

(No Model.)

C. D. WILLIAMS.
KEY HOLE GUARD.

No. 412,867.

Patented Oct. 15, 1889.

fig. 1.

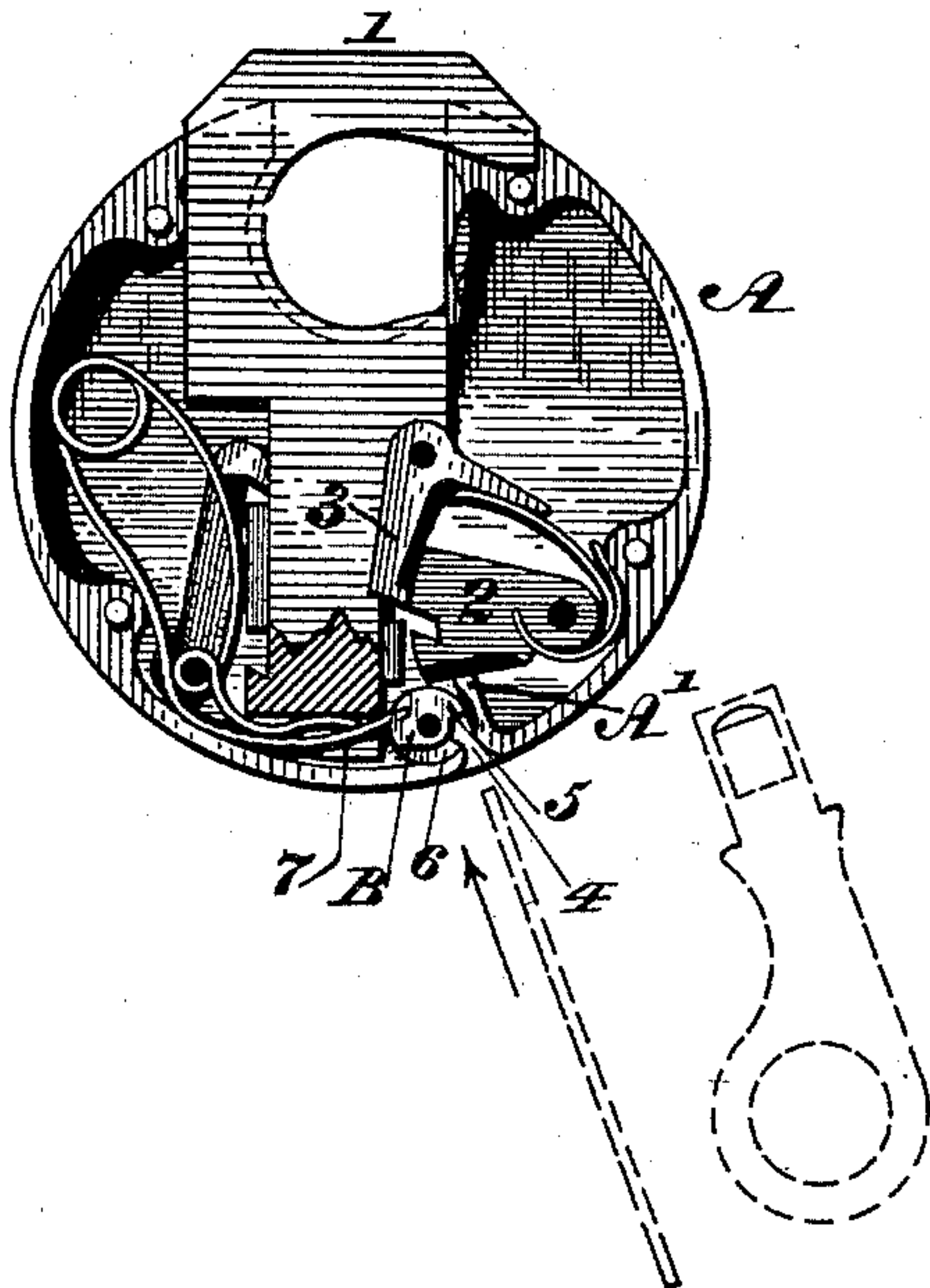


fig. 3.

