

J. ROCHE.
KEYHOLE COVER FOR LOCKS.
APPLICATION FILED NOV. 1, 1909.

952,643.

Patented Mar. 22, 1910.

Fig 1.

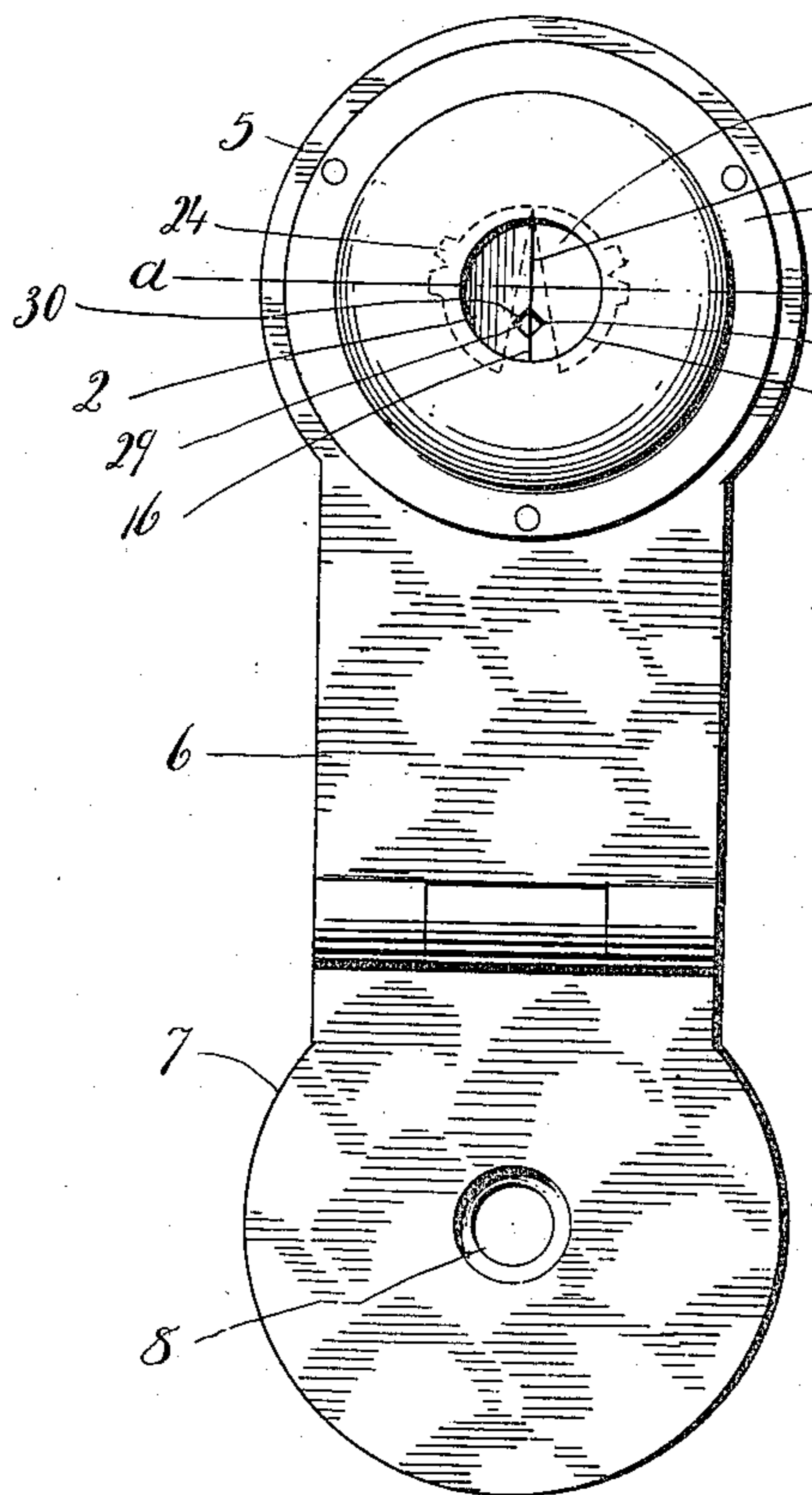


Fig 2.

