

No. 835,304.

PATENTED NOV. 6, 1906.

F. M. INDELLI.  
COMBINATION PADLOCK.  
APPLICATION FILED MAY 28, 1906.

Fig. 1.

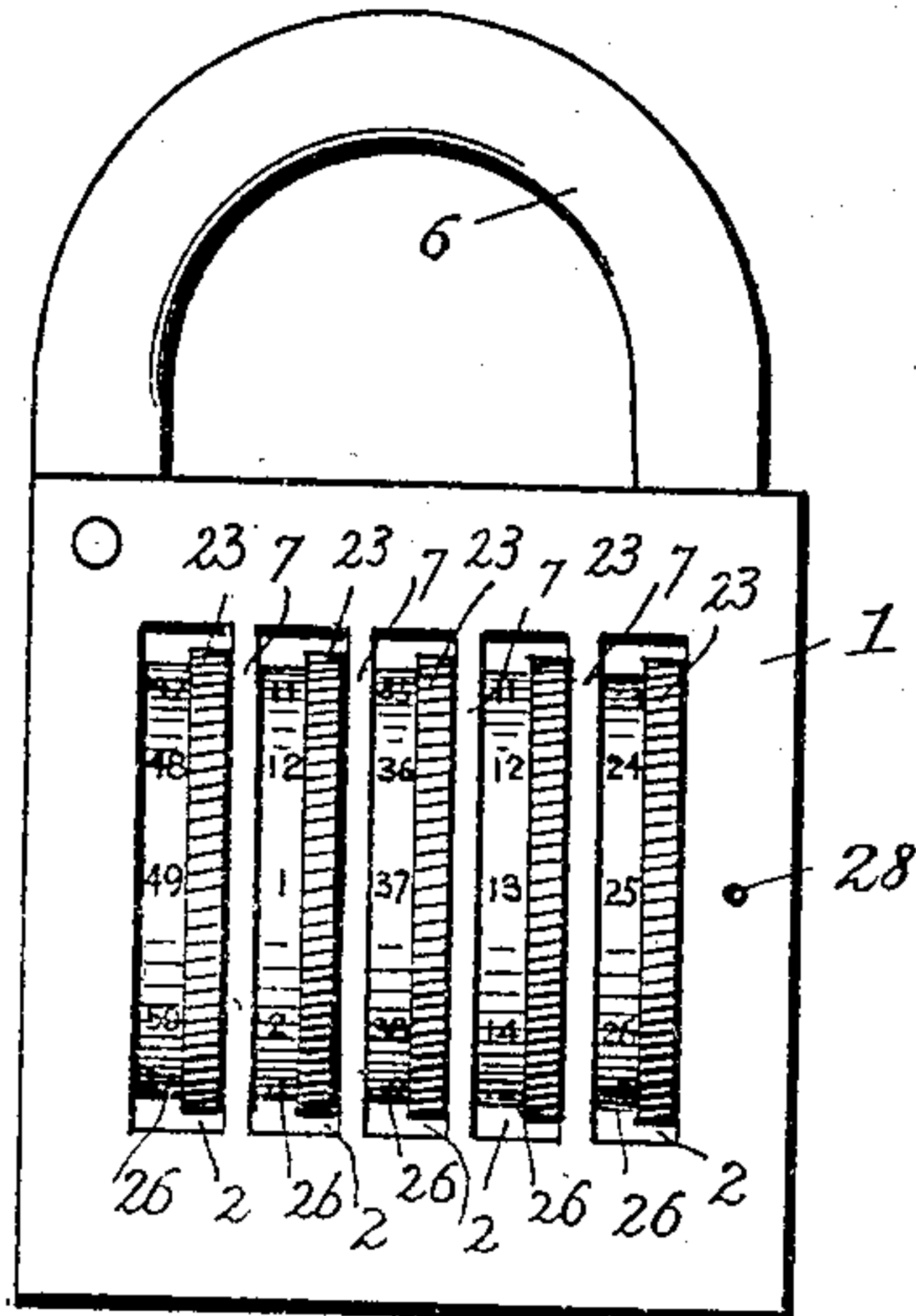


Fig. 2.