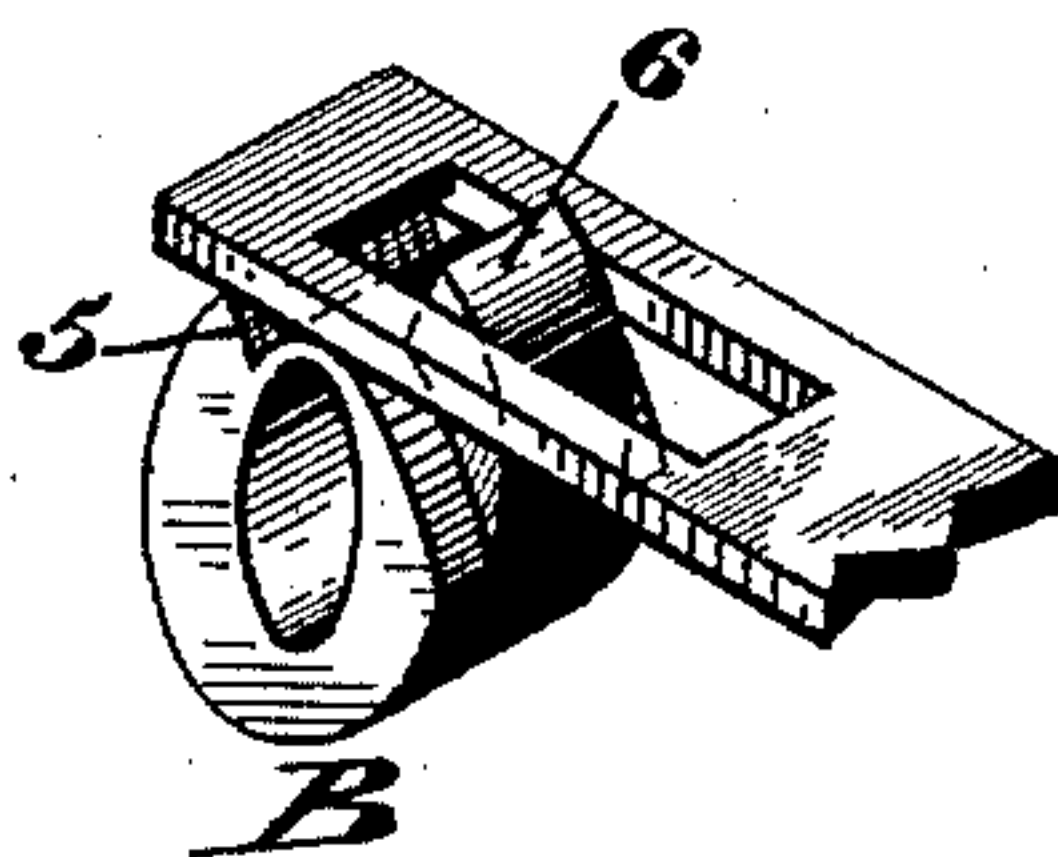


fig. 2.

