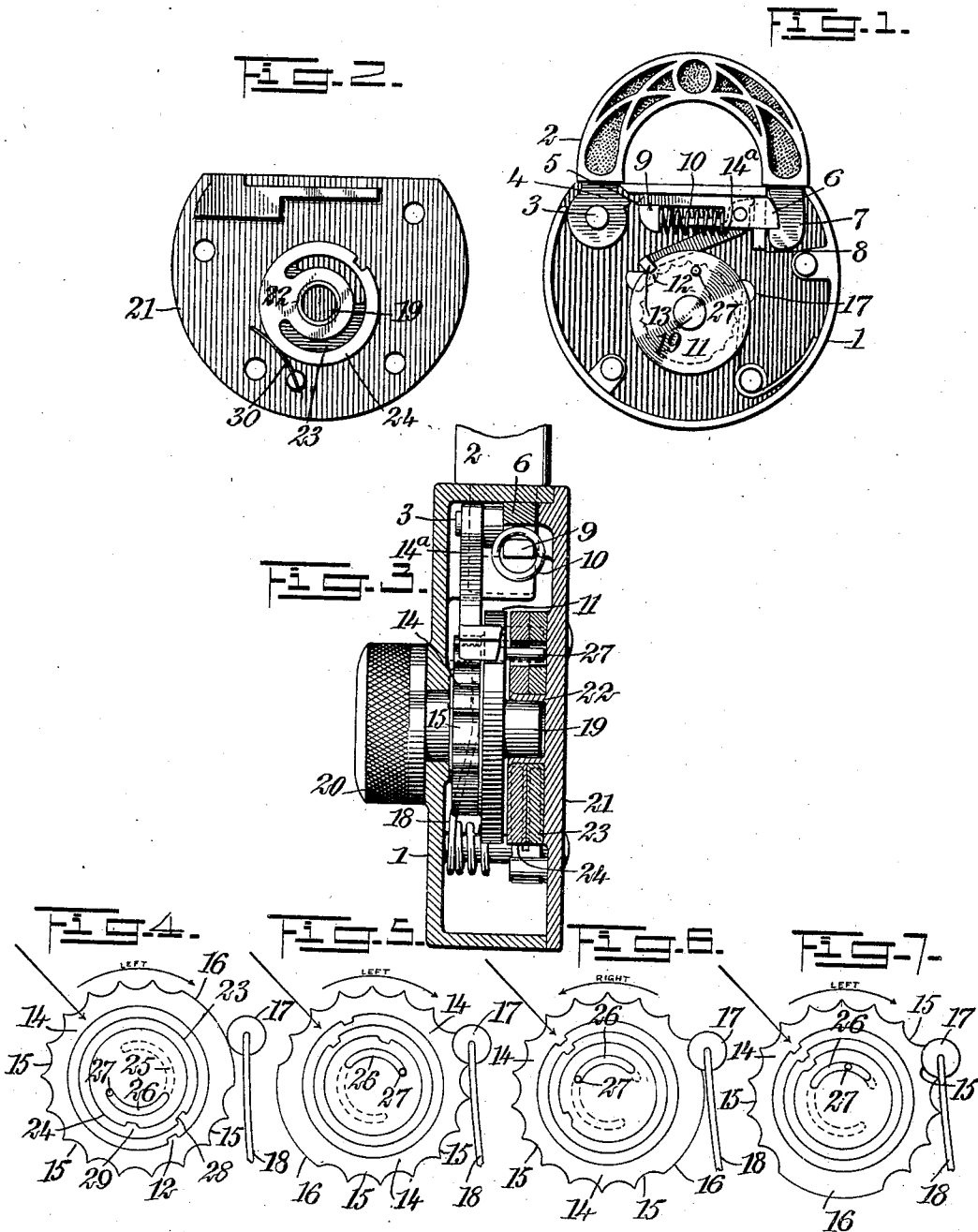


No. 835,437.

PATENTED NOV. 6, 1906.

O. KATZENBERGER.
LOCK.

APPLICATION FILED MAR. 10, 1906.



WITNESSES:

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OSCAR KATZENBERGER, OF SAN ANTONIO, TEXAS.

LOCK.

No. 835,437.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed March 10, 1906. Serial No. 305,245.

To all whom it may concern:

Be it known that I, OSCAR KATZENBERGER, a citizen of the United States, and a resident of San Antonio, in the county of Bexar and State of Texas, have invented a new and Improved Lock, of which the following is a full, clear, and exact description.

