

G. H. PINGS.

LOCK.

APPLICATION FILED AUG. 4, 1908

Patented Mar. 30, 1909.

916,778.

Fig. 1.

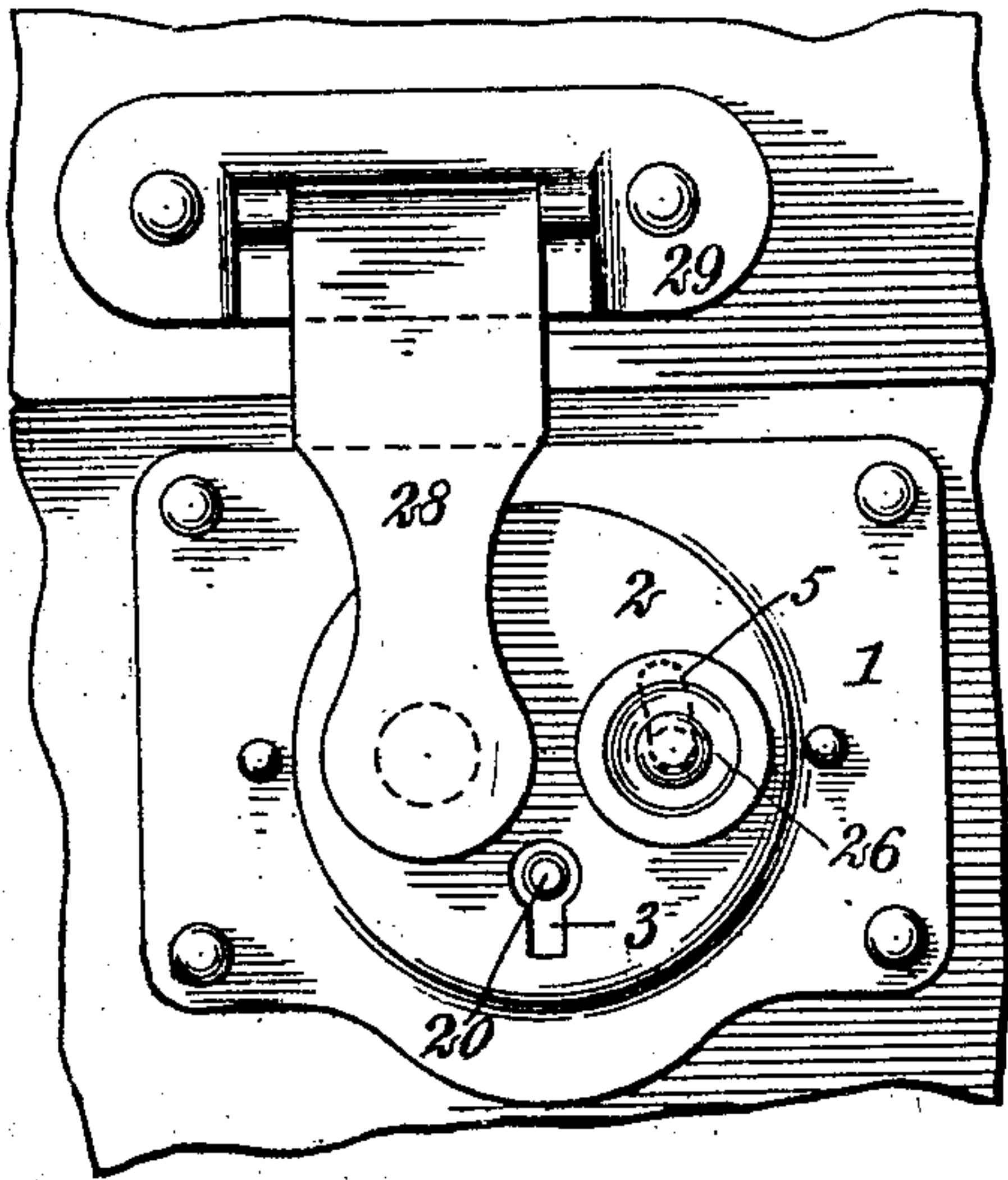


Fig. 2.