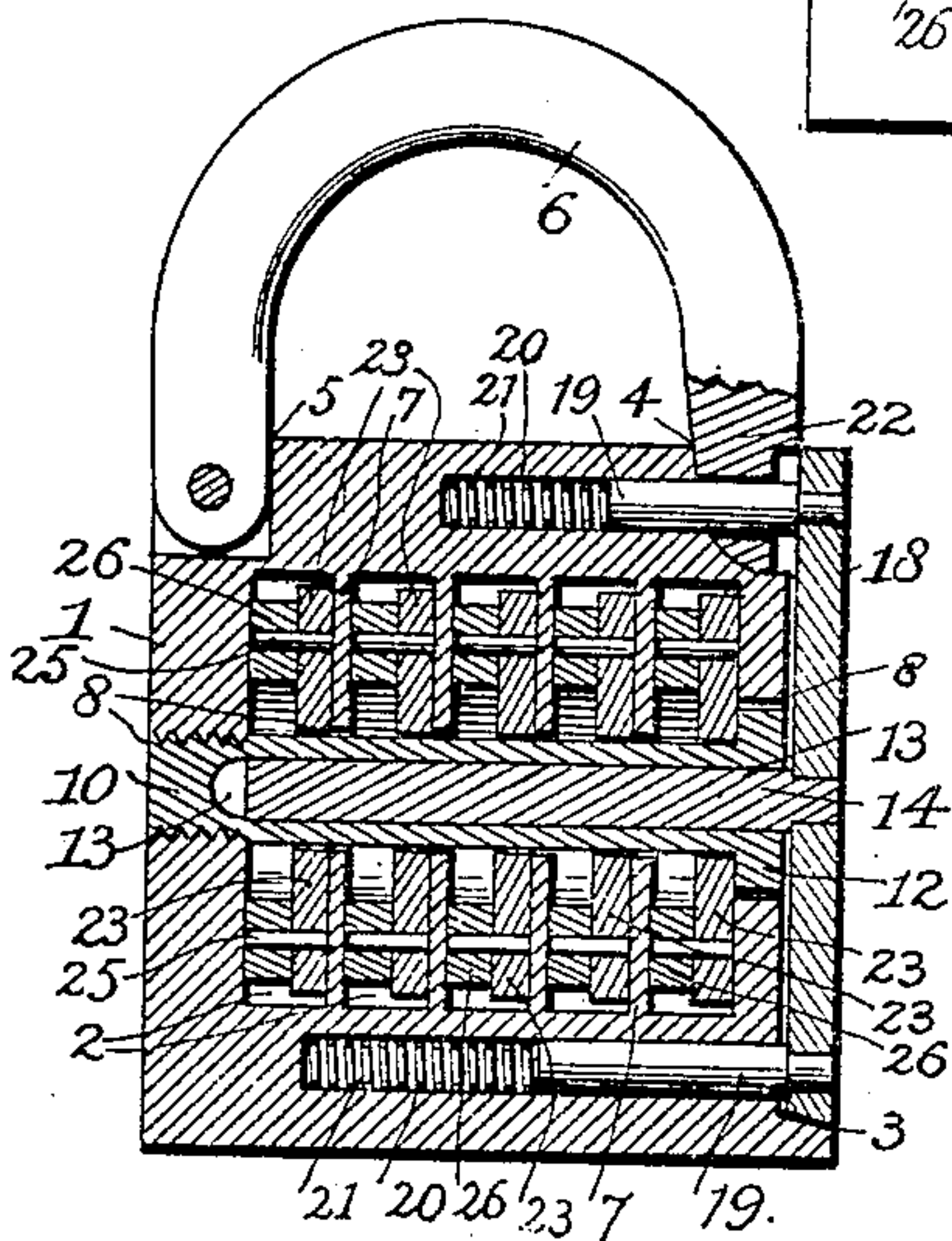


Fig. 3.

