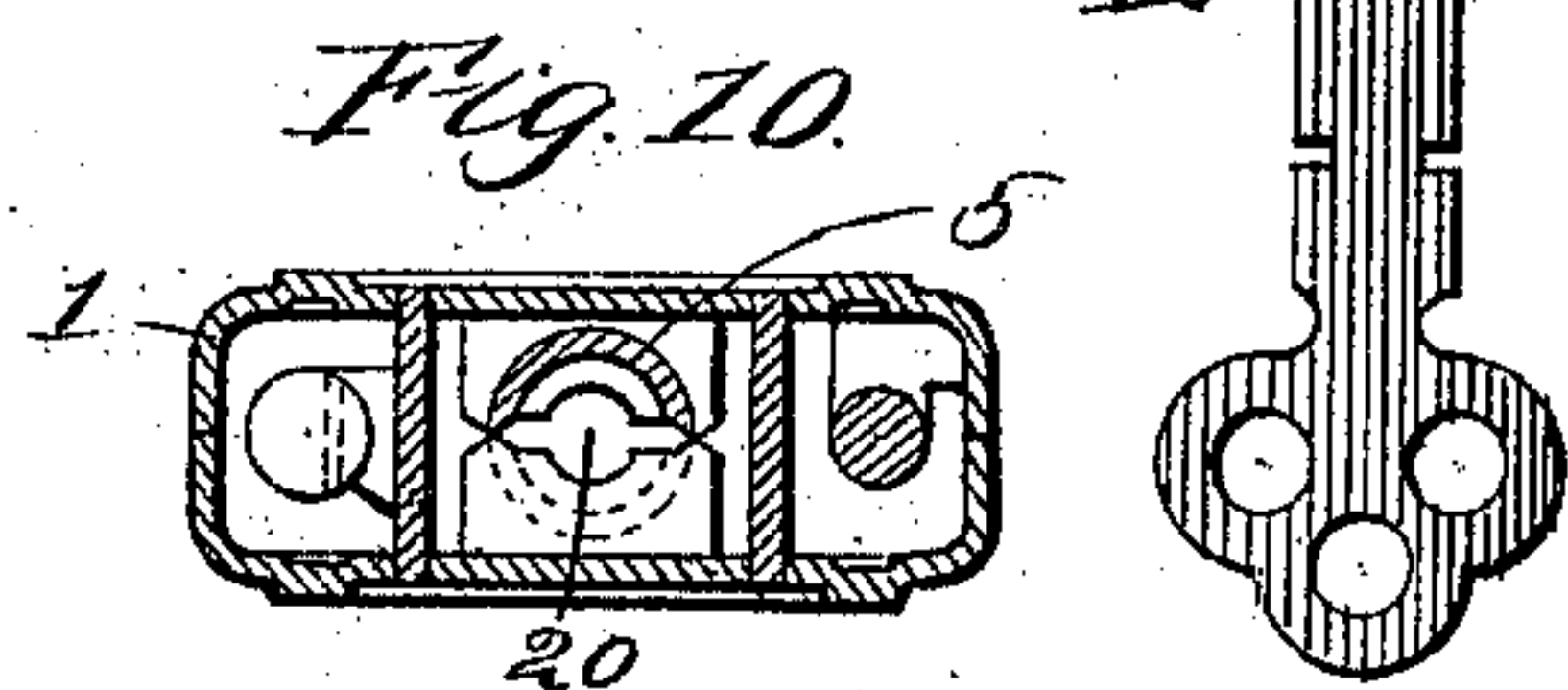
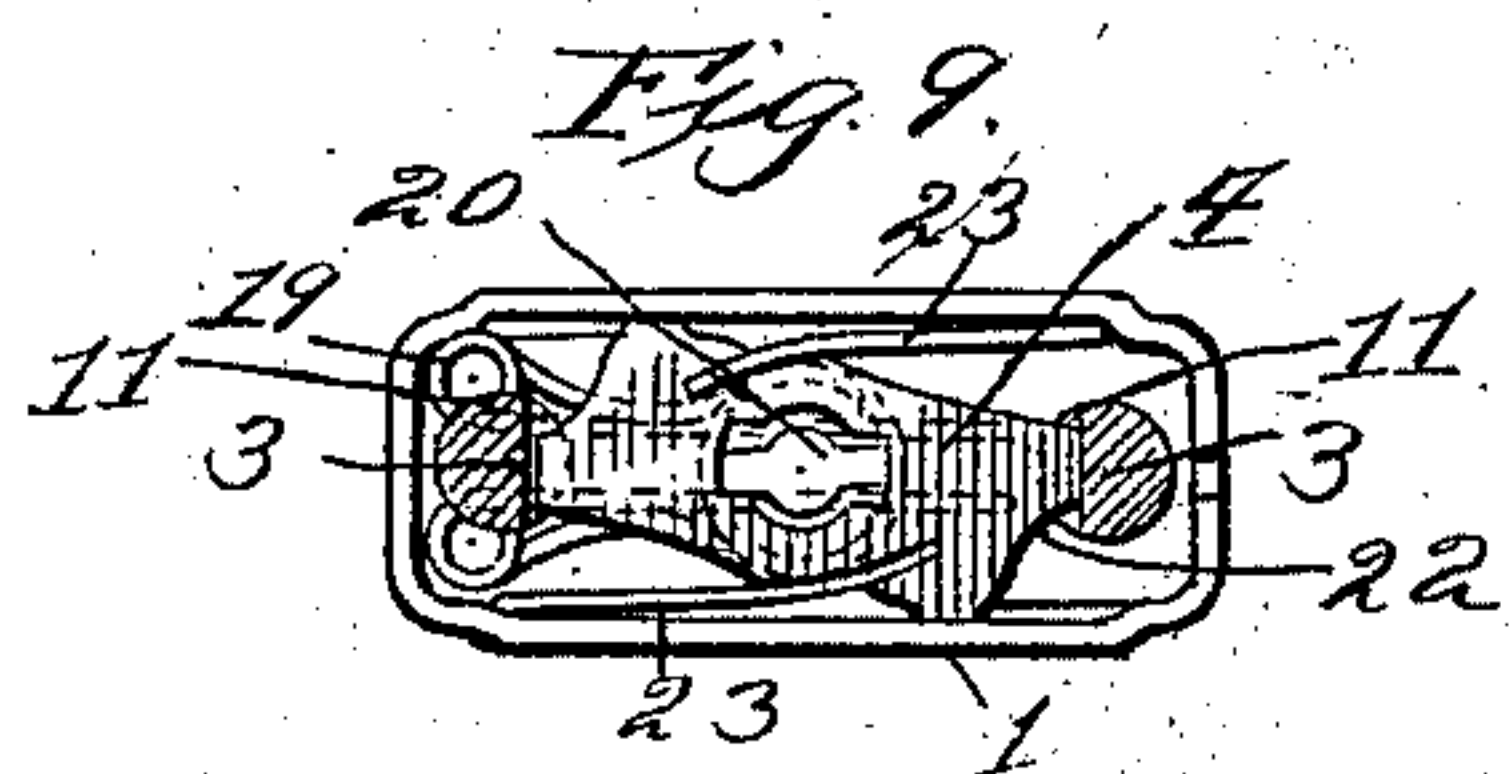