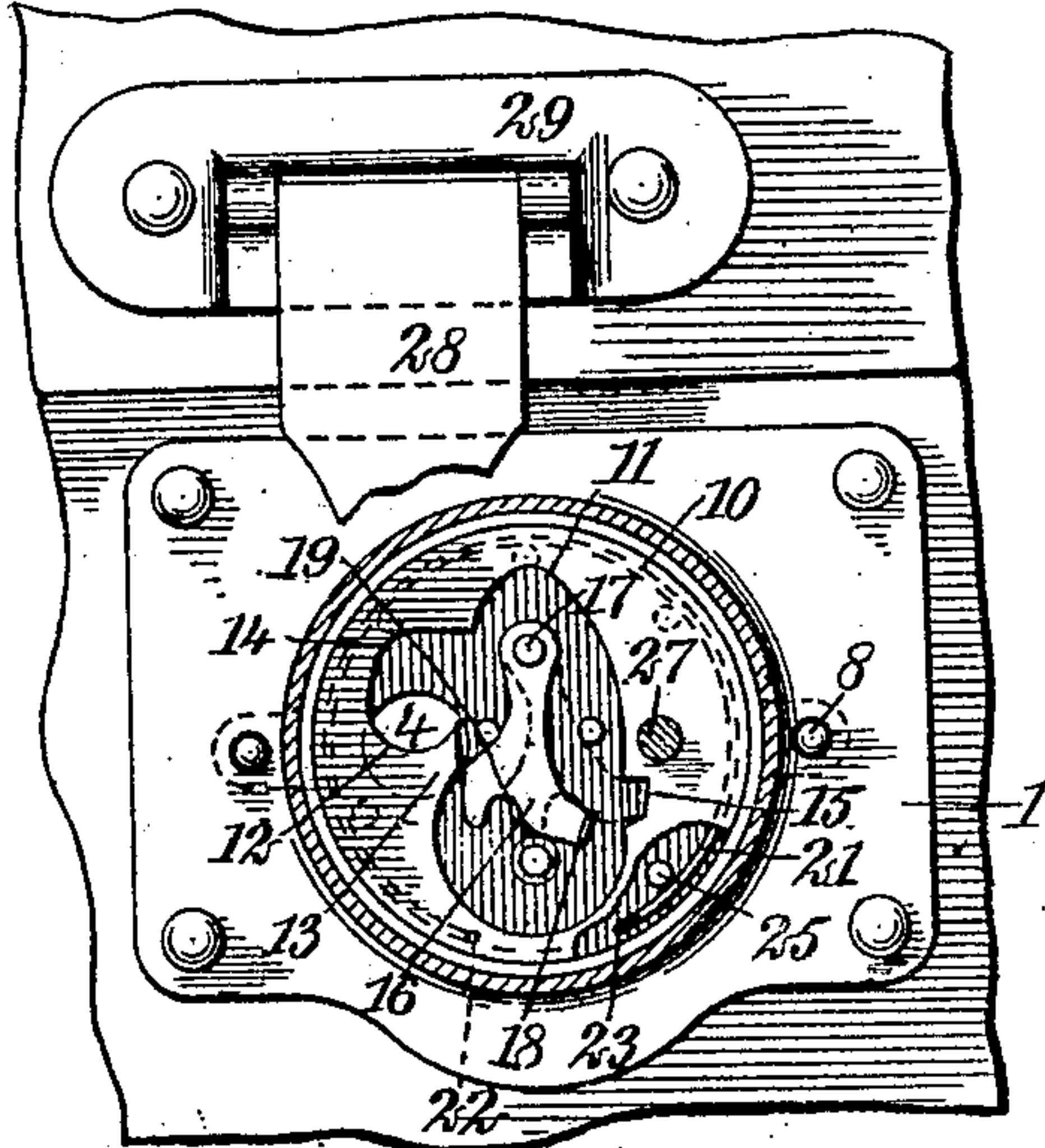


Fig. 3.