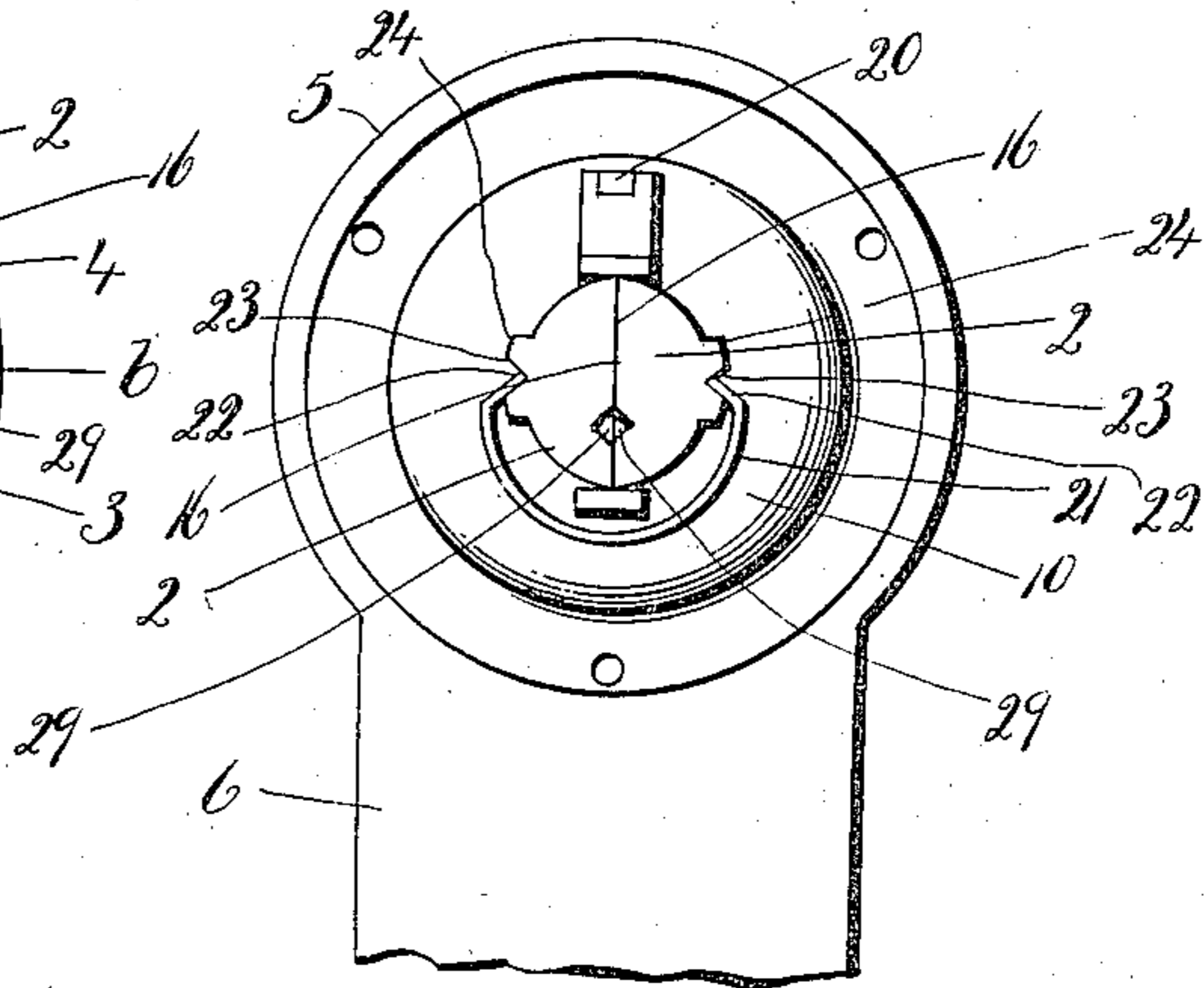


Fig 3.

