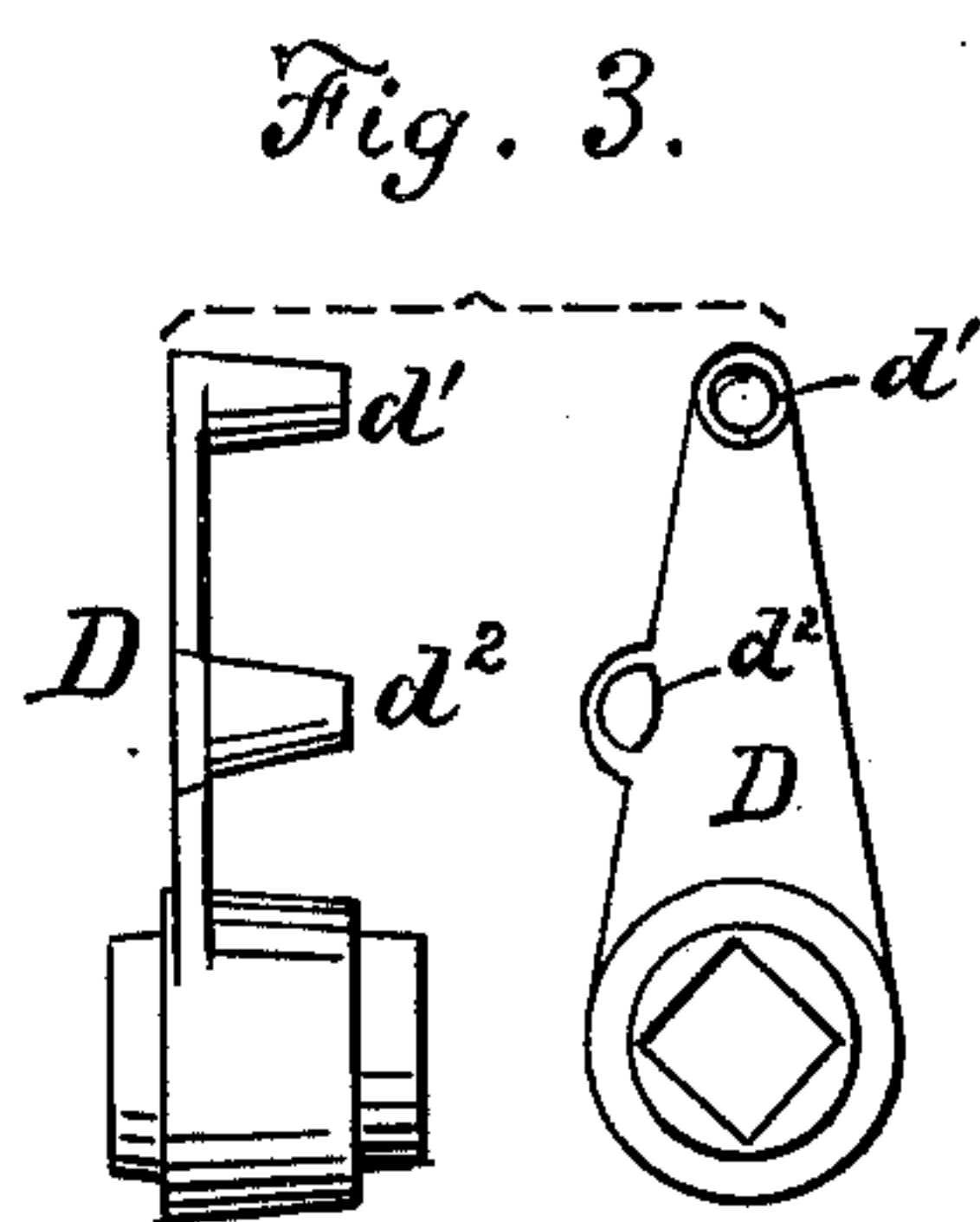
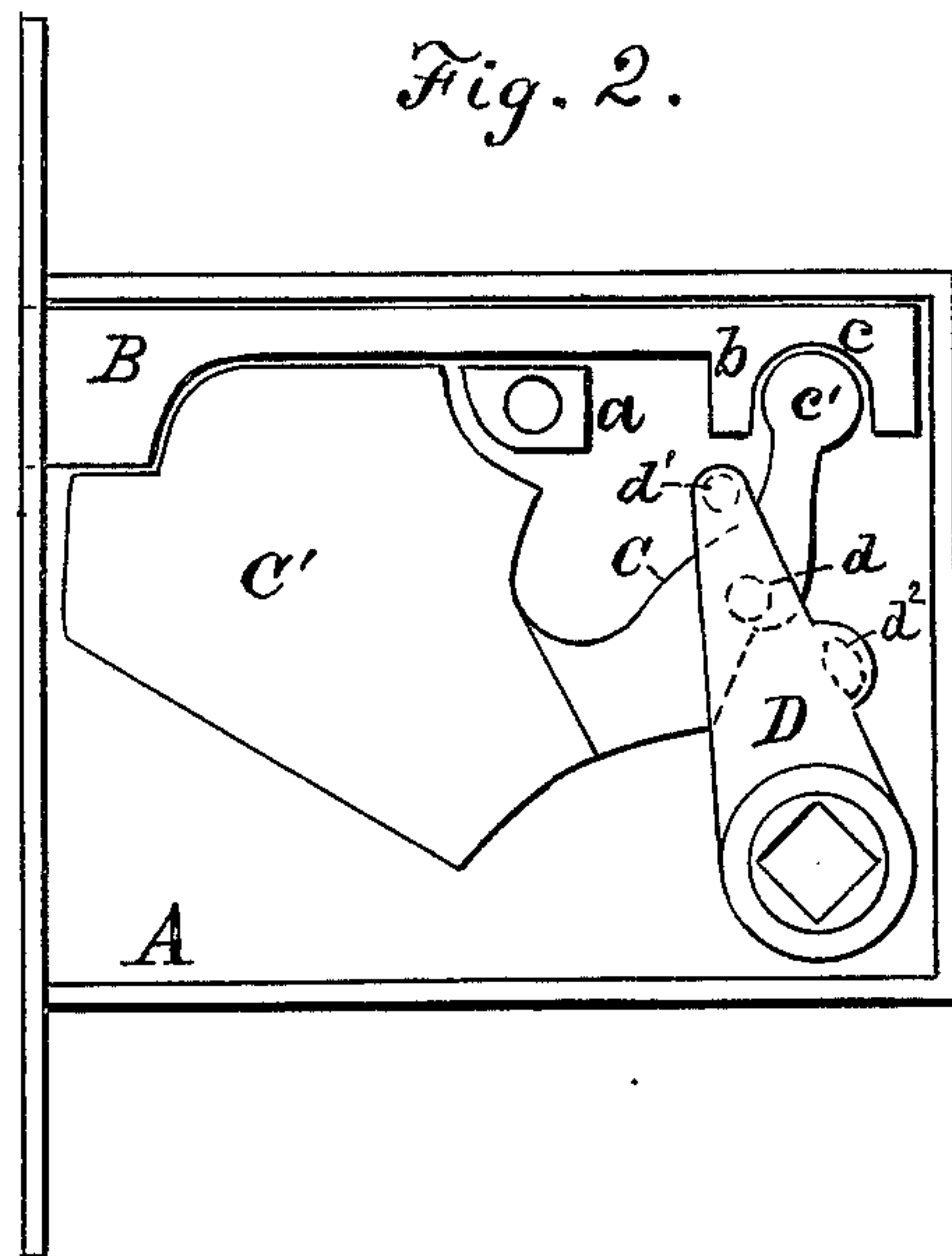