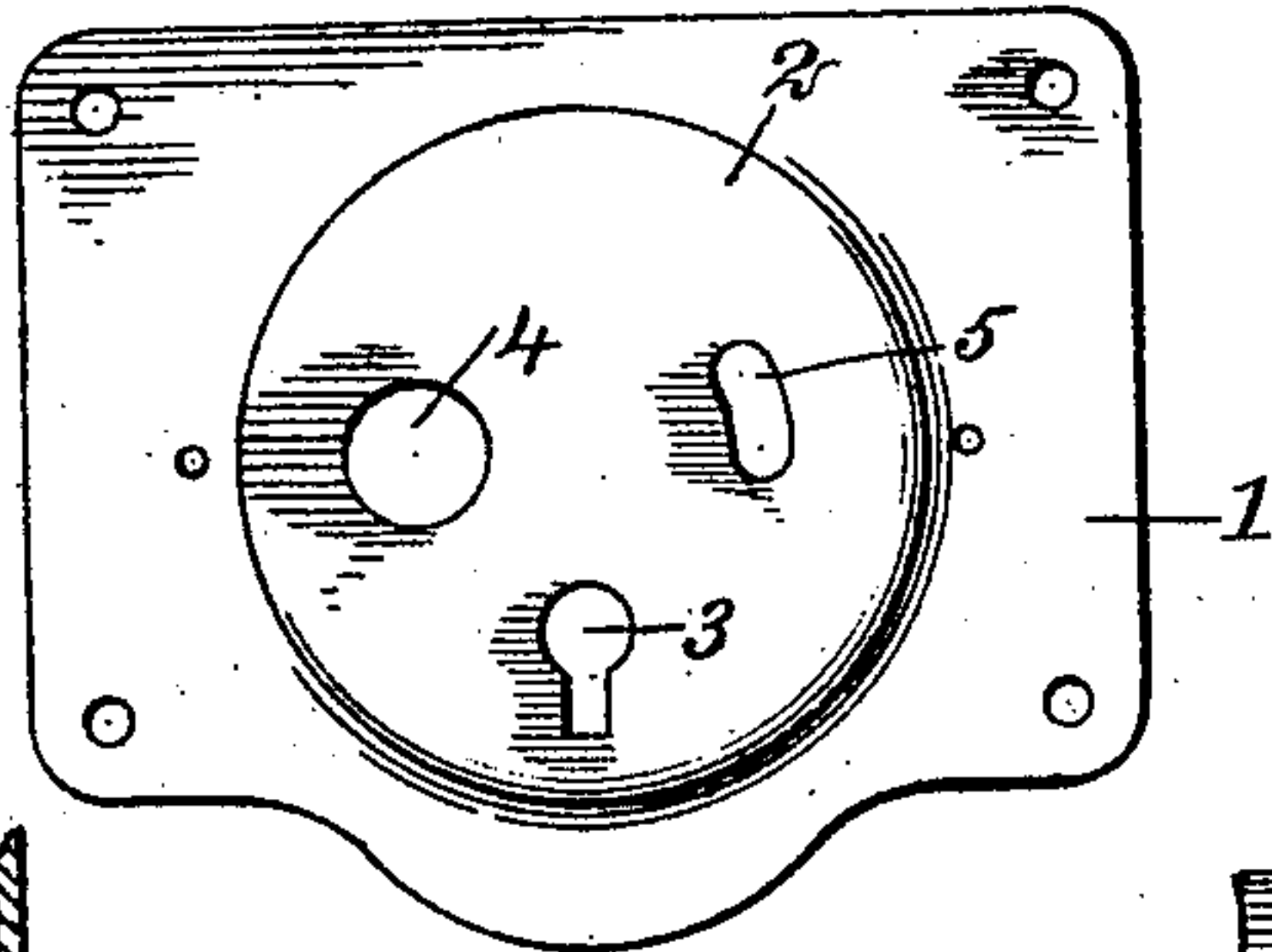


Fig. 4.