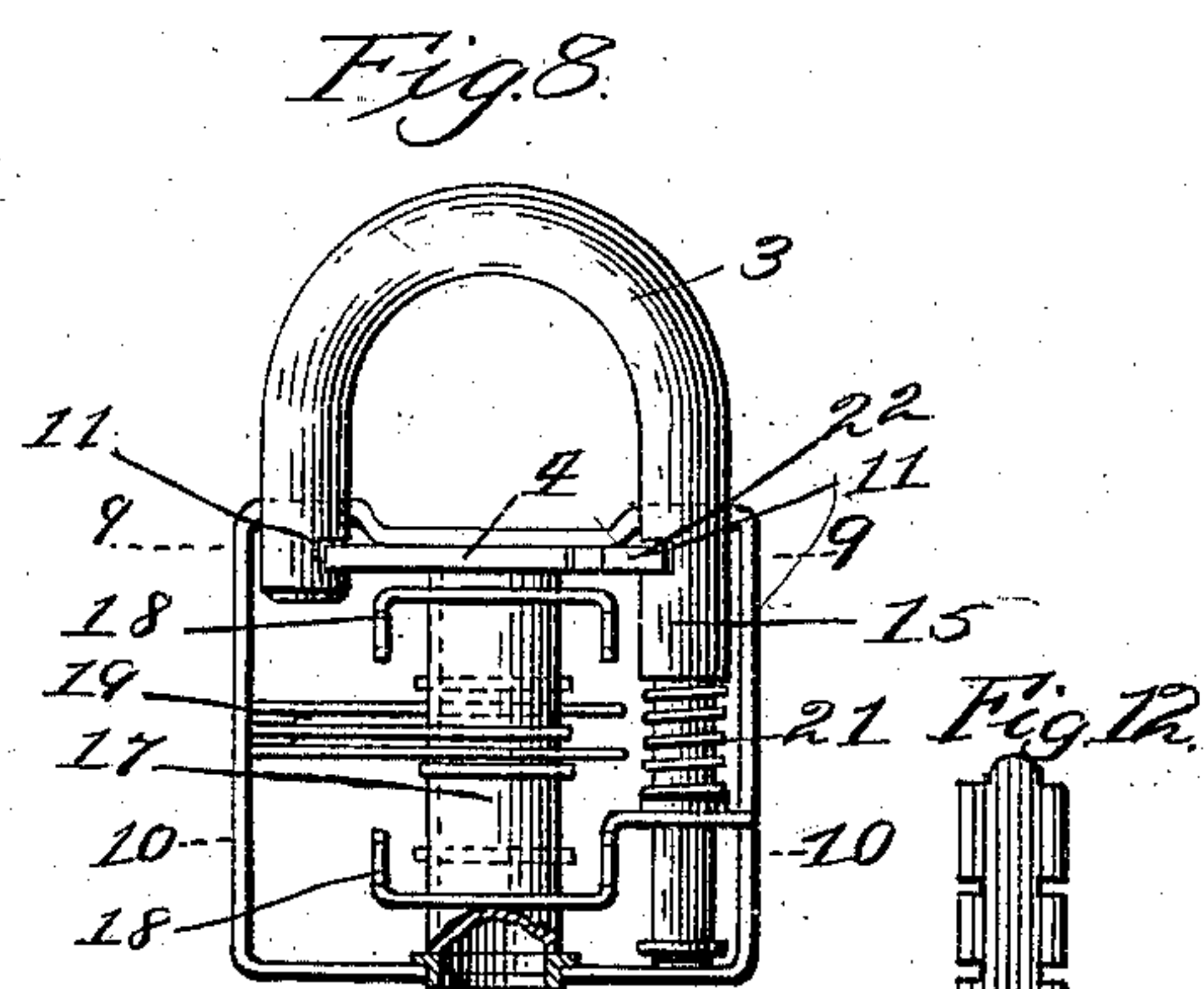