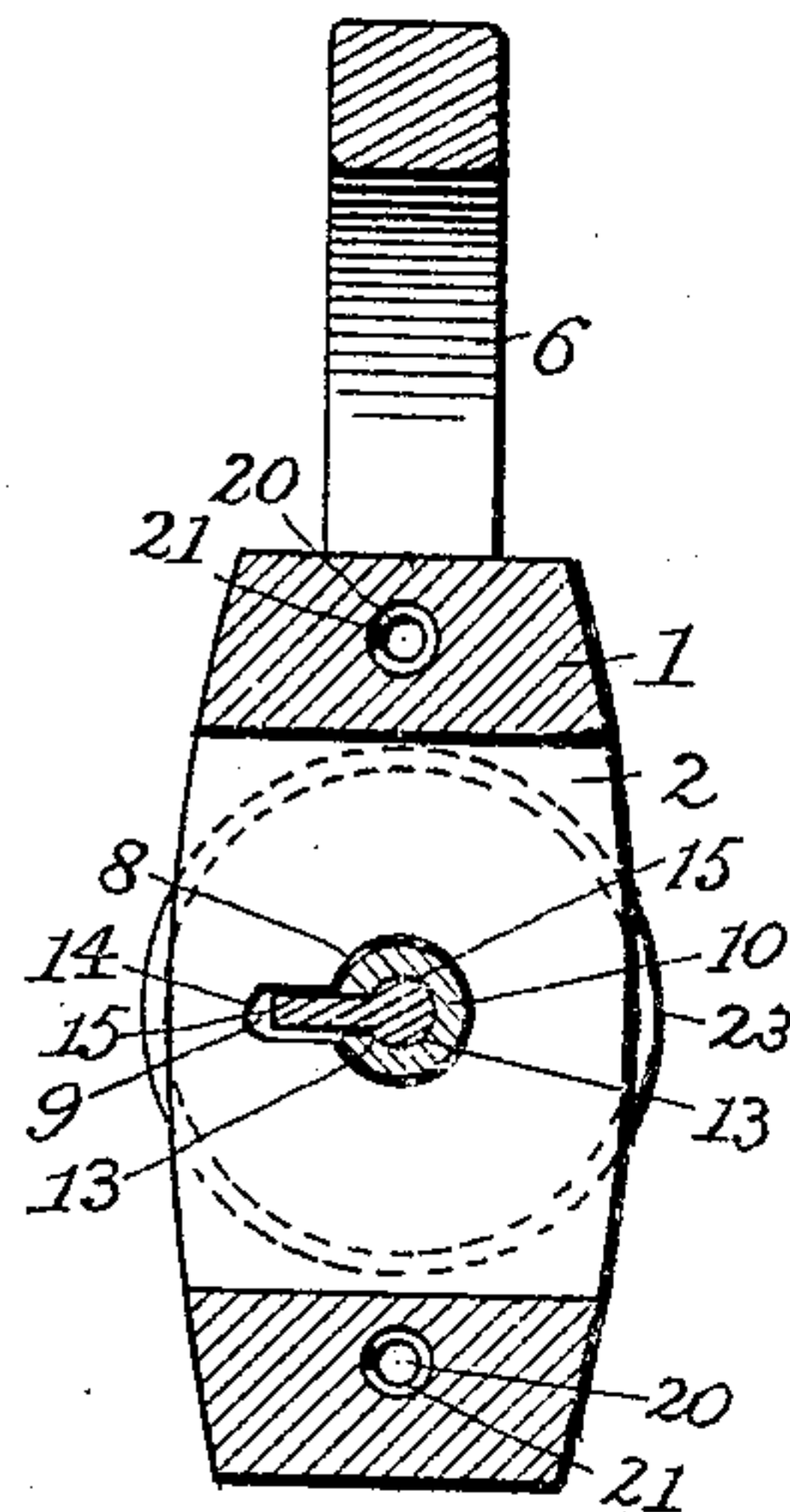


Fig. 4.