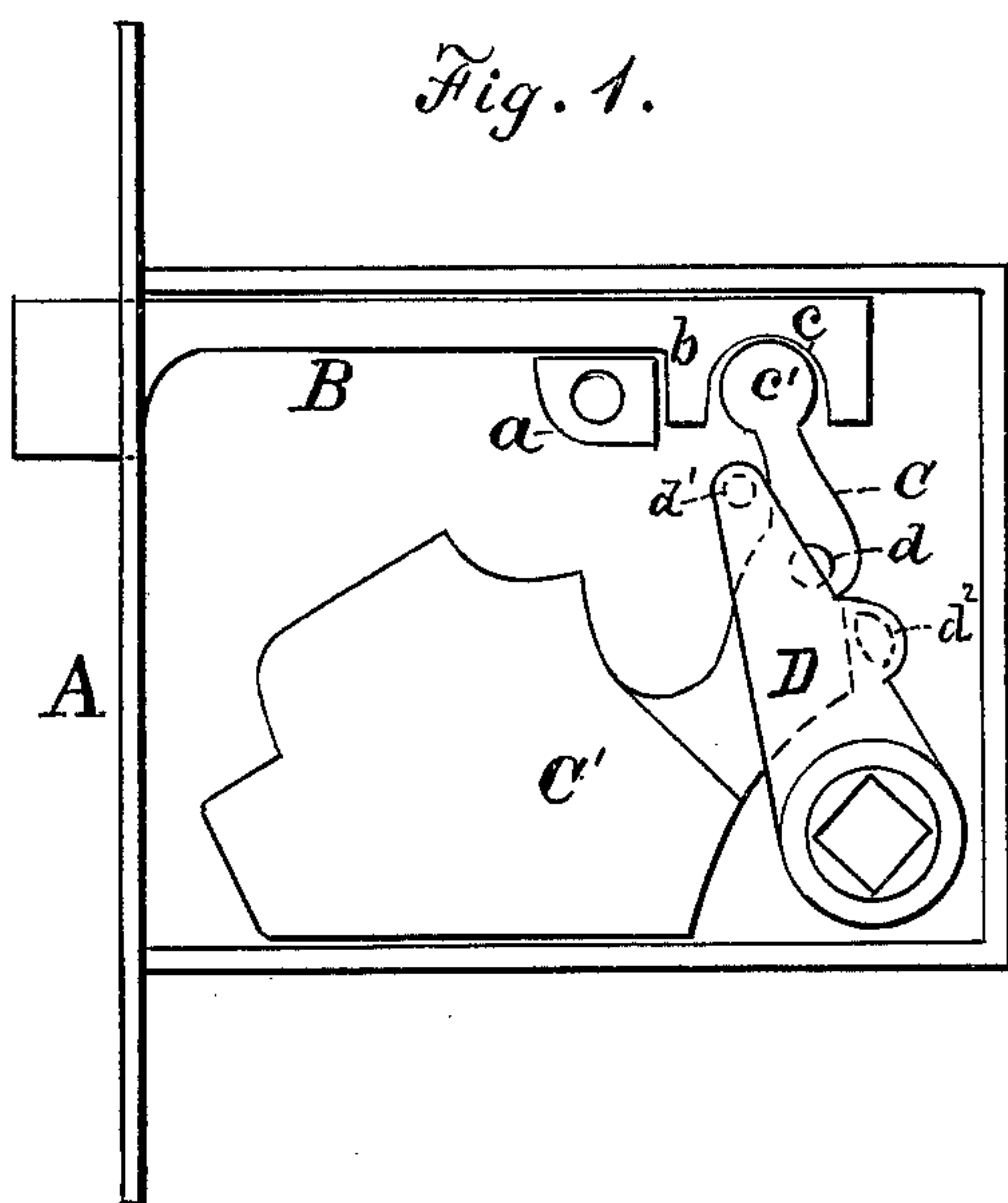