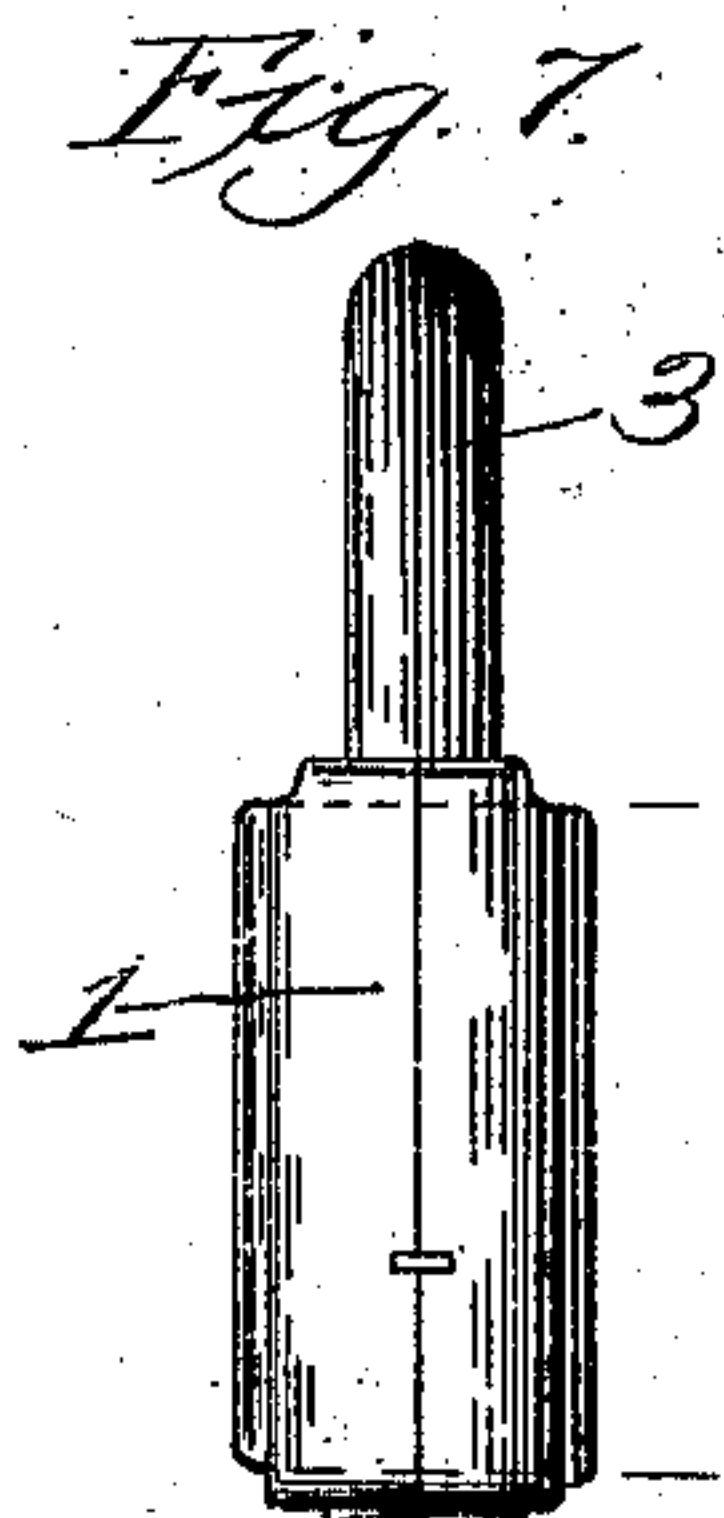
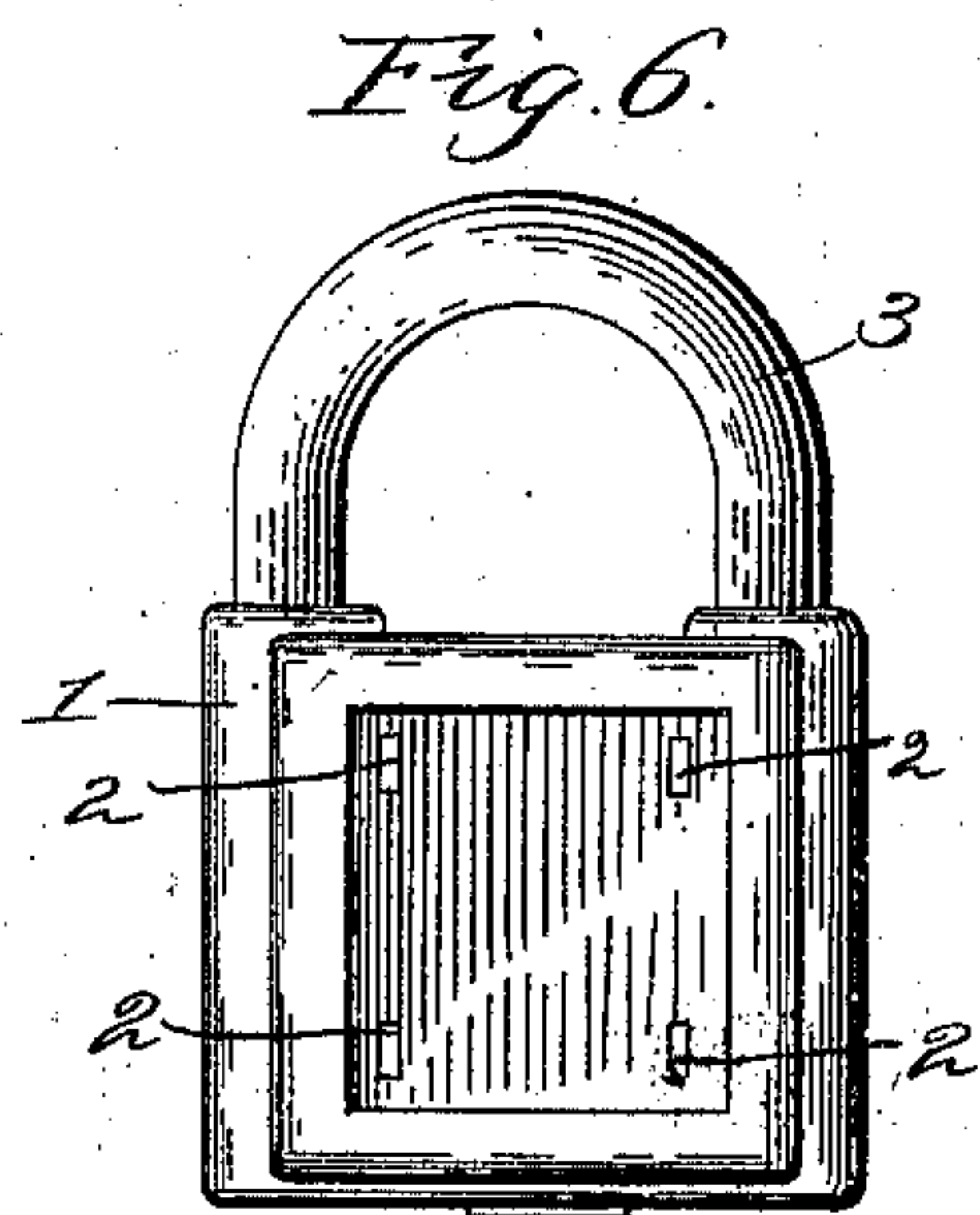