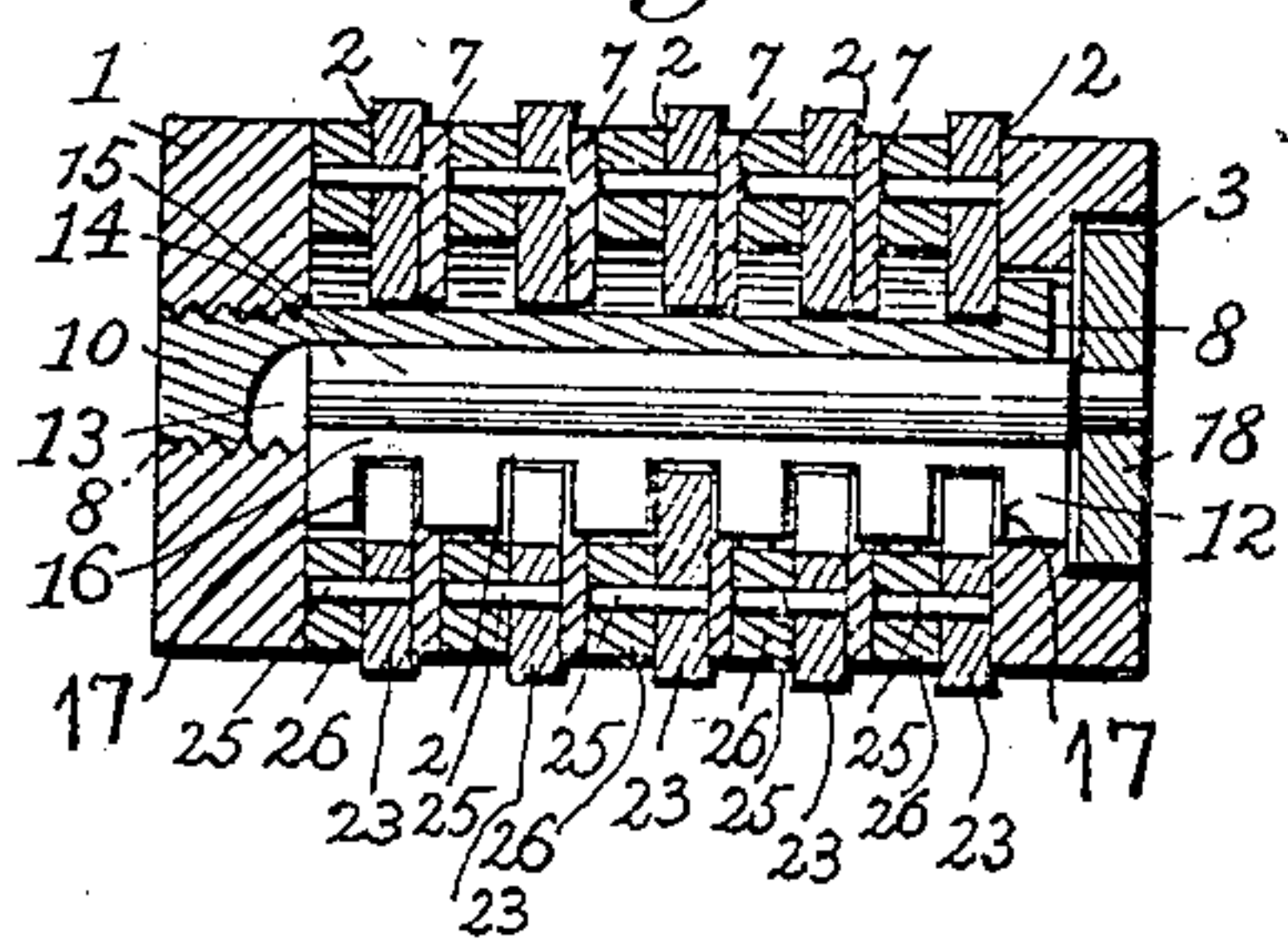


Fig. 5.