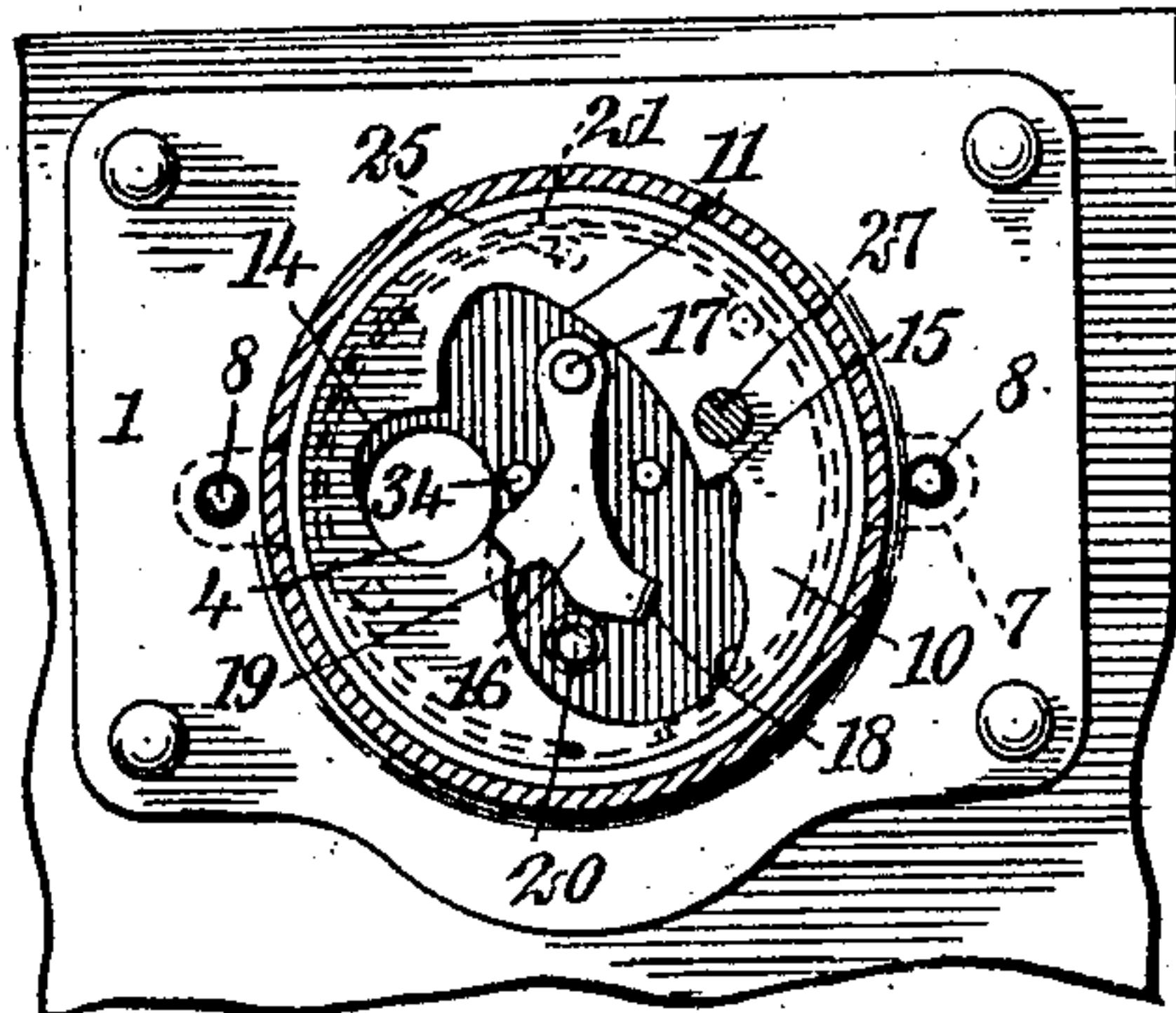


Fig. 5.