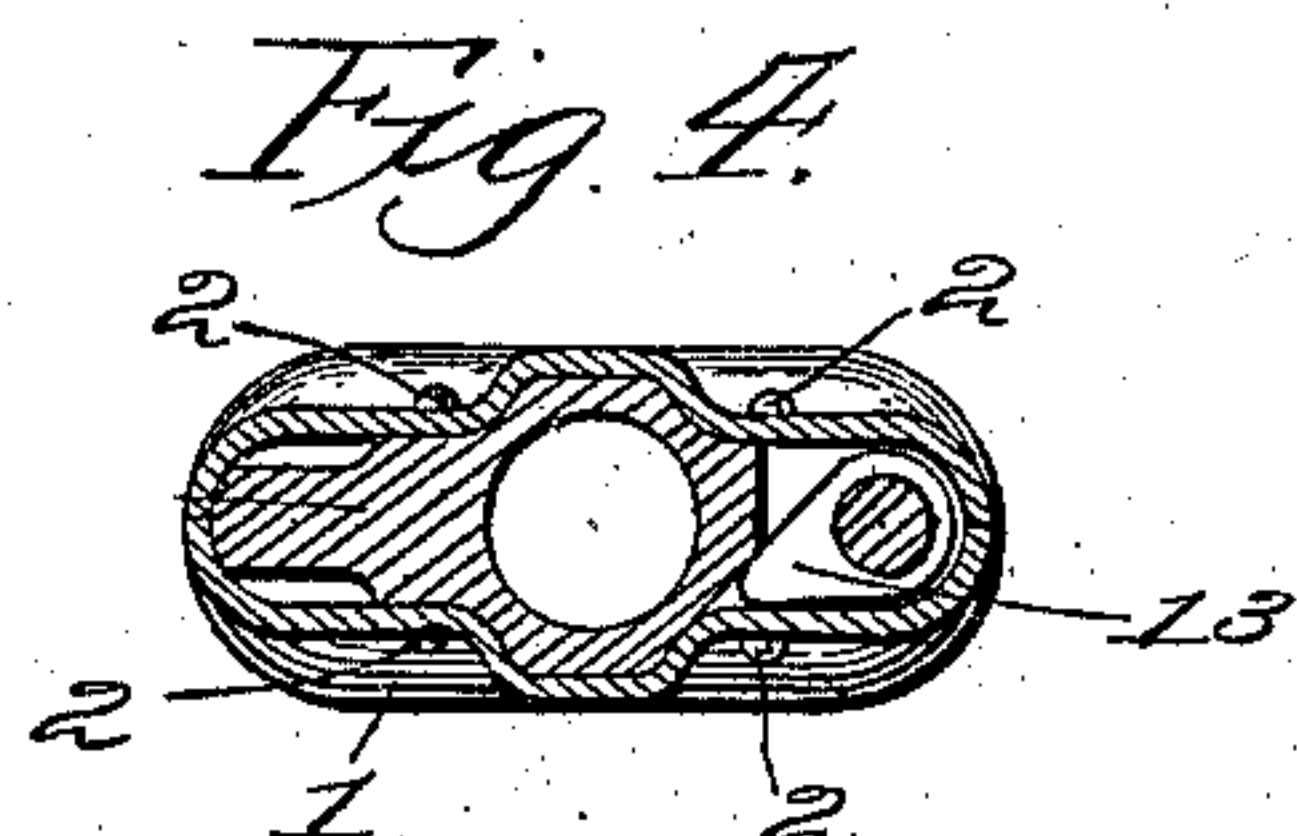
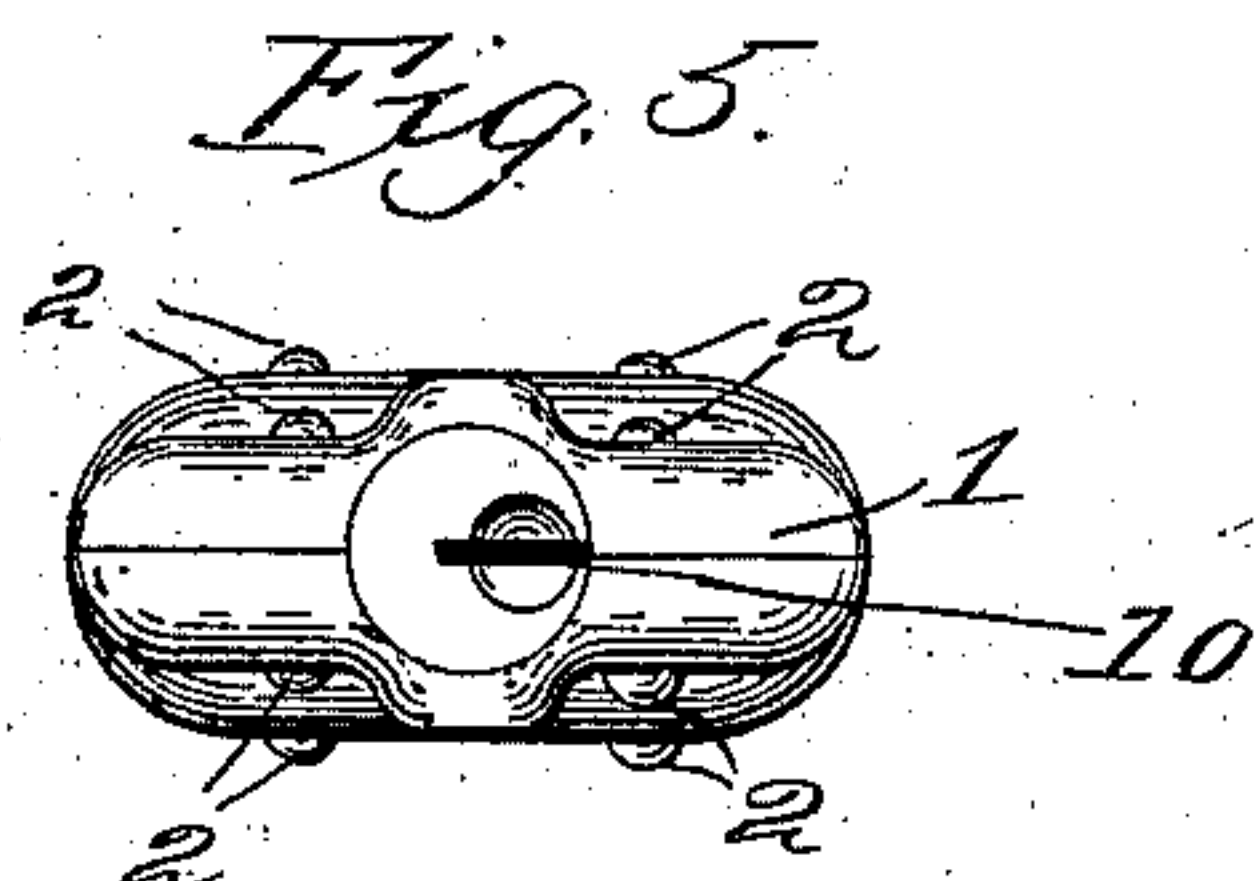