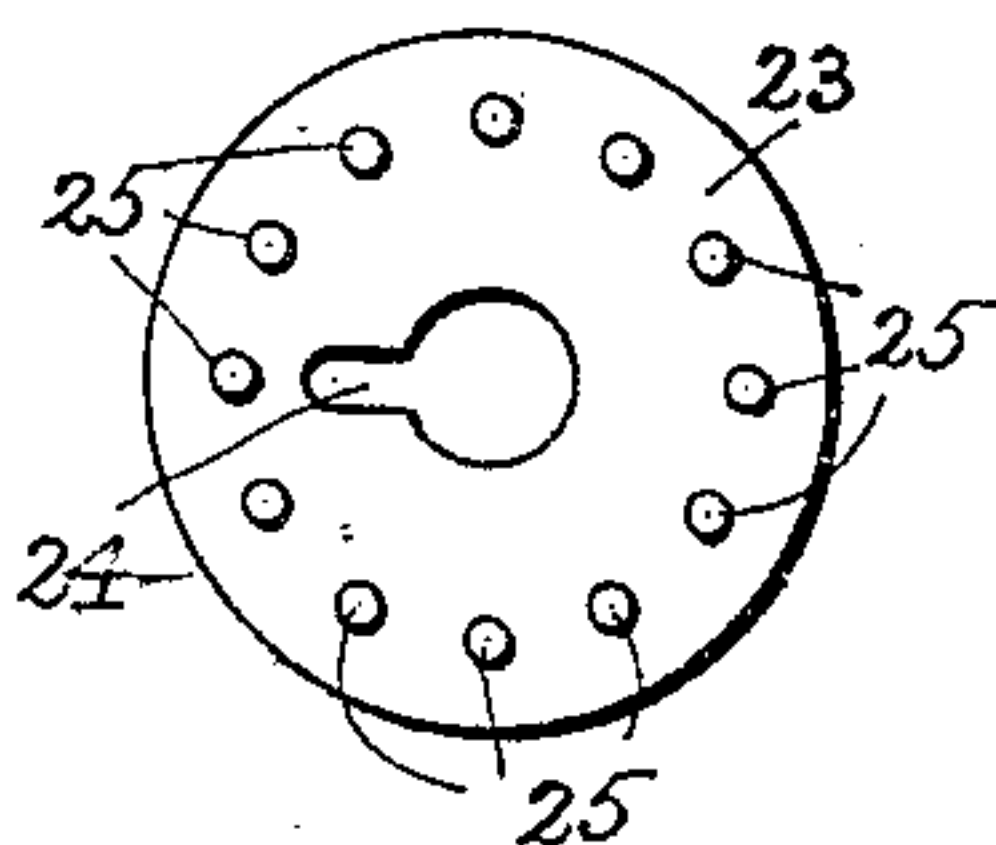
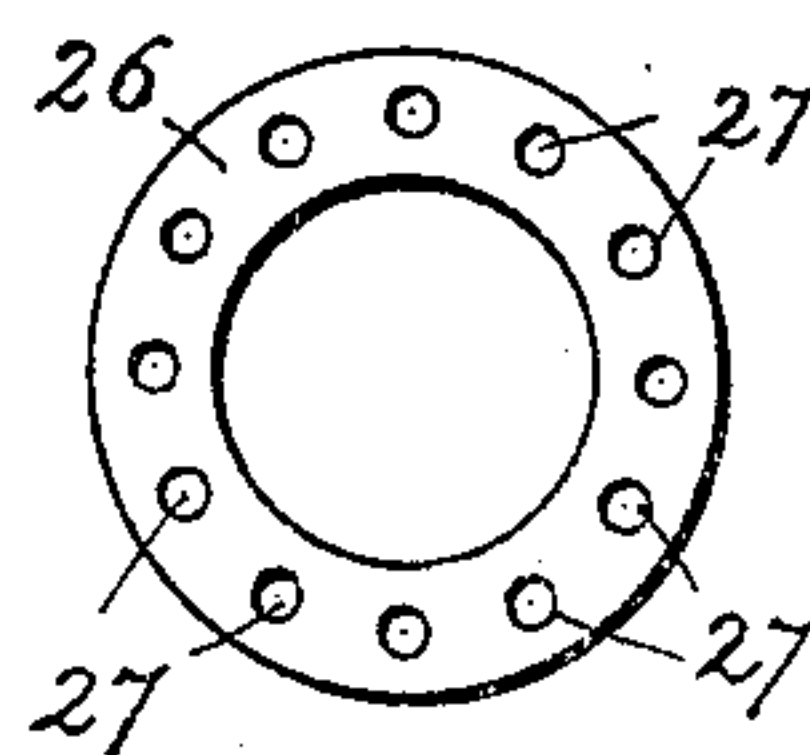


Fig. 6.



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# UNITED STATES PATENT OFFICE.

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## COMBINATION-PADLOCK.

No. 835,304.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed May 28, 1906. Serial No. 319,186.

*To all whom it may concern:*

Be it known that I, FELIX M. INDELLI, a citizen of the United States, residing at 57 East Houston street, New York city, in the  
5 county of New York and State of New York, have invented certain new and useful Improvements in Combination-Padlocks; and I do declare the following to be a full, clear, and exact description of the invention, such  
10 as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in combination-padlocks.

