

No. 619,524.

Patented Feb. 14, 1899.

A. J. WARNER.

LOCK.

(Application filed Feb. 28, 1898.)

(No Model.)

Fig. 1.

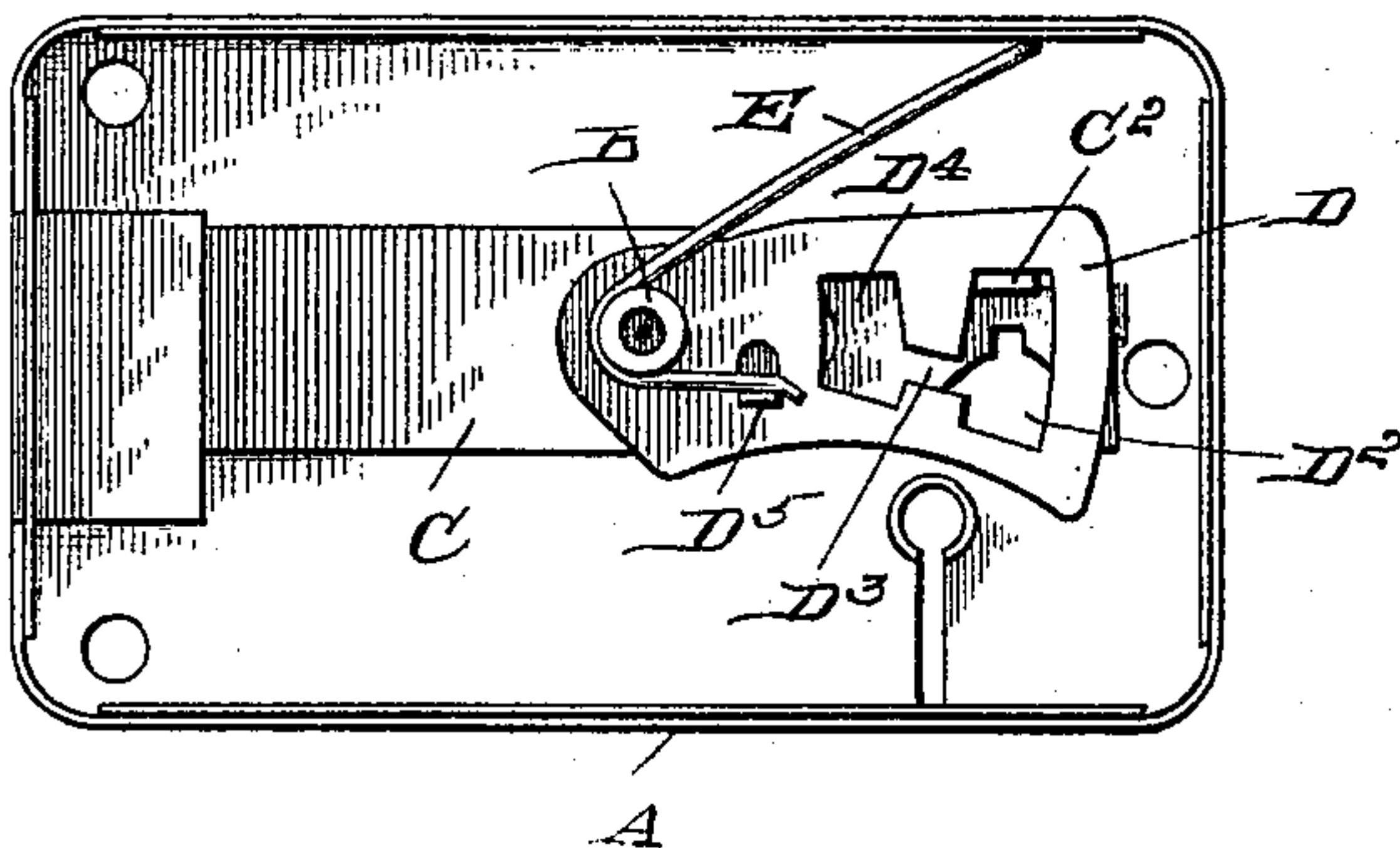


Fig. 2.