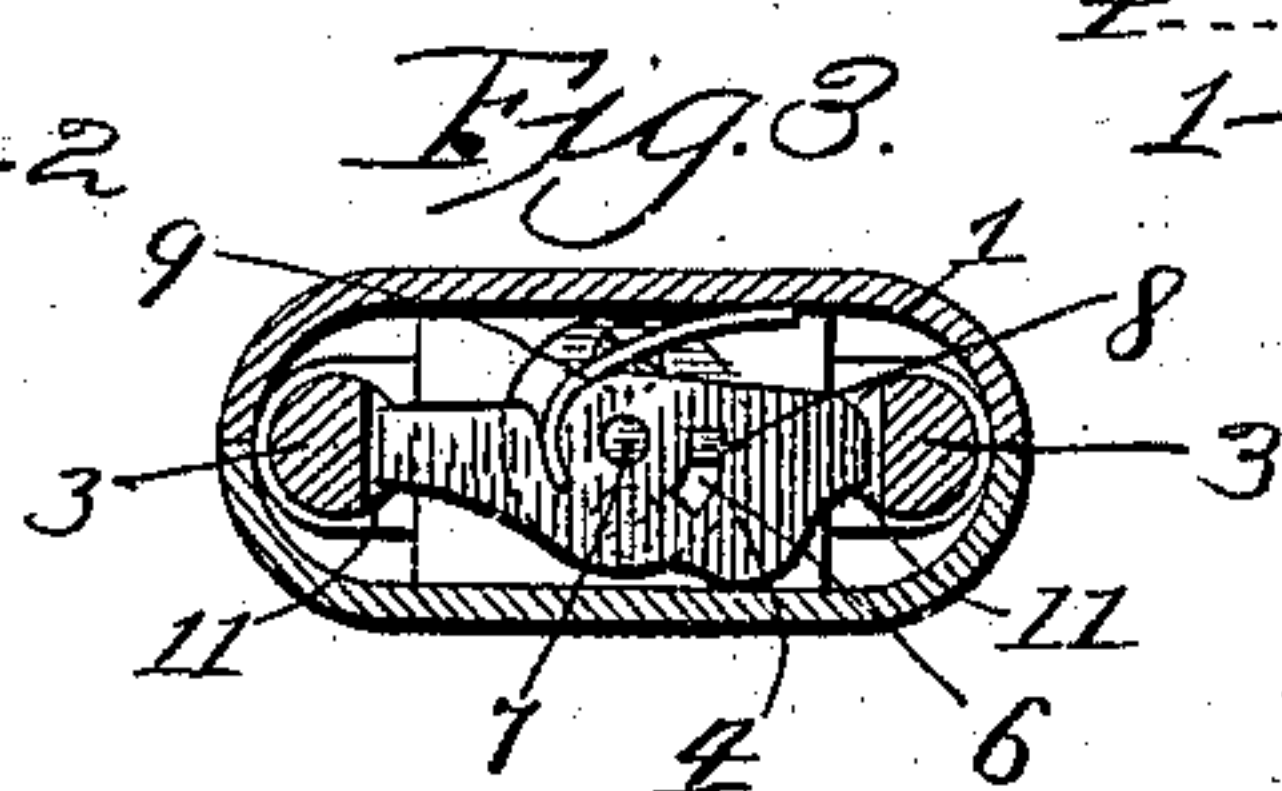