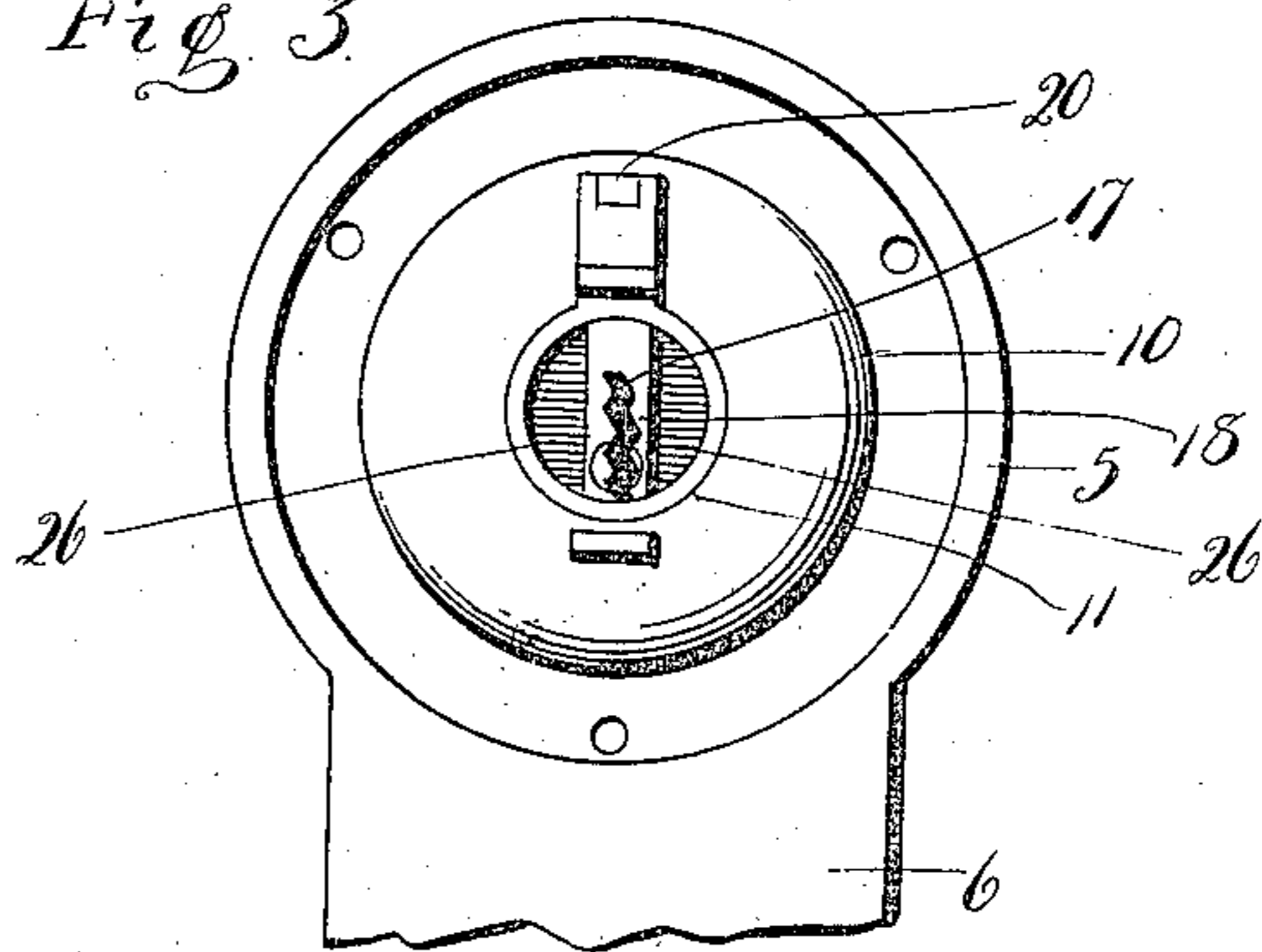


Fig 4.