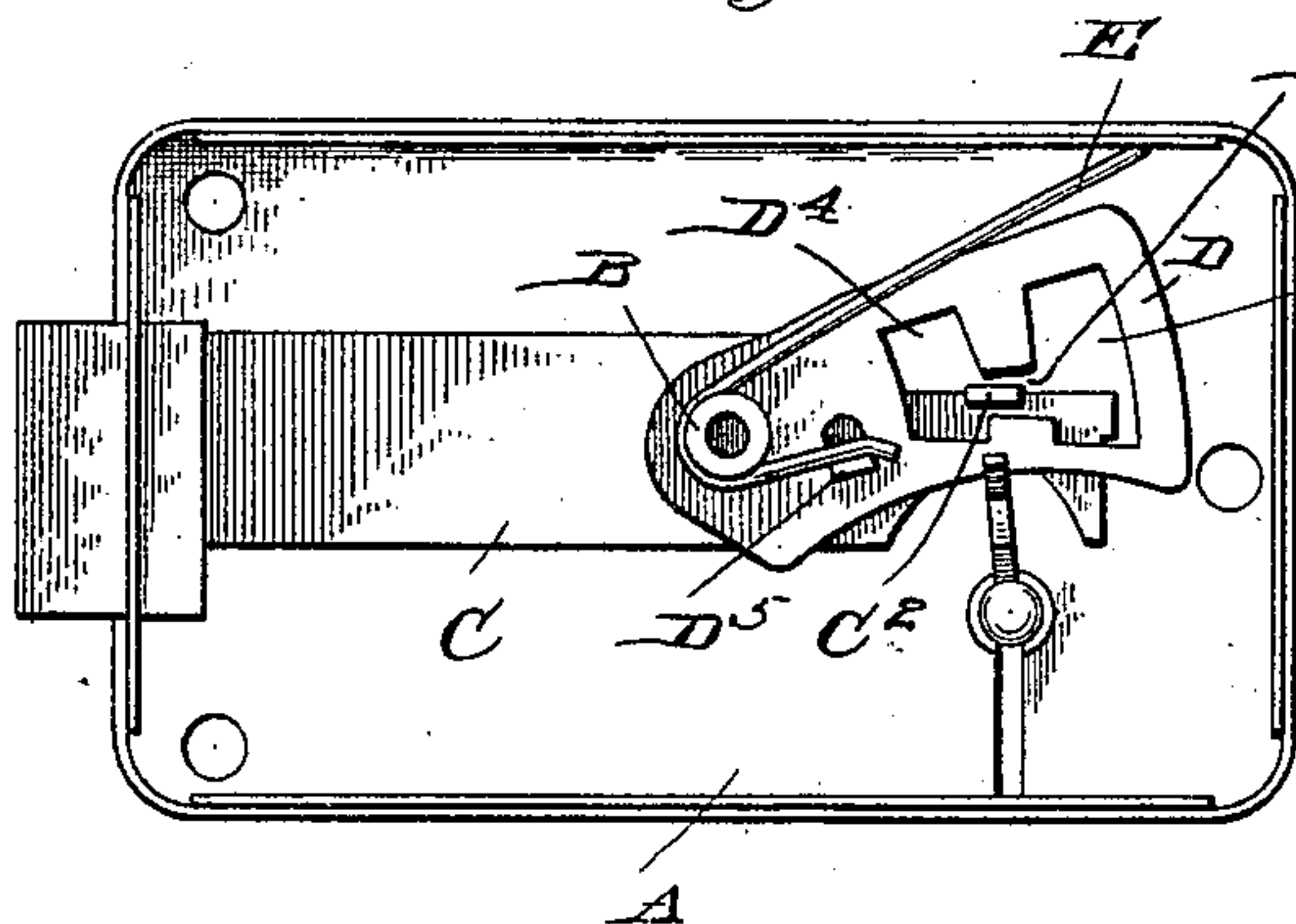


Fig. 3.