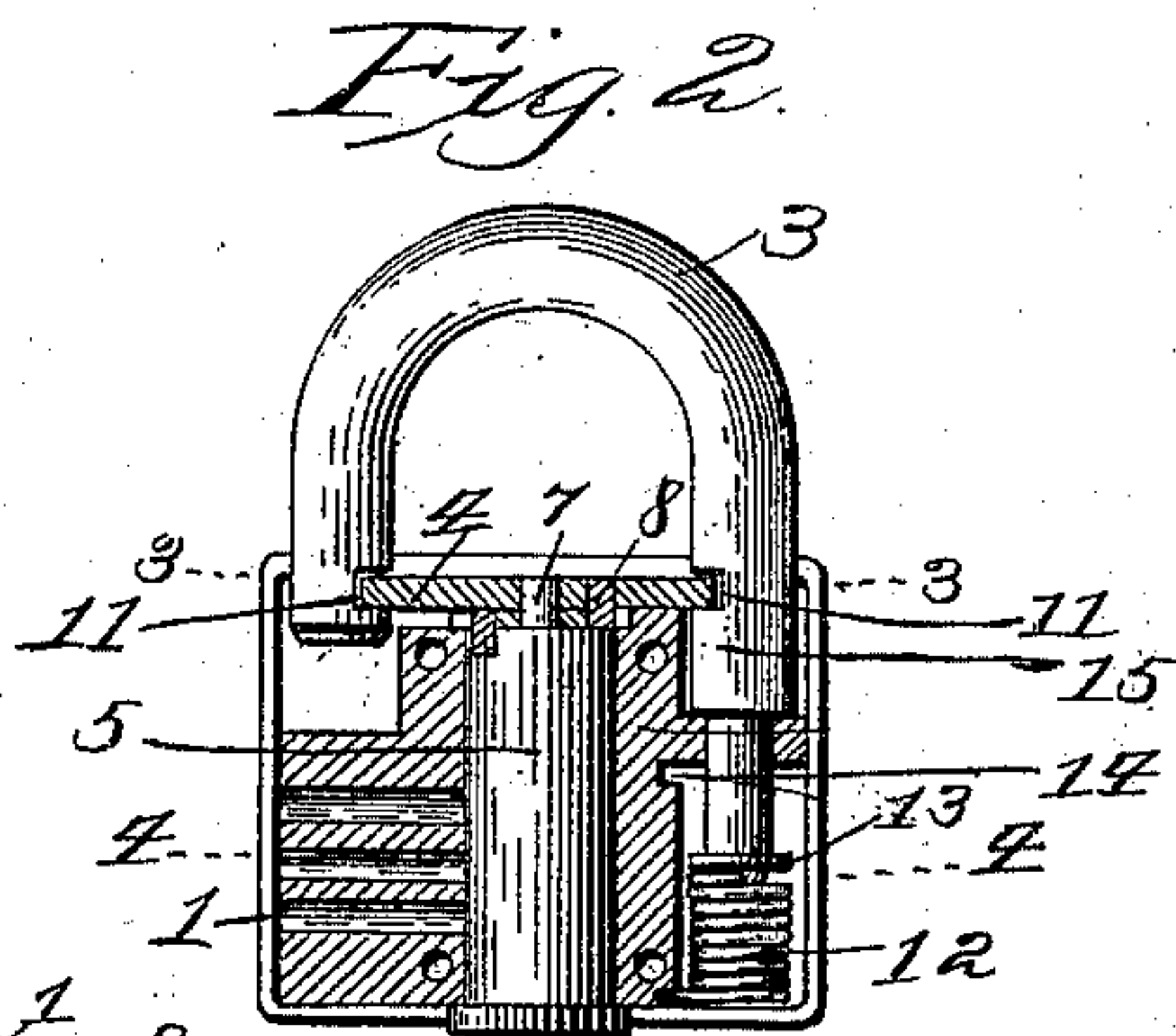
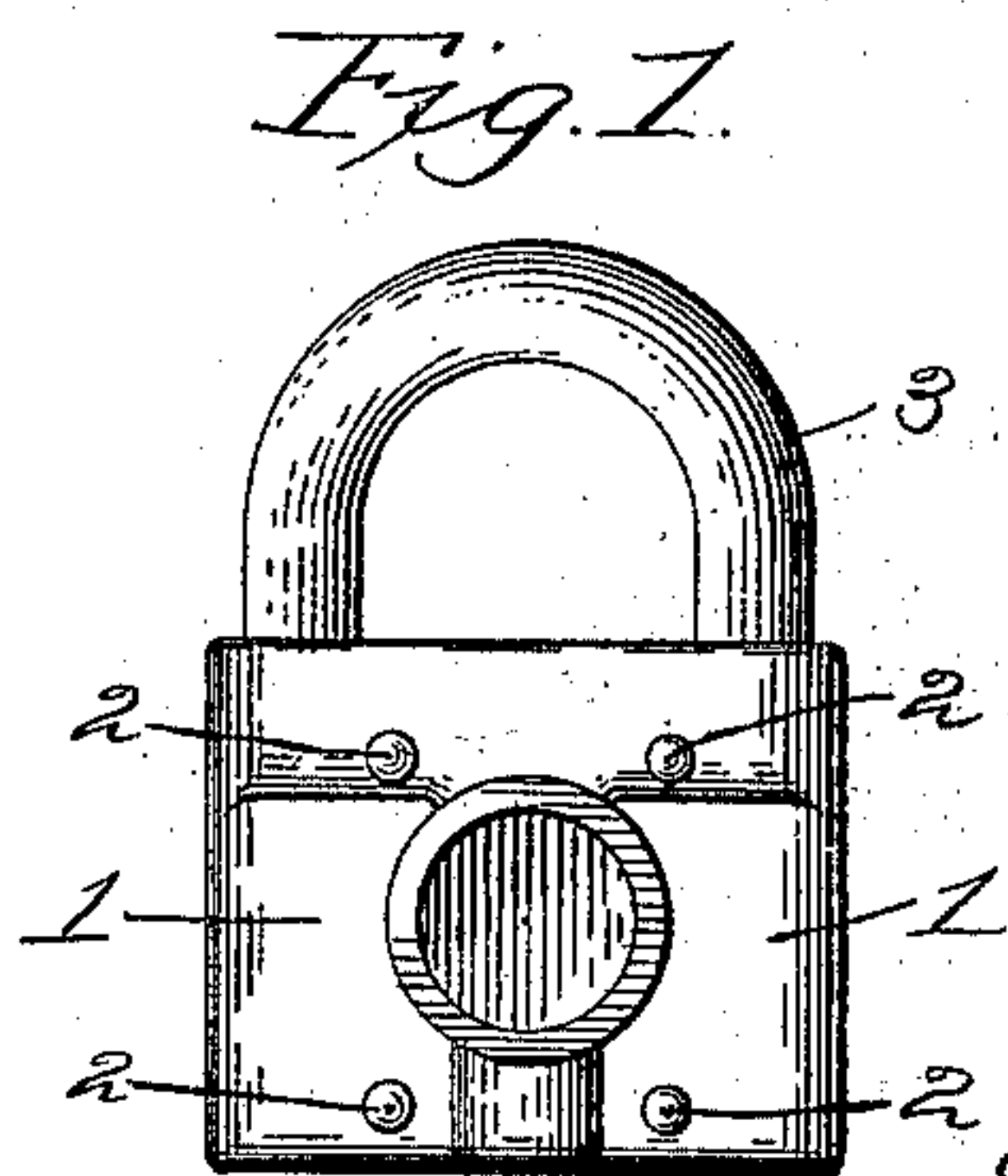