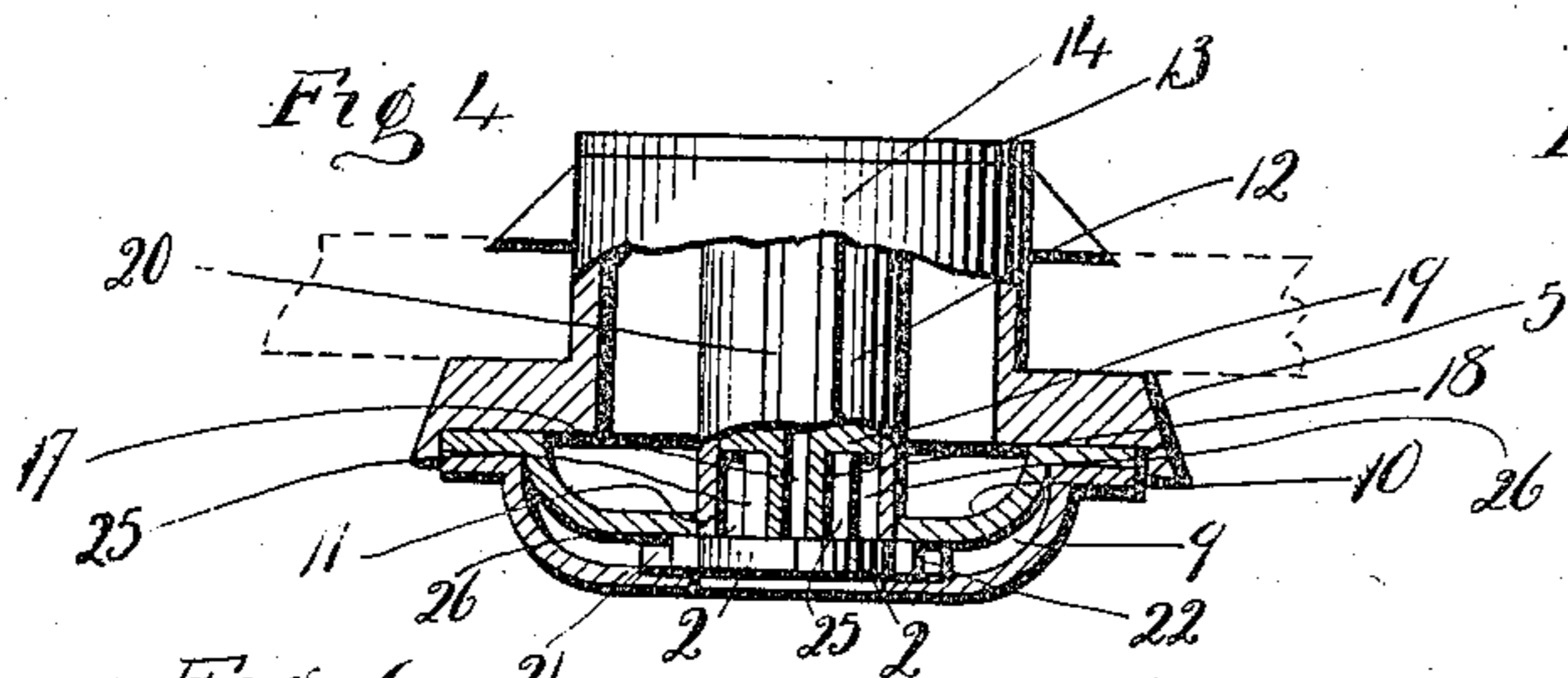


Fig 5.

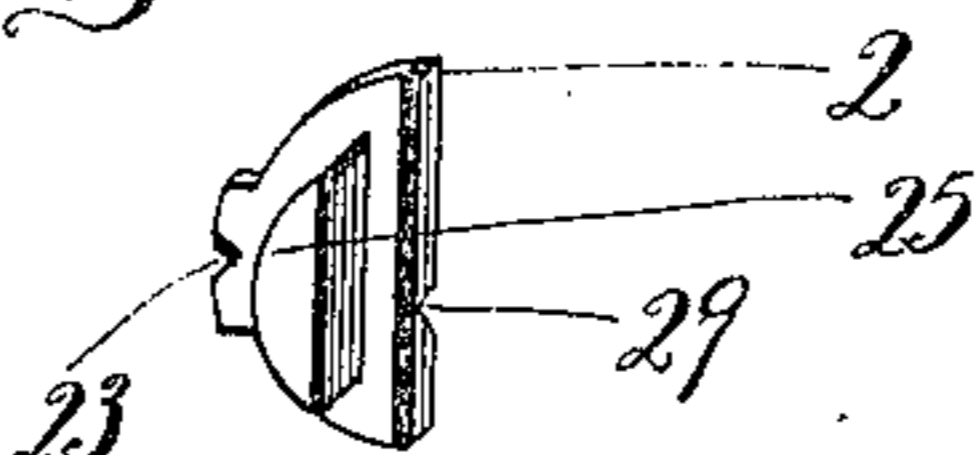


Fig 8.