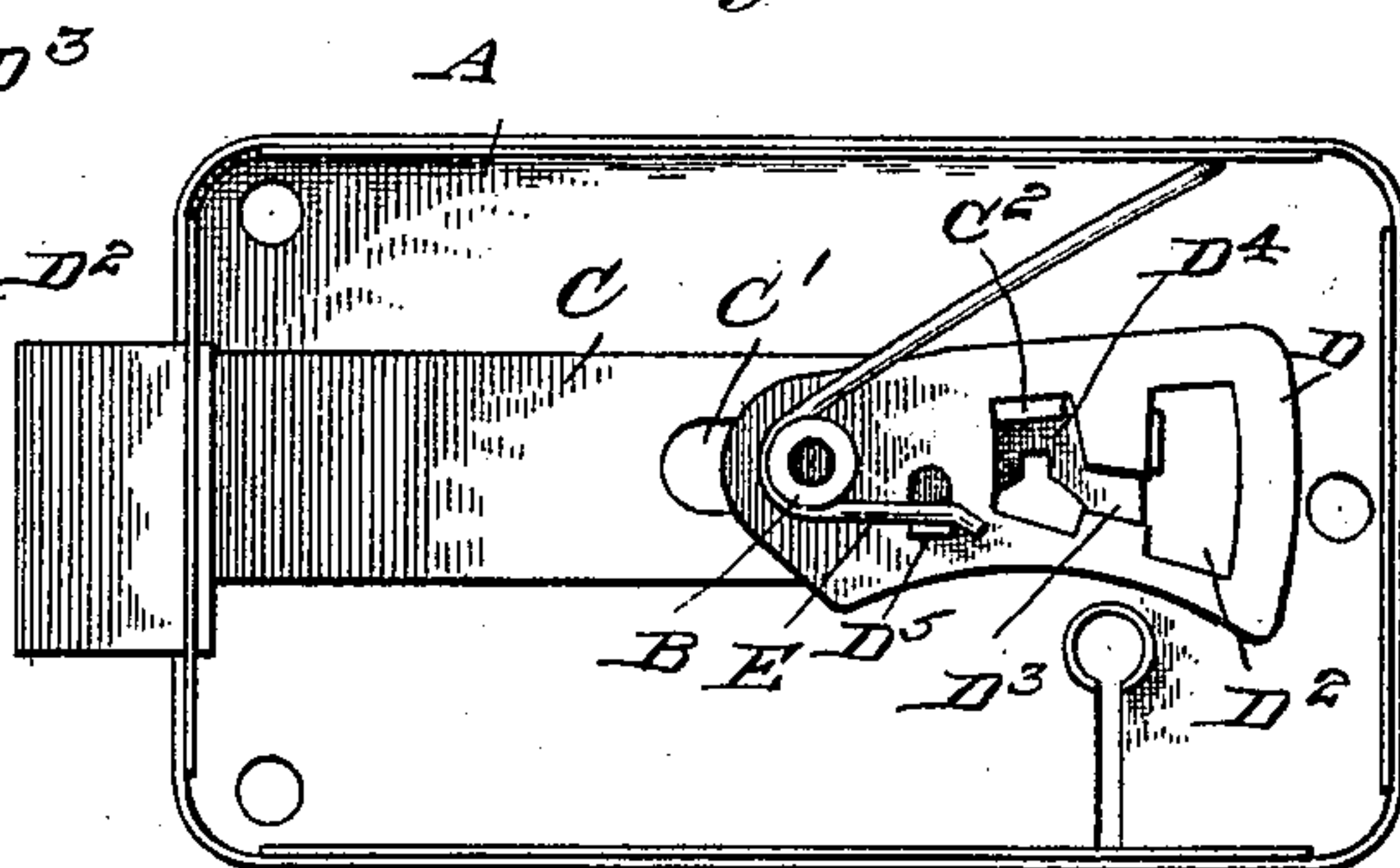


Fig. 4.