15 The object of the invention is to provide a combination-padlock in which the parts may be readily changed or adjusted to provide many different combinations.

A further object is to provide a lock of this  
20 character which will be simple, strong, and durable in construction, reliable in operation, and consisting of comparatively few parts which are not liable to get out of order.

With the above and other objects in view  
25 the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1.  
30 is a side view of the lock constructed in accordance with the invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a vertical cross-sectional view. Fig. 4 is a horizontal sectional view. Fig. 5 is a  
35 plan view of one of the locking disks or plates removed from the lock, and Fig. 6 is a similar view of one of the indicating-disks.

Referring more particularly to the drawings, 1 denotes the body of the lock, which  
40 may be of any suitable shape or construction and which is here shown as of substantially rectangular form. In the body 1 of the lock is formed a series of transversely-disposed passages 2, of which there may be any de-  
45 sired number, five of said passages being shown in the present instance. In one end of the body 1 is formed a recess 3, and in the top of the lock at its opposite corners are formed recesses 4 and 5, the recess 4 opening  
50 into the recess 3 in the end of the body, as shown. In the recess 5 is hinged a bail 6, the opposite end of which is reduced and is adapted to engage the recess 4 when the bail is in a closed position.

55 The passages 2 in the body of the lock are

separated by partitions 7, in which and in the ends of the lock-body are formed alined apertures 8, the aperture 8 in the recessed end of the lock being of considerably greater diameter than the recesses in the partitions and  
60 opposite end. The hole in said latter end is provided with screw-threads. The apertures 8 in the partitions 7 are provided with laterally-projecting notches or offset recesses 9. Adapted to be inserted through the aper-  
65 tures in said partitions is a hollow shaft 10, one end of which is threaded and adapted to be screwed into the threaded hole in the end wall of the lock. The shaft 10 is provided on its opposite end with a head or enlargement  
70 12, which when the shaft is screwed into the threaded hole 8 is adapted to be seated in the enlarged aperture in the recessed end of the lock, so that the outer end of said head will lie flush with the wall or face of the recess 3.  
75 The head 12 is provided with a notch to receive a screw-driver or other tool, by means of which the same may be screwed into and out of the lock. The shaft 10 is provided on one side with a longitudinally-disposed slot  
80 13, which extends into the central bore of the shaft, as shown. Said slot is adapted to aline with the notches or recesses 9 in the partitions 7 when the shaft is in place in the lock, thereby forming a keyhole-shaped passage  
85 in the lock.

Adapted to be inserted into the keyhole-shaped passage formed by the slot in the shaft 10 and the notched apertures in the partitions 7 is a locking-bolt 14. This bolt  
90 comprises a cylindrical portion 15 and an integrally-formed laterally-projecting rib 16, which when the bolt is in place is adapted to engage the slot 13 in the shaft 10 and the notches 9 in the apertures of the partitions.  
95 The rib 16 is provided with a series of notches 17, which when the bolt is in place are adapted to lie between the partitions 7, as shown. On the outer end of the bolt 14 is secured a locking-plate 18, on the upper and lower ends  
100 of which are arranged inwardly-projecting locking-pins 19, which when the bolt is in place are adapted to project into longitudinally-disposed sockets 20. In the sockets 20 are seated coil-springs 21, the tension of  
105 which is normally adapted to force the locking pins and plate outwardly together with the bolt 14. The upper locking-pin 19 when the locking bolt and plate are in place is adapted to pass through an aperture 22 in the  
110



reduced end of the bail 6, thereby holding or locking said end of the bail in the recess 4, as clearly shown in Fig. 2 of the drawings.

Rotatively mounted on the shaft 10 in the passages 2 are a series of locking plates or disks 23, the diameter of which is slightly greater than the width or thickness of the body 1 of the lock, so that the edges of the disk will project slightly beyond said sides. The edges of the disks are preferably milled or serrated to facilitate the turning of the same on the shaft 10. The plates 23 are each provided with a centrally-disposed aperture, through which the shaft 10 passes, said apertures being provided with lateral or offset notches or recesses 24, adapted to be brought into and out of alinement with the notches or recesses 9 in the partitions 7. When the recesses 24 are in alinement with the notches or recesses 9, a through-passage is provided, into which the locking-bolt may be inserted or removed. A slight turn in one direction or the other of one or more of the disks will bring the notch or recess therein out of alinement with the recesses 9 and will bring a solid portion of the disk into engagement with one of the notches or recesses 17 in the rib 16 of the bolt, thereby preventing the withdrawal of said bolt and the parts connected thereto, thus locking the bail in closed position.