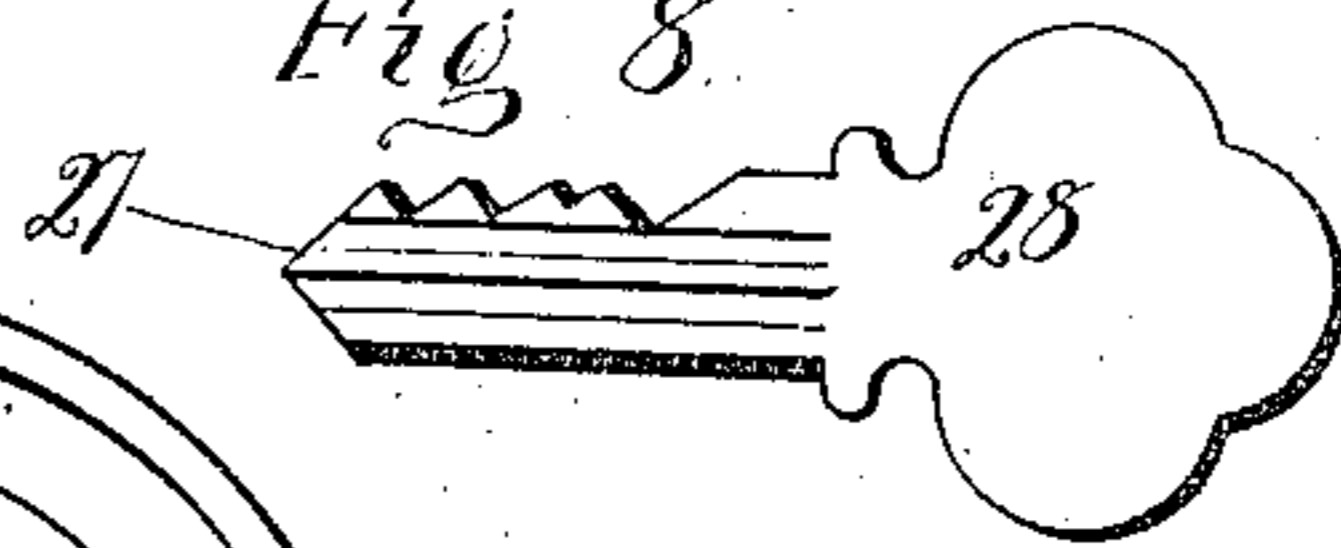


Fig 6.