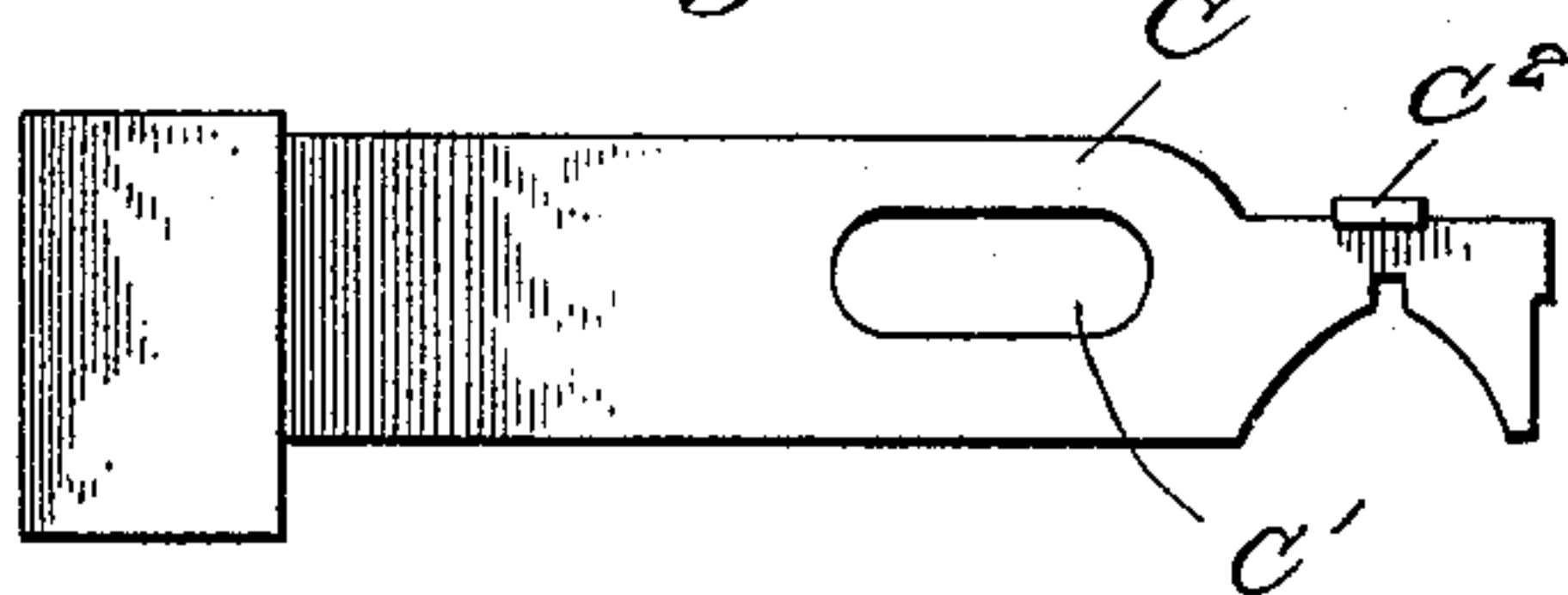


Fig. 5.

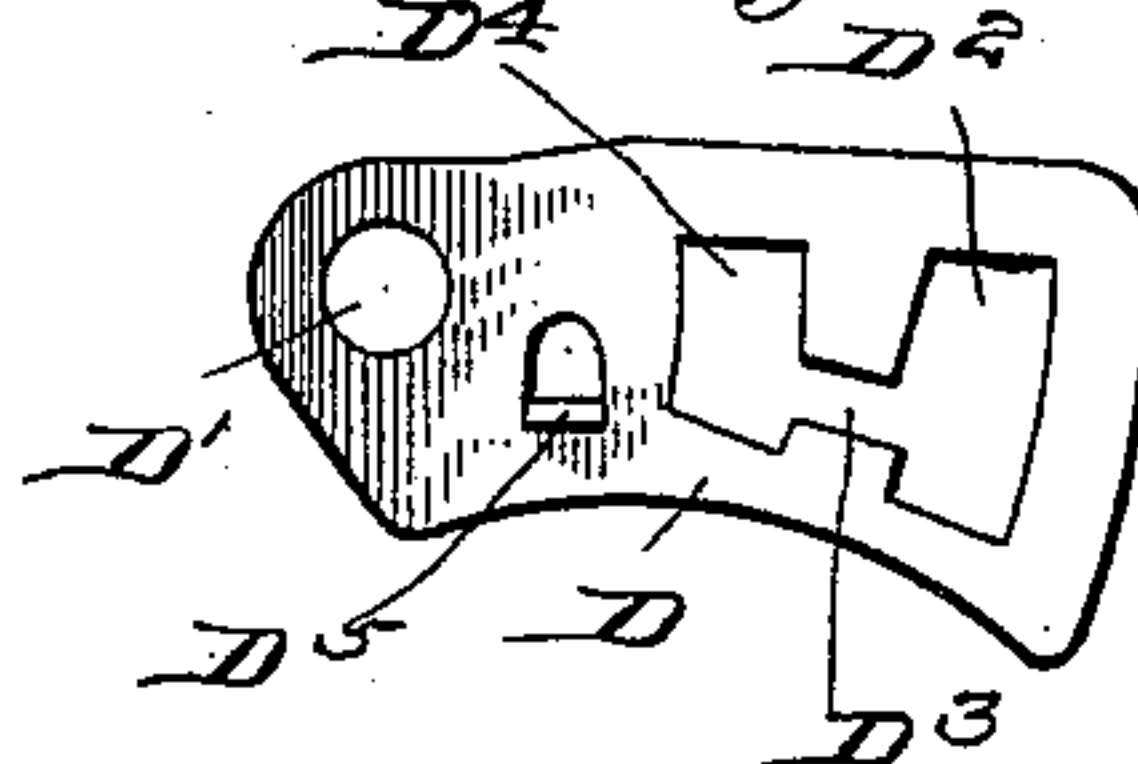


Fig. 6.