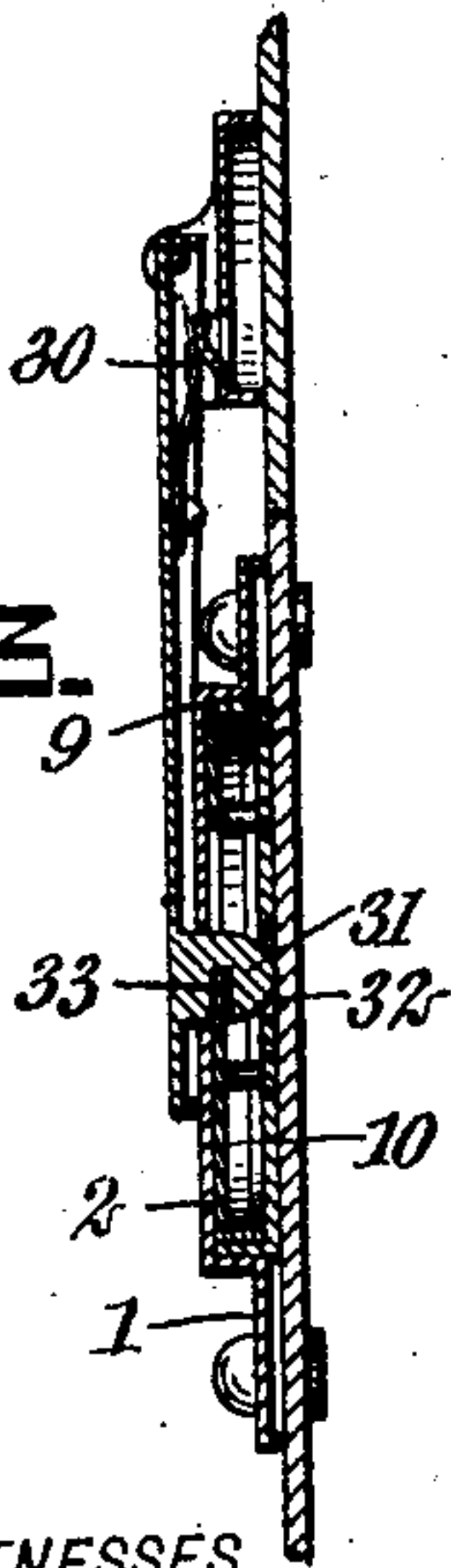


Fig. 6.