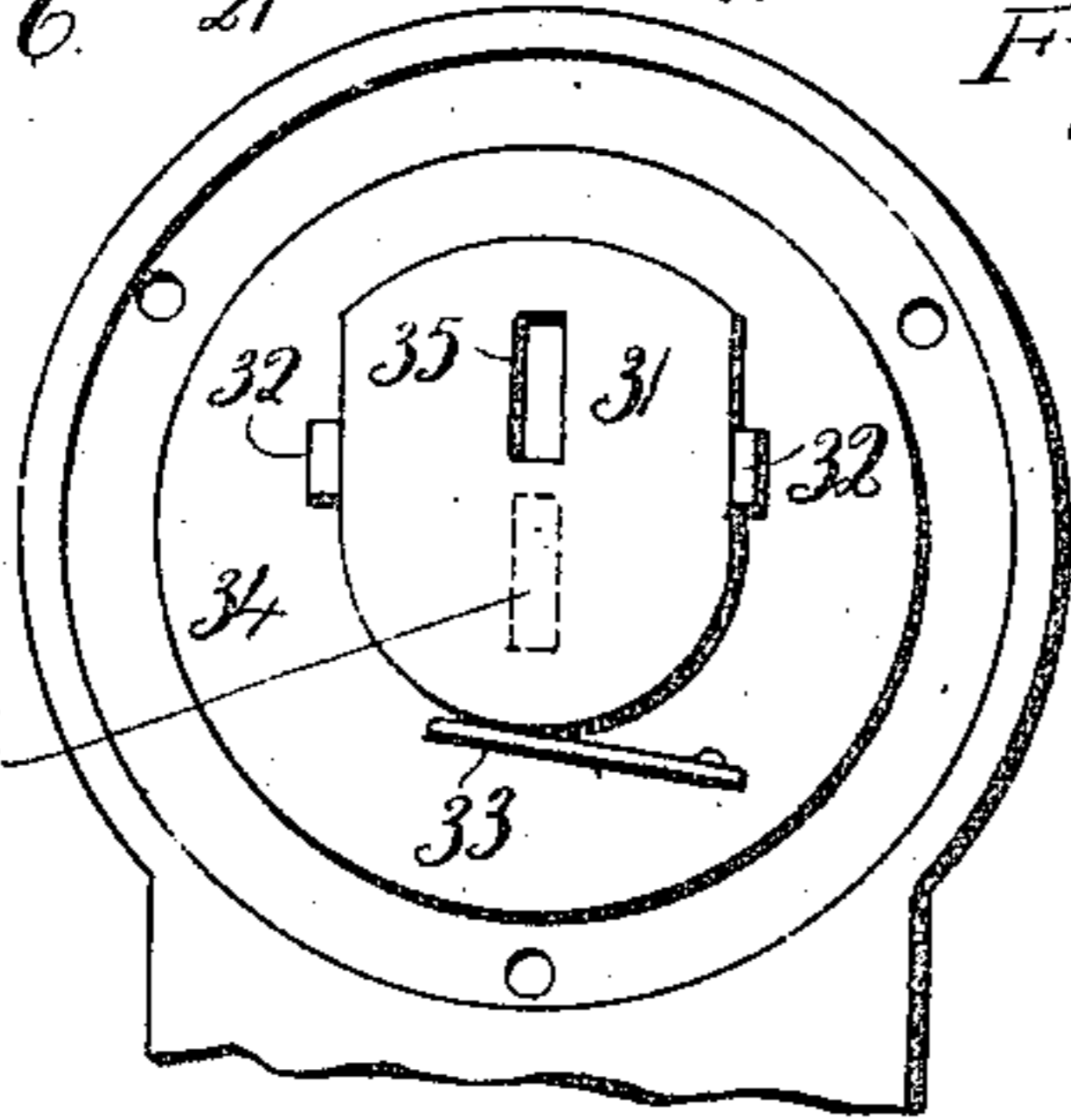
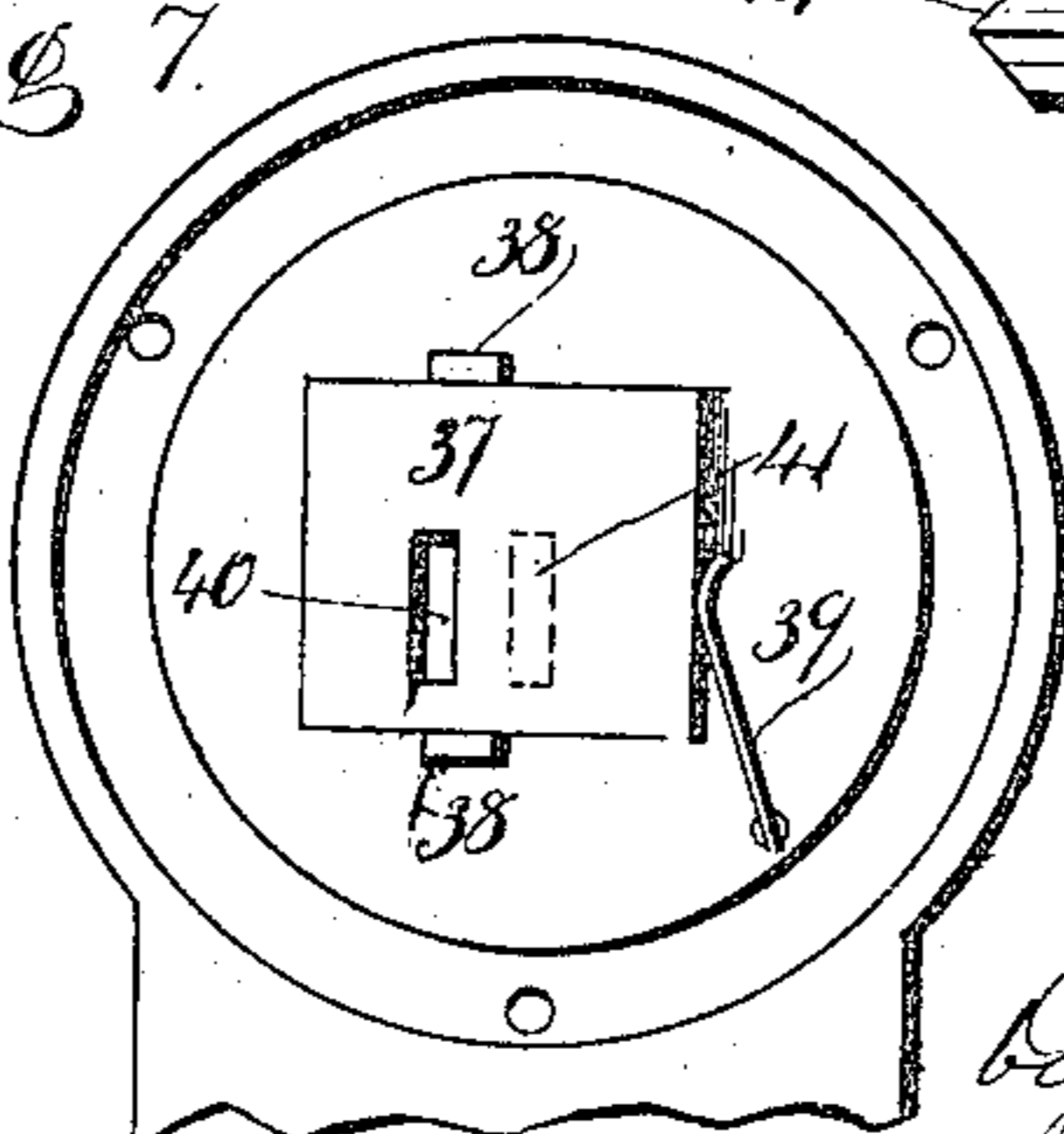