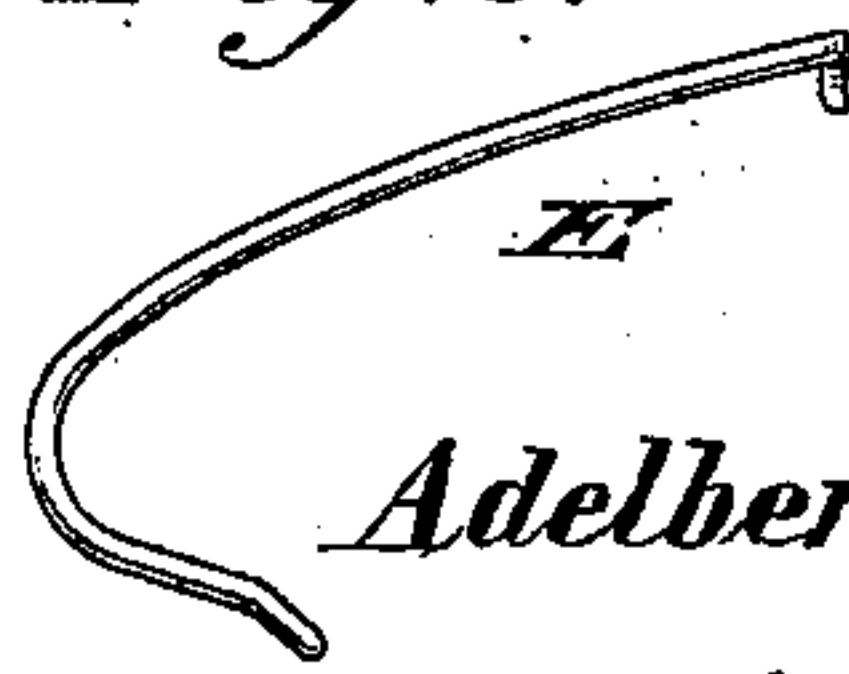
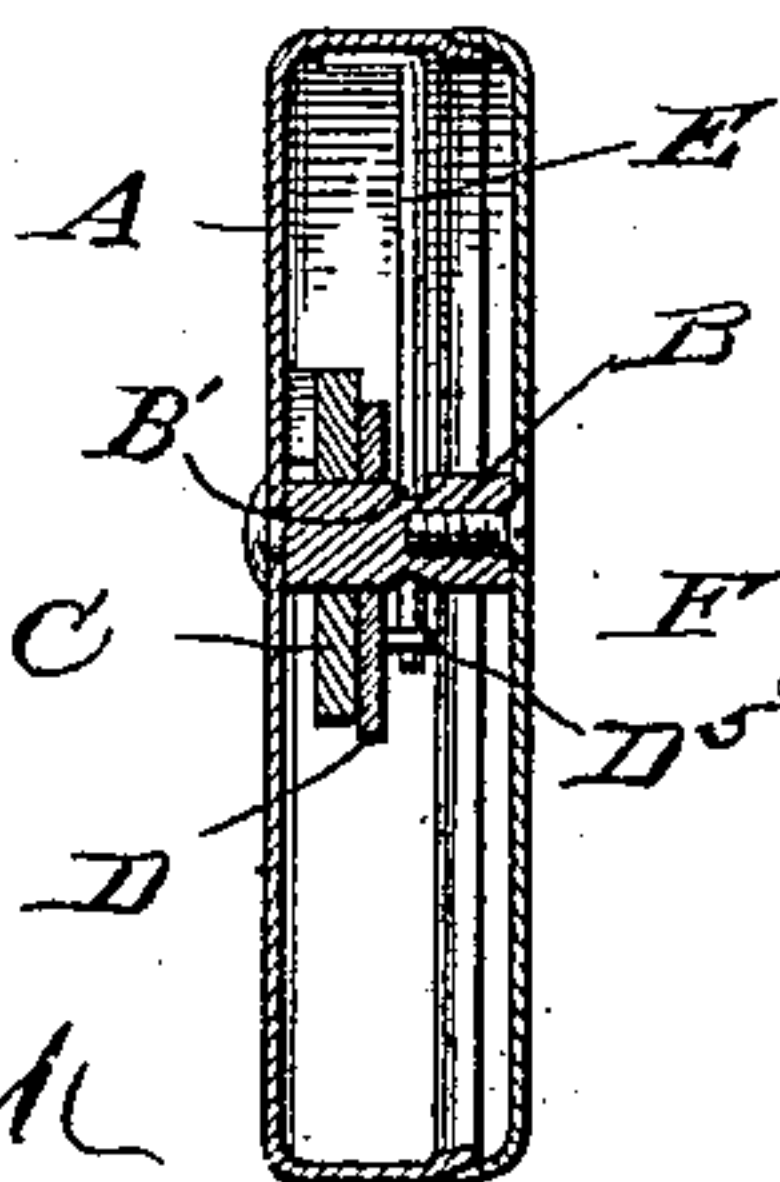