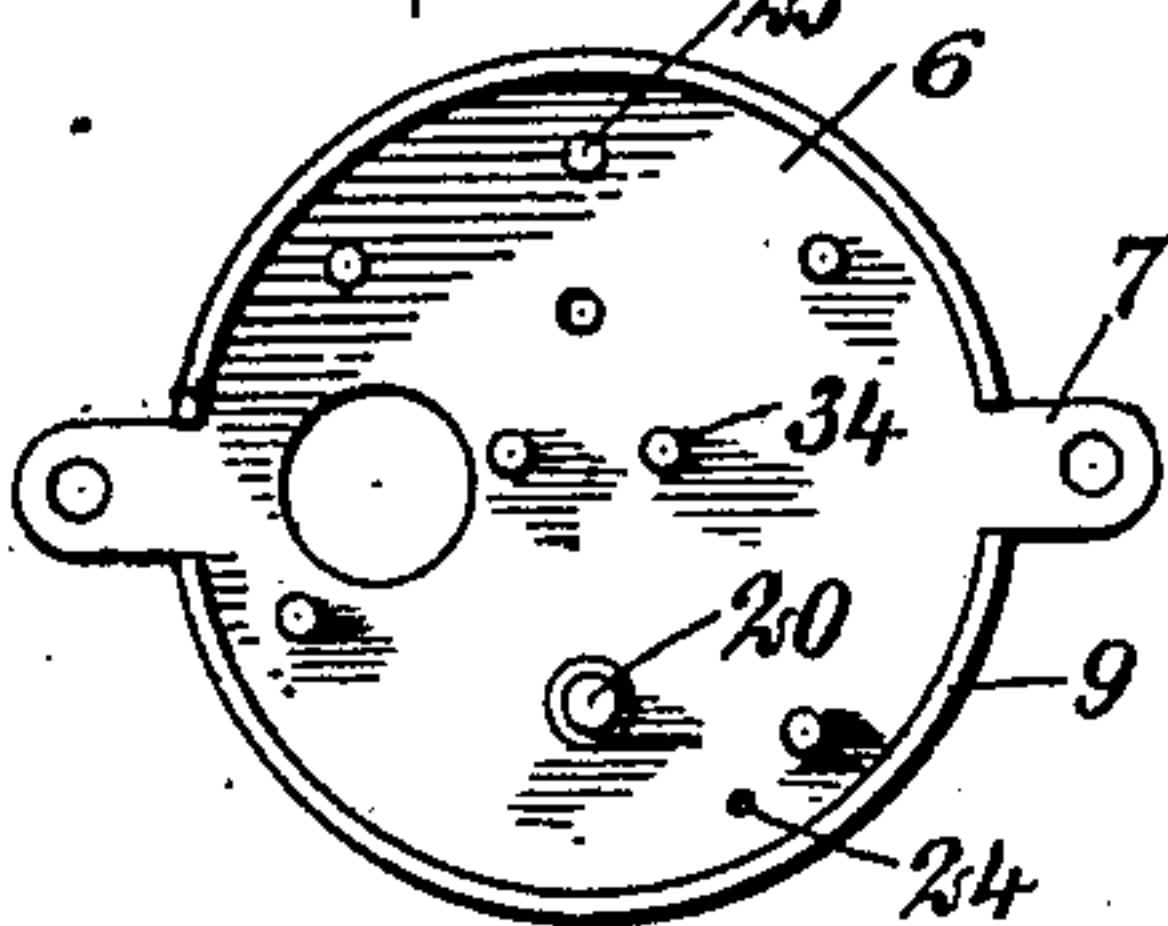
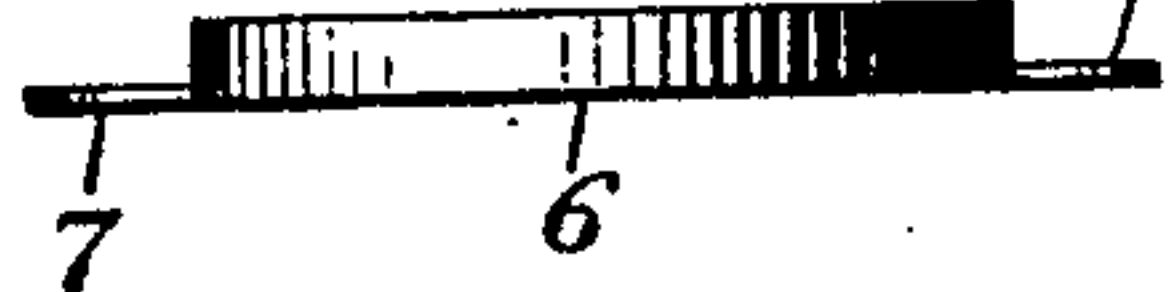


Fig. 7.



WITNESSES

J. G. Hackenberg,

J. D. Dumen

INVENTOR  
George H. Pings  
BY *Mumford & Co.*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

GEORGE H. PINGS, OF NEW YORK, N. Y.

## LOCK.

No. 916,778.

Specification of Letters Patent.

Patented March 30, 1909.

Application filed August 4, 1908. Serial No. 446,880.

*To all whom it may concern:*

Be it known that I, GEORGE H. PINGS, a citizen of the United States, and a resident of the city of New York, Arverne, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Lock, of which the following is a full, clear, and exact description.