Fig 7.



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KEYHOLE-COVER FOR LOCKS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES ROCHE, a citizen of the United States, residing at Terryville, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Keyhole-Covers for Locks; and I do hereby declare the following, when taken in connection with the accompanying drawings and the numerals of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a view in front elevation of a pin-tumbler trunk lock provided with a keyhole cover constructed in accordance with my invention, the two parts of the cover being shown in their open positions by broken lines. Fig. 2 a broken view in elevation showing the upper end of the hasp with the boss-like cap or outer shell of the lock removed so as to expose the two gates of the key-hole cover and the inner shell of the lock. Fig. 3 a corresponding view with the two gates of the key-hole cover and their operating-spring removed. Fig. 4 a view in horizontal section on the line *a—b* of Fig. 1. Fig. 5 a detached perspective view of one of the key-hole cover gates. Fig. 6 a broken view in front elevation corresponding to Fig. 2 but showing a modified form of keyhole cover. Fig. 7 a corresponding view of still another modification. Fig. 8 a detached view of the key.

My invention relates to an improvement in key-hole covers for locks, the object being to produce a simple, compact, convenient and effective device, constructed with particular reference to the adequate protection of the key-hole cover in locks subject to the roughest usage, such as trunk-locks.

With these ends in view my invention consists in the construction and arrangement of parts hereinafter described and pointed out in the claim.

In carrying out my invention, herein shown as applied to a pin-tumbler trunk-lock, though not so limited in use, I locate a key-hole cover composed of two corresponding plate-like segmental members or gates 2, directly back of a circular opening 3 formed in and concentric with the boss-like outer casing or shell 4 of the lock, the said shell being secured within the circular upper

end 5 of the hasp 6 which is pivoted to a plate 7 designed to be secured in place by a bolt passing through bolt-hole 8 in its center in the ordinary manner. The said outer shell 4 confines the gates 2 in a shallow concentric chamber 9 formed between its inner face and the outer face of a corresponding boss-like inner shell 10 also set within the circular end 5 of the hasp 6 and formed with an opening 11 receiving and supporting the forward end of the cylinder 12 the rear end of which is supported by a circular plate 13 secured to a tubular housing 14 from which the bolts 15 project, the said housing 14 extending rearward at a right angle from, and concentric with, the circular upper end 5 of the hasp 6. The outer and inner shells 4 and 10 are concentric with the tubular housing 14 aforesaid.