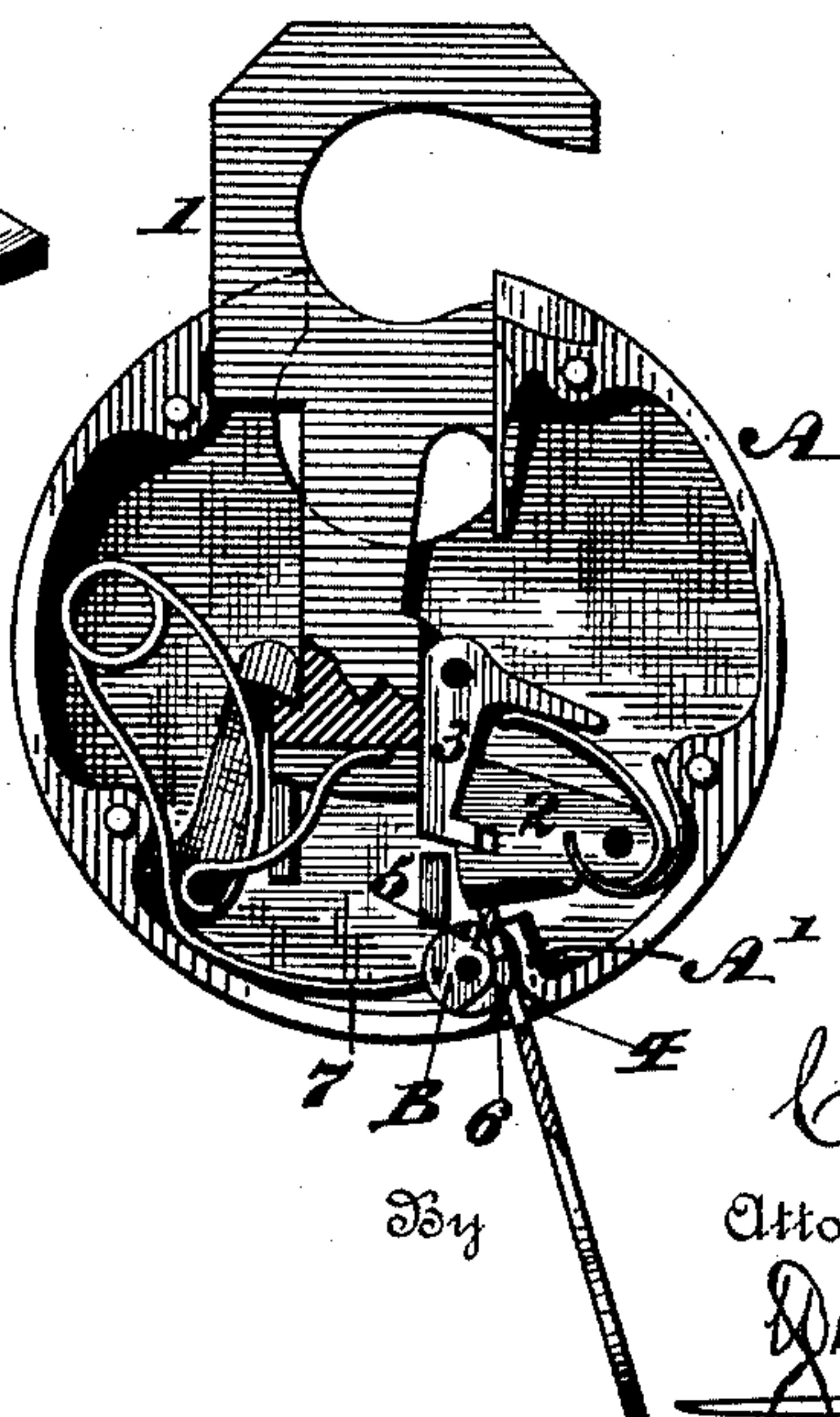


fig. 4.

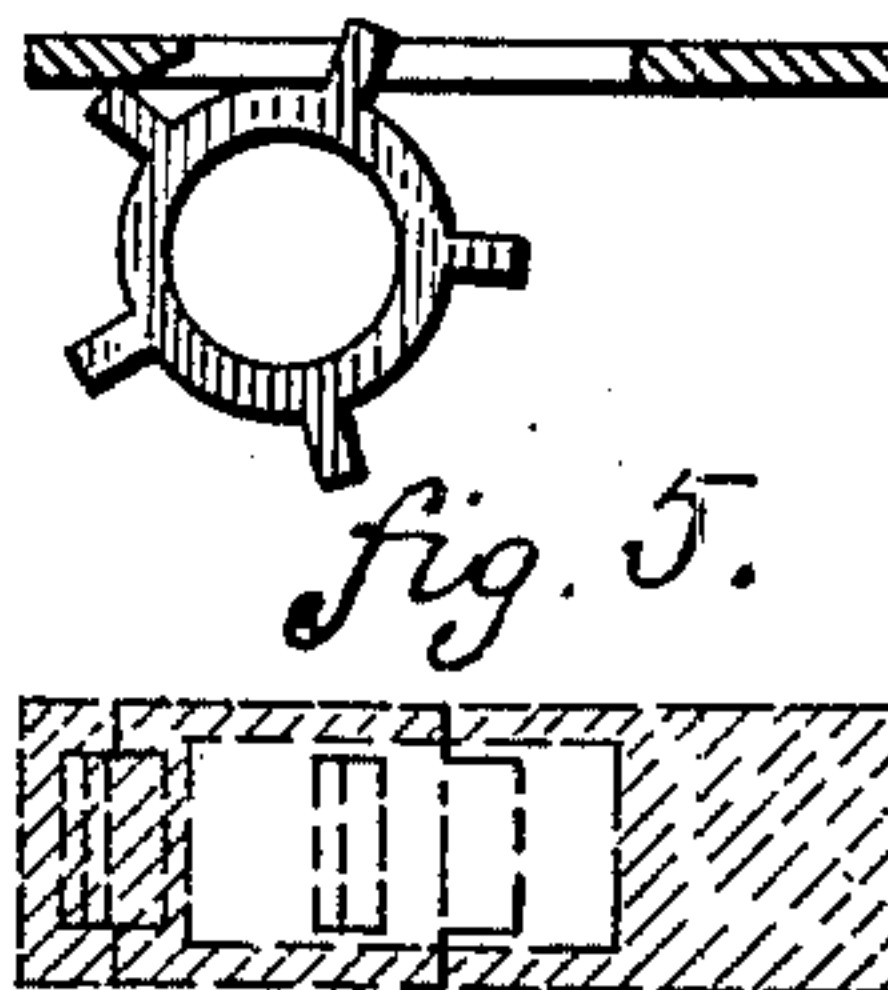
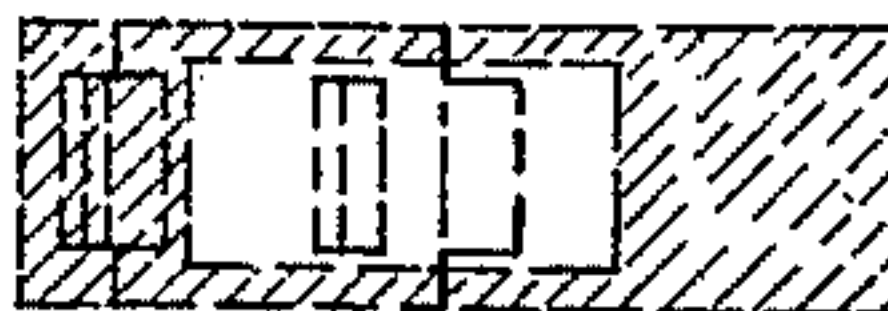


fig. 5.



