided with an operating lever or treadle D' to be operated ordinarily by the foot of the operator. The cross bar D when the press is about to be operated as shown in Fig. 3, occupies an inclined position a little in rear of the vertical. When the lever D' is depressed the cross bar D is brought into a substantially vertical position as shown in Fig. 4, thus straightening the toggle lever, and depressing the trunnions *d d* and causing the links C C to draw down the platen B and compress the book or other article upon the bed *a* of the press. The parts will be firmly locked and held in this position by the straightening of the toggle lever, and will remain so until the lever D' is raised. The cross bar D is provided with laterally extending lugs *d² d²* which engage the rear faces of the links C C when the lever D' is depressed and prevent it from being pressed down too far, as shown in Fig. 6.

When the press is not in use the platen B may be raised into a substantially vertical position out of the way, and the arms C C, the toggle lever and operating lever D' will assume the positions shown in Fig. 1.

In order to give the desired amount of pressure, and to adapt the press for use with books, and materials of different thicknesses, I provide the arm E of the toggle lever with an adjusting mechanism by which it may be lengthened or shortened so that the platen may give the desired pressure when the toggle lever is straightened. In this instance I have shown the arm E formed in two parts each having a screw threaded recess *e* and a

screw F provided with right and left screw threads engaging said recesses. The screw is provided with a hand wheel *f* or other means for rotating the same to adjust the parts. In 5 adjusting the parts to a book of a certain thickness the book is placed in the bed *a* and the platen brought down upon the book. The lever D' is then pressed down, and the screw wheel *f* is turned until the press gives 10 the desired pressure upon the book. The lever D' is then thrown up and the press is ready to operate without further manipulation of the screw.

It is obvious that I may provide the links 15 C C with adjusting means instead of the arm E if desired and accomplish substantially the same result.

What I claim, and desire to secure by Letters Patent, is—

20 1. In a copying-press, the combination with the bed and platen, of a downwardly yielding support for said platen pivotally connected thereto, links connected to said platen and extending downwardly below said bed 25 and means connected with said links for depressing said links platen and platen support, substantially as described.

2. In a copying-press the combination with the bed, of the support for the platen provided with guide rods, springs normally maintaining the guide rods and support in an elevated position, the platen hinged to said support, the links connected to said platen and means connected to said links for depressing 30 said links, platen and platen support, substantially as described.

3. In a copying-press the combination with

the casing provided with the bed, of the platen, the links pivoted to said platen, a toggle-lever pivoted to the said bed and to said 40 links, a treadle for operating said lever, and guides controlling the movement of the lower end of said toggle lever, substantially as described.

4. In a copying-press the combination with 45 the bed, of the downwardly yielding support for the platen, the platen pivoted to said support, the links pivoted to said platen and extending below said bed, a toggle-lever pivoted to said bed and links, and a treadle for operating said toggle-lever, substantially as described. 50

5. In a copying-press the combination with the casing having a bed and provided with guiding grooves, of the platen, links pivoted 55 to said platen and extending below said bed, the toggle-lever pivoted to said bed and links and engaging said guiding grooves, and a treadle for operating said lever, substantially as described. 60

6. In a copying-press the combination with the bed of a platen, links pivoted to said platen and extending below said bed, a toggle lever pivoted to said bed and links, one 65 arm of said lever being composed of two parts united by a right and left hand screw and a treadle for operating said toggle lever, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRED H. CUTLER.

Witnesses:

SILAS J. DOUGLASS,
HYDE H. CLARK.