The gates 2 forming the two members of the key-hole cover have straight inner edges 16 which, when in contact, completely cover the key-hole 17 entering a rib 18 formed upon the forward end of the rotary plug 19 which is furnished with the usual sliding cover 20 for the retention of the pin-tumblers which are not shown. For the purpose of holding the straight edges 16 of the gates 2 normally in contact, I employ a bowed spring 21 the ends of which are turned inward to form fingers 22 entering notches 23 in lugs 24 upon the outer edges of the gates 2, the lateral movement of which is limited by their provision with segmental stems 25 entering spaces 26 on the opposite sides of the rib 18 in the forward end of the plug 19.

For the purpose of forcing the gates 2 apart by the point 27 of the flat key 28 as the same is inserted into the key-hole 17 for setting the pin-tumblers, I form two notches 29 just below the vertical centers of the edges 16 of the gates 2, these two notches being located opposite each other and together forming a shallow conical recess 30 which does not, however, extend through the gates. On account of the beveled form of these notches the key is enabled to wedge, as it were, the gates 2 apart against the tension of the spring 21, whereby they are held apart as long as the key is in the lock; but when the key is removed from the lock, the spring 21 at once asserts itself to draw the gates together so as to bring their edges 16

into contact, and thus entirely cover the key-hole 17 from which they exclude all foreign matter, whether solid or fluid.

In the construction shown by Fig. 6 of the drawings, I employ a one-piece key-hole cover in the form of a vertically movable sliding plate-like gate 31 located between guide-posts 32, actuated by a spring 33 and confined between the inner and outer shells of the lock, only the inner shell 34 being shown in the drawing. This gate 31 is formed with a key-hole 35 normally located above the key-hole proper 36 of the lock, shown by broken lines. In operating the key-hole cover 31, the point of the key is inserted into the key-hole 35, after which the cover 31 is pushed down against the tension of the spring 33, until the key-hole 36 proper of the lock is exposed. When the key is removed the spring 33 operates to return the key-hole cover 31 to its normal position in which its lower portion entirely covers the key-hole 36.

In the modified construction shown by Fig. 7 of the drawings, the key-hole cover consists of a horizontally movable plate-like gate 37 located between guide-posts 38, operated by a spring 39 and formed with a key-hole 40. Normally this plate covers the key-hole proper 41 of the lock. In the operation of the gate 37, the key is inserted into the key-hole 40 of the gate which is then pushed laterally from left to right until the key-hole 40 registers with the key-hole 41.

It will be observed that in the modified construction shown by Figs. 6 and 7, as well as in the construction shown by the other figures, the key-hole cover is located within the outer shell or casing of the lock, and hence is both out of the way and protected.

I particularly wish to point out that under

my improved construction the key-hole cover, whether consisting of one or more pieces, is so housed in and protected that it will not be broken or deranged, but continue to perform its proper function even though the lock with which it is associated be subjected to the very roughest possible usage, as in the case of trunk-locks for which the invention was primarily designed.

I do not broadly claim a key-hole cover, but only a key-hole cover when constructed and arranged to be protected against injury as herein shown and described.

I claim:—

In a pin-tumbler trunk lock, the combination with the hasp thereof, of a housing projecting from the inner face of the outer or upper end of the said hasp, one or more bolts projecting laterally from the said housing, a pin-tumbler mechanism mounted in the upper end of the said hasp at a right angle to the plane thereof and controlling the said bolts and provided with a key-way, two concentric shells applied to the outer face of the upper or outer end of the hasp, arranged concentric with the said housing and pin-tumbler mechanism and separated from each other by a shallow chamber, and a key-hole cover located in the said chamber in which it is protected from injury and adapted to be moved edgewise therein for the exposure of the key-way of the pin-tumbler lock by the key when the same is inserted into the lock.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

JAMES ROCHE.

Witnesses:

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