(No Model.)

C. E. BILLINGS.
Latch.

No. 231,260.

Patented Aug. 17, 1880.



Witnesses:
Henry Orth
H. A. Daniels.

Inventor:
Clark E. Billings
By *W. B. Davis*
Atty.

UNITED STATES PATENT OFFICE.

CLARK E. BILLINGS, OF WARREN, VERMONT.

LATCH.

SPECIFICATION forming part of Letters Patent No. 231,260, dated August 17, 1880.

Application filed June 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, CLARK E. BILLINGS, of Warren, in the county of Washington and State of Vermont, have invented certain new and useful Improvements in Gravitating Latches; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to gravitating latches; and it consists of a latch operated by means of a weighted lever, constructed as shown in the drawings, and as hereinafter fully described.

In the drawings, Figure 1 is a view of the latch without the removable plate, showing the interior devices with the bolt thrown out. Fig. 2 is the same view with the bolt thrown back. Fig. 3 is a side view of the knob-lever detached.

A represents the latch-case, having the stud *a*, provided with screw-threads to receive the screw which holds in place the removable plate of the case. This stud is located in position to form the stop for the bolt B, which is provided with a shoulder, *b*, to catch against the stud *a*, as shown in Fig. 1. This bolt is provided also with a recess, *c*, to receive the upper rounded end, *c'*, of the weighted lever C, which is pivoted on a pin, *d*, on the inside of the fixed plate of the case.

D is the knob-lever, provided with the two

lugs *d'* and *d''*. The lug *d'* is adjusted to bear against the lever C above the pivotal pin *d*, and the lug *d''* bears against the other side of the lever below the pivotal pin, so that the bolt may be thrown back by turning the knob in either direction.

To secure the greatest practicable force to the bolt the pivotal pin *d* is located as near as practicable to the upper end of the lever C, and the weighted end C' is made as large as the space in the case will allow, with room for the movements of the lever.

It is readily seen that this construction of a latch is very simple, easily operated, not liable to get out of order, and secures superior force to the bolt, which is of great importance in this class of latches.

What I claim as new, and desire to secure by Letters Patent, in a gravitating latch, is—

The combination of the case A, provided with the stop-lug *a* and pivotal pin *d*, the bolt B, provided with the stop-shoulder *b* and recess *c*, the pivoted weighted lever C, having its upper end, *c'*, adjusted in the recess *c* of the bolt, and the knob-lever D, provided with the lugs *d'* *d''*, substantially as and for the purposes described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

CLARK E. BILLINGS.

Witnesses:

JAMES CARDELL,
JAMES BLAIR, Jr.