Witnesses
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CHARLES D. WILLIAMS, OF PHILADELPHIA, PENNSYLVANIA.

KEY-HOLE GUARD.

SPECIFICATION forming part of Letters Patent No. 412,867, dated October 15, 1889.

Application filed October 23, 1888. Serial No. 288,941. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. WILLIAMS, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Locks, which invention is fully set forth in the following specification and accompanying drawings.

My invention consists of a lock having a key-hole guard which is so constructed that a false key or pick is prevented from passing the same and opening the lock. To this end the guard is formed of a rotatable piece having a nose or tooth, and the key has a slot into which said nose or tooth enters when the piece is properly rotated, so that the key is permitted to pass the guard and reach the tumblers or bolt of the lock, or both, and thus cause or permit the opening of the latter.

Figures 1 and 2 represent face views of the interior of a lock embodying my invention. Fig. 3 represents a perspective view of a portion thereof. Fig. 4 represents a longitudinal section of a portion of a modification. Fig. 5 represents a horizontal sectional view of parts shown in Fig. 4.

Similar letters and numerals of reference denote corresponding parts in the several figures.

Referring to the drawings, A designates the casing of padlock, and 1 2 3 designate the bolt or shackle, the tumblers, and dog, respectively, said parts, broadly considered, being well known. In the wall of the casing is a throat 4, through which the key is inserted in order to reach the tumblers, whereby, when said tumblers are properly moved, the dog is permitted to leave its normal position, and thus the bolt or shackle under impulse of its spring is thrown out and unlocked, as will be seen in Fig. 2. Within the casing, close to the throat 4, is pivoted a cylindrical or other properly-shaped piece B, on whose periphery is a shoulder 5, and adjacent thereto a tooth 6, the bit end of the key having a slot to receive the said tooth. When the bolt is locked, the shoulder 5 faces the throat 4, so that when the key is inserted its end impacts against said shoulder and causes the rotation of the piece B. The wall A' of the throat opposite to the shoulder and tooth of the piece B is extended into the casing

and circumscribes said shoulder and tooth as a guard, and also forms a guide for the entering key. A spring 7 is connected with the piece B for causing the return of the same to its normal position.

The operation is as follows: When the bolt is locked, the key is inserted into the throat and pressed against the shoulder 5 of the piece B, whereby the latter is rotated, causing the tooth 6 to enter the slot of the key, as will be seen in Figs. 2 and 3. The key continues to advance and clears the shoulder, the tooth playing in the slot of the key as the advance continues. The key then reaches the tumblers and moves the same, so that the dog leaves the shoulder on the bolt with which it is interlocked, whereby the bolt, under impulse of its spring, shoots out and is accordingly unlocked. (See Fig. 2.) The key may now be removed, after which the piece rotates or returns to its normal position.

In Fig. 4 I show a piece or guard of cylindrical form with a number of teeth on the periphery thereof, the operation of the same being similar to that shown in the other figures.

It will be seen that should an improper key or a pick be inserted into the throat against the shoulder 5 it is evident that the tooth 6, due to the rotation of the piece B, will impact against said key or pick and prevent the advance of the same toward the tumblers, it being noticed that the wall or guard A' forms a bed against which the improper key or pick is jammed, and also provides a barrier against the passage of said key or pick beyond the outer end of the shoulder 5, said end being contiguous to said wall in its normal position.

I am aware that it is not new to construct a lock having an opening in the peripheral wall of its casing, and provided with two co-acting wheels having projections thereon adapted to engage the key on its entrance and before reaching the tumbler; but I am not aware that the construction herein set forth and claimed is old, wherein a single wheel or oscillating guard provided with a shoulder and a tooth is placed in such proximity to an inwardly-extending portion of the wall of the casing as to be adapted to abut against the same, and thereby close the said casing, so

as to prevent the entrance of implements or foreign substances, and thus protect the works of the lock.

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

A lock having a throat in the periphery of its casing, and an inwardly-extending guard
at the wall of said throat, and an oscillating
10 guard with a shoulder adapted to abut against

said inwardly-extending guard, and a tooth adapted to enter an opening in a key, and a spring adapted to close said shoulder against said inwardly - extending guard, said parts being combined substantially as described.

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Witnesses:

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