This invention relates to locks, and particularly to that type of lock which is employed on bags, satchels, dress suit cases, and light trunks. These locks usually comprise a hasp which is adapted to snap into engagement with the lock. The lock comprises a sliding button which may release the hasp, unless the key has been applied to lock the hasp in position.

The object of this invention is to produce a lock of this general character, which shall be very simple in construction and reliable in operation, and not likely to get out of order.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of a lock constructed according to my invention, showing a portion of the satchel to which the lock is represented as applied; Fig. 2 is a view similar to Fig. 1, but showing the hasp of the lock broken away and showing the lock in section so as to disclose its inner mechanism; Fig. 3 is a vertical section through the lock and hasp; Fig. 4 is a view similar to Fig. 2, but not showing the hasp, this view showing the inner mechanism of the lock in an unlocking position, which is not the case in Fig. 2; Fig. 5 is a front elevation of the escutcheon or face plate of the lock; Fig. 6 is an inner face view of the cover of the lock which is attached to the inner side of the face plate and which constitutes the case for the inner mechanism; and Fig. 7 is an edge view of the same.

Referring more particularly to the parts, 1 represents the escutcheon or face plate of the lock, which consists of a plate of sheet metal having the form shown in Fig. 5, the middle portion of which is pressed outwardly

so as to form a circular dial 2. This dial is provided with a keyhole 3 in its lower part, with a bolt opening 4 disposed toward the left, and with a curved slot 5 disposed at the right, as shown. On the inner face of this face plate, a shallow dished cover or case 6 is attached by means of ears 7 which project laterally from the case and afford means for the application of fastening screws 8, as shown. This case is of circular form of about the same diameter as the dial 2, and it is formed with a circumferential flange 9, the inner edge of which seats against the inner side of the face plate, as shown in Fig. 3. In this way a shallow circular lock chamber is formed behind the dial 2. In this chamber there is mounted a keeper or keeper disk 10, the form of which is clearly shown in Figs. 2 and 4. This disk is free to rotate, but is not pivoted in any manner. Its inner portion is cut away so as to form an enlarged oblong opening 11 of irregular form. At one side this opening 11 is cut away so as to form a curved edge 12 which is normally disposed across the opening 4, as indicated in Fig. 2. This edge 12 is formed on the upper side of a spur 13 which projects toward the right toward the interior of the opening 11, as indicated. Just above this edge 12, the material of the disk is cut away so as to form a pocket 14. On the right-hand side of the opening 11 a detent notch 15 is formed.

On the inner face of the cover 6, a tumbler 16 is pivotally mounted on a rivet 17. This tumbler hangs downwardly, as shown, and is provided with a laterally disposed toe 18; in addition to this the lower end of the tumbler is formed with a notch 19 which is adapted to receive the bit of a key applied in the keyhole 3, and centering on a fixed stud 20 seated in the cover. The keeper or keeper disk 10 is normally held in the position in which it is shown in Fig. 2, by means of a bow spring 21. This bow spring is received in the space between the disk 10 and the cover. It is provided with a forwardly projecting spur 22 received in a small opening in the disk, as shown in Figs. 2 and 4. The spring extends upwardly from this point and is disposed in a circular arc within the case; its lower end 23 is attached in a small opening 24 which extends inwardly in the cover, as indicated in Fig. 6. On the inner face of the cover 6 a plurality of small studs 25 project



inwardly, and these studs form a seat for the rear face of the disk and hold the same in position, as will be readily understood.