This invention relates to improvements in padlocks of the keyless combination type, the object being to provide a lock of this character that will be simple in construction, having no parts liable to get out of order, and that may be opened only by a person knowing the combination.

I will describe a lock embodying my invention and then point out the novel features in the appended 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 an inner side view of a portion of a lock embodying my invention. Fig. 2 is an inner side view of another part of the lock. Fig. 3 is a vertical section, and Figs. 4, 5, 6, and 7 are diagrammatic views illustrating the manner of manipulating the tumblers for releasing the shackle.

Referring to the drawings, 1 designates the lock-casing, and 2 the shackle therefor, mounted to swing on a pivot 3, and this pivot portion is provided with a finger 4, designed to be engaged by the inclined end 5 of the locking-bolt 6. This locking-bolt 6 is designed to engage with a hook portion 7 on the free end of the shackle. The bolt is slidable on lugs 8 9 and is held yieldingly in its forward position by means of a spring 10, which engages at one end with the bolt and at the other end with the lug 9.

Mounted to rotate in the casing is a shifting disk 11, provided with a notch 12 in its periphery for receiving a lug 13, extended laterally from an arm 14^a, having pivotal connection with the bolt 6.

At one side of the shifting disk is a combination-disk 14, having depressions 15 around a portion of its circumference, and a plain portion 16. Adapted to engage in the depressions 15 is a block 17, mounted on a spring 18.

The parts 11 and 14 are rigidly mounted on a stem 19, extended outward through the front wall of the lock-casing and provided with a knob 20.

Arranged on the back wall 21 of the casing is a tubular pivot-pin 22, into which the stem 19 passes, and mounted on this pivot-pin 22 are tumbler-disks 23 24. The disk 23 is provided with an arc slot 25, and the disk 24 is provided with an arc slot 26, which is of less length than the slot 25, and into these slots a pin 27 on the disk 11 passes. These tumbler-disks 23 and 24 are provided at one side, respectively, with notches 28 29, designed to receive the projection 13 on the arm 14^a when the several notches 12, 28, and 29 are in alinement.

In the operation the knob is to be turned until the block 17 rests upon the smooth surface 16 of the disk 14.

Assuming the combination-number to be "874," the knob is to be turned eight points to the left, as indicated in Fig. 5, then seven points to the right, as indicated in Fig. 6, and then four points to the left, as indicated in Fig. 7. At this time the pin 27 by engaging the end walls of the slots in the disks 23 and 24 will move the same until the notches in the periphery of said disks will be coincident with the notch 12. The part 13 on the arm 14^a will now be forced into said notches by the pressure of the spring 10 pressing an extension from the pivotal end of the arm against a portion of the lug 8, arranged at one side of the bolt, as indicated by dotted lines in Fig. 1, and upon a further movement of the knob to the left the bolt will be driven out of engagement with the hook end of the shackle, and the end 5 of the bolt 6 will swing the shackle to open position.

The tumbler-disks are prevented from accidental movement by means of a spring 30, engaging therewith.

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

1. A lock comprising a casing, a shackle pivoted therein, a spring-pressed bolt for engaging the shackle, an arm mounted to swing on the bolt and having a laterally-extended end portion, a spindle extended into the casing, a disk mounted on said spindle and having in its periphery a plurality of depressions, and also having on its periphery a plain portion, a spring-pressed block for engaging the said disk, a shifting disk mounted on the spindle and having a notch in its periphery, a pin on said shifting disk, and tumbler-disks having peripheral notches, and also

provided with segmental slots for receiving said pin, the slot of one tumbler-disk being longer than the slot of the other disk.

2. A padlock comprising a casing, a shackle
5 pivoted therein, a spring-pressed bolt for engaging the free end of the shackle, and also operating to swing the shackle, an arm mounted to swing on said bolt and having a lateral projection at its end, a spindle
10 extended through the front wall of the casing, and having a knob at its outer end, a disk attached to said spindle within the casing and provided with a plurality of peripheral depressions and also having a
15 smooth peripheral portion, a shifting disk

attached to the spindle and having a peripheral notch, a tubular pivot extended inward from the back plate of the casing, and into which said spindle passes, and tumbler-disks mounted to rotate on said tubular pivot, the 20 said tumbler-disks each having a notch in its periphery.

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

OSCAR KATZENBERGER.

Witnesses:

JAMES ROUTLEDGE,
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