Fig. 7.



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UNITED STATES PATENT OFFICE.

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LOCK.

SPECIFICATION forming part of Letters Patent No. 619,524, dated February 14, 1899.

Application filed February 28, 1898. Serial No. 672,017. (No model.)

To all whom it may concern:

Be it known that I, ADELBERT J. WARNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Lock, of which the following is a specification.

This invention relates generally to locks, and more particularly to that class of locks in which the bolt and tumbler are simultaneously operated by means of a key.

The prime object of the invention is simplicity of construction, combination, and operation.

Another object of the invention is to provide a lock which shall consist of minimum number of parts arranged in most compact and economical manner.

The invention consists in certain details of construction and novelties of combination, all of which will be fully described hereinafter and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a view of a lock constructed in accordance with my invention, the cap or face plate of a shell or case being removed in order to expose the mechanism, which is shown in a locked position. Fig. 2 is a view similar to Fig. 1, showing the mechanism in a half-locked position. Fig. 3 is a view showing the mechanism in a locked position. Fig. 4 is a detail view of the bolt. Fig. 5 is a detail view of the tumbler; Fig. 6, a detail view of the spring, and Fig. 7 a sectional view on the line 7 7 of Fig. 1.

In carrying out my invention I employ a case or shell A, which may be of any desired construction and which is provided with a post B, which has a threaded socket to receive the screw, which fastens the top or cap piece of the lock to the shell or case. The post is also formed with an annular groove B', the purpose of which will be described hereinafter.

The bolt C is slotted longitudinally, as shown at C', the post B entering the said slot and guiding the bolt as it slides back and forth in the case, said bolt being constructed in any suitable manner at its rear end for engagement with the bit of the key.

The tumbler D is preferably in the form of a plate having a pivotal opening D', adapted to fit upon the post B and turn freely thereon. Said tumbler also has an opening D² near the

opposite end adapted to receive a lug C² when the mechanism is in an unlocked position; but when the bolt is thrown to a locked position the lug is moved through a slot D³ into another opening D⁴, produced in the tumbler. It will be understood, however, that instead of openings D² and D⁴ there may be simply recesses, and it will also be understood that I do not limit myself to the exact details of construction of the tumbler or bolt, as these may be varied considerably without departing from the broad principle of my invention. A lug D⁵ is preferably struck up from the body of the tumbler and forms a bearing for one end of the spring E, which is placed around the post B, the opposite end bearing upon the side of the case, as most clearly shown, or it may bear upon any part of lock, thereby normally holding the tumbler in engagement with the lug of the bolt, said tumbler being only thrown out of engagement by the bit of the key. The spring E as it passes around the post is placed in the annular groove B', whereby the said spring is held against lateral displacement.

It will thus be seen that I provide a lock in which the post which connects the shell and cap-plate also serves as the guide for the bolt and also as the pivot for the tumbler and the bearing for the spring.

It will thus be seen that I provide a lock of great simplicity and efficiency.

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

In a lock, the combination with a case or shell, having a post provided with an annular groove, of the bolt slotted longitudinally to slide upon said post, the tumbler having a pivotal opening to fit upon the post, and also openings near the rear end connected by a slot, a lug struck up from the body of the tumbler, and a spring bearing at one end upon the case or shell, and at the other upon the lug, said spring passing around the post and resting in the annular groove whereby lateral displacement of the spring is prevented, substantially as shown and described.

ADELBERT J. WARNER.

Witnesses:

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