On the forward face of the disk a button 26 is attached, the shank 27 of which extends through the slot 5. By means of this button the disk may be rotated against the tension of the spring. The spring normally holds the shank 27 of the button at the lower end of the slot 5, as will be readily understood, but if the button is pushed upwardly in the slot, the disk rotates in a left-hand direction and it can be rotated sufficiently to bring the edge 12 substantially into alinement with the lower edge of the opening 4, as indicated in Fig. 4. This is the unlocking movement which liberates the hasp 28. This hasp is hinged to a plate 29 and tends to move outwardly by the action of a leaf spring 30 attached near the hinge connection, as indicated in Fig. 3. The hasp is provided near its lower end with a stud or bolt 31 which projects inwardly through the opening 4 when the lock is closed. The inner end of this bolt 31 is formed with a rounded nose 32 which engages with the edge 12 and rotates the disk in a left-hand direction so as to permit the hasp to snap into its locked position. In this connection it should be noted that the lower side of the bolt 31 is provided with a notch or recess 33 into which the edge 12 projects when the hasp is locked. If the lock has simply been snapped shut, the parts will have the relation shown in Fig. 2. If it is desired to lock the hasp so that it cannot be released simply by moving the button, the key is applied at the keyhole, and rotated toward the right. The bit of the key will strike the notch 19 and rotate the tumbler 16 toward the right and into the position in which it is indicated in dotted lines in Fig. 2. The toe 18 will then be received in the notch 15 and will lock the disk against rotation. Inasmuch as the disk is not pivoted, although it may have a limited rotation, the disk may be considered as a "floating" disk. On each side of the tumbler 16, a stop pin 34 is provided which limits the lateral swinging movement of the tumbler.

Attention is called to the extreme simplicity of the construction of the lock and to the small number of parts which it embodies. Attention is also called to the small thickness of the lock which admirably adapts it for use as a lock for valises and the like.

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

1. In a lock of the class described, in combination, a face plate having an opening, a hasp having a member adapted to project through said opening, a keeper having an edge projecting under said opening and adapted to engage said member, a button at-

tached to said keeper and disposed on said face plate, said button affording means for shifting said keeper to release said hasp, a spring tending to rotate said keeper, and a member adapted to engage said keeper to lock the same against rotation.

2. In a lock of the class described, in combination, a face plate having an opening, a hasp having a member adapted to project through said opening, a floating keeper mounted behind said face plate, having an edge normally projecting across said opening to engage said member, a bow spring having one end fixed and one end attached to said keeper to rotate the same, a button attached to said keeper and disposed on the face of said face plate, and a movable tumbler adapted to engage said keeper and affording means for locking the same against rotation.

3. In a lock of the class described, in combination, a face plate having an opening therethrough, a hasp having a member adapted to project into said opening, a floating disk mounted behind said face plate and having an edge adapted to engage said member to lock said hasp, a bow spring having one end fixed and one end attached to said disk and tending to rotate the same, said face plate having a slot therein, a button pivoted to said disk at said slot and adapted to rotate said disk to release the hasp, and means adapted to be actuated by a key for said lock for locking said disk against rotation.

4. In a lock of the class described, in combination, a face plate, a case disposed upon the same, said face plate having an opening therein, a hasp having a bolt adapted to project into said opening, a floating disk mounted in said case and having an edge normally disposed across said opening, a spring having one end fixed and the other end engaging said disk to rotate the same, said disk having an opening therein with a notch in the edge thereof, a pivoted tumbler mounted in said case at said opening adapted to be actuated by a key and having a toe adapted to engage said notch to lock said disk against rotation, said face plate having a slot therein, and a button attached to said disk at said slot and normally affording means for releasing said hasp.

5. In a lock of the class described, in combination, a face plate having an opening therein, a hasp having a bolt adapted to project through said opening, a substantially circular case attached to the rear side of said face plate, a floating disk mounted under said case having an edge normally projecting across said opening and adapted to engage said bolt to lock said hasp, a bow spring having one end attached to said case and the other end attached to said disk and tending to rotate the same, said face plate having a slot therein, a button having a shank passing



through said slot and attached to said disk,  
said button affording means for normally ro-  
tating said disk to release said hasp, said  
disk having a notch in the edge thereof, and  
5 a member adapted to be operated by a key  
and adapted to engage said notch to lock  
said disk against rotation.

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

GEORGE H. PINGS.

Witnesses:

F. D. AMMEN,  
EVERARD B. MARSHALL.