(No Model.)

W. H. TAYLOR.
PADLOCK.

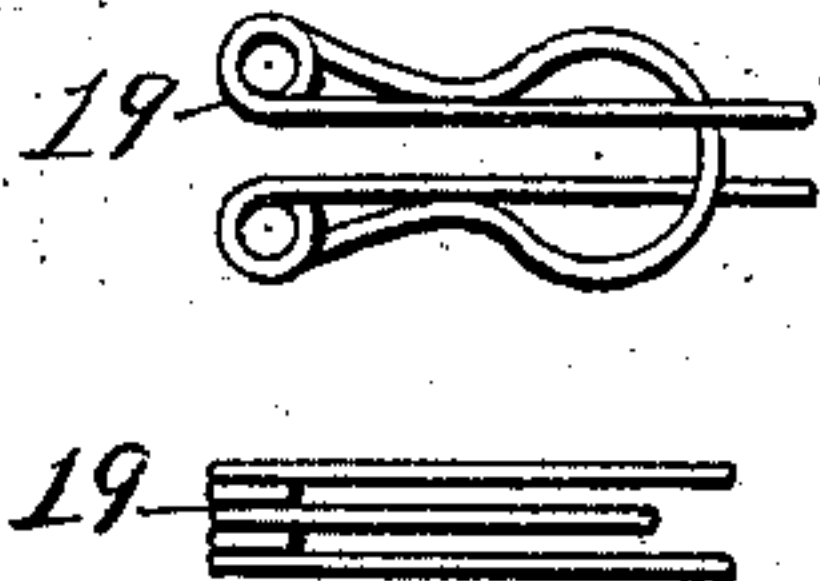
No. 558,623.