In order to ascertain when the notches or recesses 24 in the locking-plates are in alinement with the recesses or notches 9 in the partitions 7, a suitable indicating mechanism is provided. Said indicating mechanism is here shown and preferably consists in providing the plates 23 with an annular series of laterally-projecting pins or studs 25, which are spaced an equal distance apart and project from one side of the disk near the outer edges or periphery of the same. One of said pins or studs is arranged opposite to the notch or recess 24 in the plate. Any desired number of pins or studs 25 may be provided, twelve of the same being shown in the present instance. Adapted to be engaged with the side of the locking-plates 23 are indicating-rings 26, said rings being provided with an annular series of transversely-disposed apertures 27, into which the pins or studs 25 are adapted to project when the rings are engaged with the locking-plates 23. The rings 26 have arranged on their outer edges or peripheries a series of numerals, one of which is arranged opposite each passage or aperture 27 therein. The numbers on each ring may be arranged in any suitable manner, but are preferably arranged consecutively, beginning with any number desired.

In order to open the lock the lock plates or disks 23 are each turned until the notch or recess therein is in alinement with the notches or recesses in the partitions 7, as hereinbefore described, and as each of the recesses or notches 24 in the locking-plates are

represented by one of the numbers on the periphery of the indicating-rings it is simply necessary to know the number representing each of said recesses and to turn the locking-plates until said members are in horizontal alinement opposite to or in line with the plane of the recesses in the partitions, when the springs 21 in the sockets 20 will force the locking-bolt 14 and plate 18 outwardly, thereby disengaging the locking-pin 19 from the aperture 22 in the reduced end of the bail, thus permitting the bail to be swung back or opened. The plane of the recesses or notches 9 in the partitions 7 is indicated on the side of the lock in any suitable manner, the same being indicated in the present instance by means of an indentation 28, with which the numbers on the indicating-rings opposite the recesses in the locking-plates are adapted to be alined to open the lock. In order to vary the combination, it is simply necessary to take out one or more of the locking-plates 23 and the indicating-rings and to change the position of said rings on the plates to bring a different number opposite the notch or recess therein.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. In a padlock of the character described, the combination with a body portion having a series of transversely-disposed passages, of a hollow, slotted shaft arranged in said body and passing through said passages, a spring-projected locking-bolt adapted to be inserted into said shaft, a notched rib on said bolt, a hinged bail, means carried by said bolt to engage and hold said bail in closed position, locking-disks having centrally-disposed notched passages formed therein, whereby the same are revolubly mounted on said shaft in the passages of said lock, said disks being adapted to be turned into and out of engagement with the notches in said bolt, an annular series of pins arranged on said disks, indicating-rings having an annular series of apertures whereby the same are changeably secured to the pins on said disks and an indicating character on the outer edge of said rings opposite each of the apertures therein, substantially as described.

2. In a padlock, the combination with a body portion recessed at one end and having a series of transversely-disposed partitions forming passages therein, of a hollow longi-



10 tudinally-slotted, centrally-disposed shaft  
arranged in said body and passing through  
notched apertures in said partitions, a lock-  
ing-bolt slidable in said hollow shaft, a  
5 notched rib on said bolt, a locking-plate on  
the outer end of said bolt to engage the re-  
cessed end of the lock, a hinged bail, a lock-  
ing-pin on one end of said plate to engage  
and hold said bail in closed position, a guide-  
10 pin on the opposite end of the plate, said pins  
being adapted to engage sockets in the body  
of the lock, springs in said sockets to project  
the pins and the locking-plate and bolt, lock-

ing-disks revolubly mounted on said shaft to  
lock and release said bolt and indicating- 15  
rings carried by said disks to indicate the  
locking and releasing positions of the same,  
substantially as described.

In testimony whereof I have hereunto set  
my hand in presence of two subscribing wit- 20  
nesses.

FELIX M. INDELLI.

Witnesses:

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DANIEL DIRENZO.