Patented Apr. 21, 1896.



Witnesses:

Herbert Bradley
Geo. E. Cruse.



Inventor:
Warren H. Taylor
by Knight Bros.
Attorneys.

UNITED STATES PATENT OFFICE.

WARREN H. TAYLOR, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE
YALE & TOWNE MANUFACTURING COMPANY, OF SAME PLACE.

PADLOCK.

SPECIFICATION forming part of Letters Patent No. 558,623, dated April 21, 1896.

Application filed October 12, 1895. Serial No. 565,500. (No model.)

To all whom it may concern:

Be it known that I, WARREN H. TAYLOR, a citizen of the United States, residing at Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Padlocks, of which the following is a specification.

My present invention relates to an improvement in padlocks, and has for its especial object an improved means for securely locking both ends of the shackle, and particularly in that class of padlocks where the unlocking motion of the shackle is automatic—that is, when the key has performed its unlocking function the shackle will be automatically projected outward and when returned to place will be automatically locked; and my invention consists in applying to the above class of padlocks a rotary latch which engages both ends of the shackle and which when the shackle is projected its end will hold the latch in unlocked position; but when the shackle is returned to the casing it will be automatically locked at both its ends.

In order that my invention may be fully understood, I will proceed to describe the same, with reference to the accompanying drawings, in which—

Figure 1 is a front view of one form of padlock. Fig. 2 is a vertical section thereof. Figs. 3 and 4 are detail sections taken on the lines 3 3 and 4 4, respectively. Fig. 5 is a bottom view of the padlock shown in Fig. 1. Figs. 6 and 7 are respectively a front and edge view of another form of padlock. Fig. 8 is a vertical section of the same. Figs. 9 and 10 are detail sections taken on the lines 9 9 and 10 10, Fig. 8; and Fig. 11 are detail views of the key-springs employed in this form of lock. Fig. 12 is a view of the key employed in the form shown in Figs. 6 to 8.

In the said drawings, and referring more particularly to Figs. 1 to 5, 1 represents the casing, formed in two parts, as shown, and secured together by the pins or rivets 2, and 3 represents the shackle, which is of the usual form. The shackle is secured in the casing by means of the latch 4, which is carried by the barrel 5 of the lock 6. In this form I employ the Yale pin locking mechanism. The latch is fitted on the pivot-pin 7 of the bar-

rel, and it is formed with the slot 6, through which projects a pin 8, also carried by the barrel 5.

9 represents a spring having one end fastened to the latch and the other end bearing against the casing. The operation will be readily seen. The key is inserted in the barrel-opening 10 and the pins adjusted by it so that the barrel can rotate. This rotation turns the latch and disengages it from the grooves 11, formed in each end of the shackle. This will permit the spring 12 to force the shackle upward, and as it reaches its highest position a turn is given the shackle. This is accomplished by allowing the cam 13, carried by the shackle, to enter the groove 14 in the lock-case. When the shackle is in its unlocked position, the latch is prevented by the portion 15 of the shackle from returning to its normal position, and it is only when the grooves 11 are in the position shown in Fig. 2 that the spring will force it to its normal position.

It will be understood that the slot in the latch is long enough to permit the barrel to be turned, so that the key can be removed.

In the form shown in Figs. 6 to 11 the same idea is employed; but the key 16 turns the latch. In this form 17 represents the barrel, which is supported within the case by the stay-pieces 18, and 19 represents the key-springs. The operation of this form is practically the same as in the other. The key 16 is inserted in the barrel and its end engages in an opening 20 in the latch and the turning of the key will disengage it from the grooves in the shackle, when the spring 21 will force the shackle upward. The latch is prevented from returning to normal position by the face 22 thereof coming into engagement with the portion 15 of the shackle. When the grooves are in the proper position, the spring 23 will force the latch into them and thus lock the shackle.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In a padlock, the combination of the casing and shackle, a locking mechanism and rotating latch carried thereby and adapted to engage both ends of the shackle, suitable means for automatically forcing the shackle

out of the casing and turning it, so that the latch will bear against one end of the shackle and be held in unlocked position, substantially as shown and described.

5 2. In a padlock, the combination of the casing, and the shackle, the lock mechanism, a latch pivotally carried by said lock mechanism, and adapted to engage both ends of the shackle, and a loose connection between the
10 latch and lock mechanism, substantially as shown and described and for the purpose set forth.

3. In a padlock, the combination of the cas-

ing and the shackle, a latch movably supported therein and adapted to engage both 15 ends of the shackle, a spring for holding it in engagement with the shackle ends, a suitable opening formed in the latch into which the means for disengaging the latch from the shackle ends fits, substantially as shown and 20 described.

WARREN H. TAYLOR.

Witnesses:

SCHUYLER MERRITT,
GEO. E. WHITE.