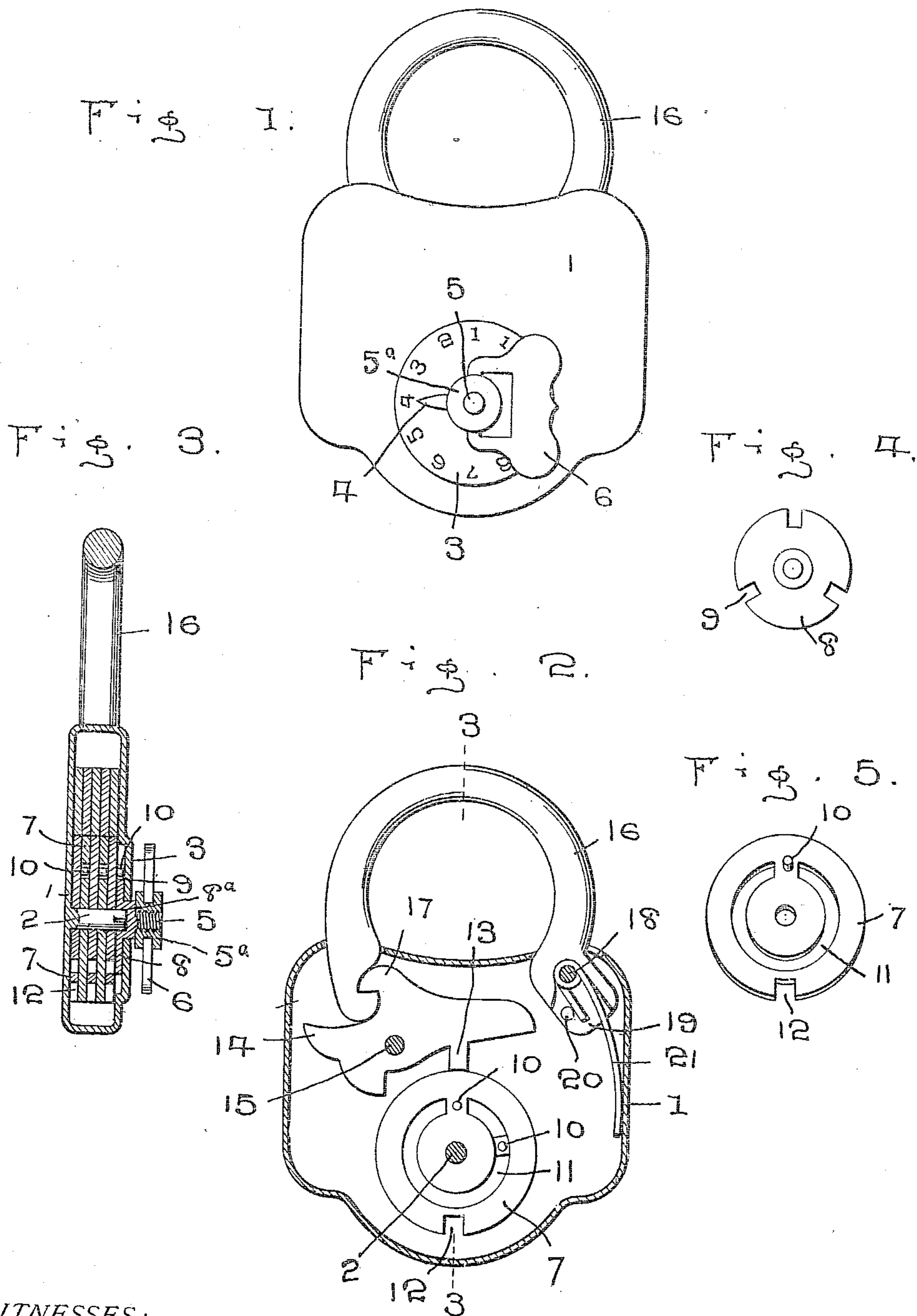


953,599.

Patented Mar. 29, 1910.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DAVID DORMAN, OF NOBLESVILLE, INDIANA.

COMBINATION-LOCK.

953,599.

Specification of Letters Patent.

Patented Mar. 29, 1910.

Application filed June 22, 1909. Serial No. 503,721.

To all whom it may concern:

Be it known that I, DAVID DORMAN, a citizen of the United States, residing at Noblesville, in the county of Hamilton and State of Indiana, have invented certain new and useful Improvements in Combination-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in locks, especially that class termed padlocks which are opened by a combination mechanism.

It has for its object to provide a device consisting of the minimum or a small number of parts, certain of which are interchangeable, whereby a variety of combinations may be obtained.

The invention consists of certain instrumentalities or features substantially as hereinafter disclosed and defined by the claim.

In the accompanying drawings illustrating the preferred embodiment of my invention and forming a part of the specification, Figure 1 is a front elevation of a lock with its parts in assembled position. Fig. 2 is a transverse section thereof. Fig. 3 is a longitudinal section produced on the line 3—3 of Fig. 2. Fig. 4 is a plan view of a contrivance for turning the disks which operate the lock, and Fig. 5 is a like view of one of the disks of the lock.

In the drawings in which similar reference characters designate corresponding parts in the several views, 1 is a shell or casing wherein are located or arranged the various operative parts of the locking mechanism, said casing having upon its outer surface a dial 3, upon the face of which is a plurality of numerals.

Projecting from the inner surface of one of the sides of the casing 1 is a stud or shaft 2 and upon one end of this stud or shaft is arranged a disk or wheel 8 having a central up-raised hollow portion or socket 8^a receiving the outer end of the stud or shaft 2, permitting said wheel to turn thereon, said wheel being received partially within the casing 1. Said up-raised portion or socket 8^a of said wheel is provided with a screw

threaded extension or stem 5 and to this stem or extension is applied a hub 5^a carrying a pointer or hand 4 and also a handle 6, said pointer being arranged to move over or in front of a dial 3 supplied to the casing 1.

Arranged within the casing 1 is a series of disks 7 carried by the stud or shaft 2, one of said disks 7 having a pin 10 engaging any one of a number of peripheral notches 9 of the wheel 8, which engagement is effected by suitably manipulating the handle 6 turning said wheel, as is obvious. Said disks have circular channels 11 therein for receiving the studs 10 of adjacent disks 7, whereby said disks may be rotated. Each of said disks has a notch 12 in its circumference or periphery, which when the disk is turned so as to bring the notch in engagement with an extension or projection 13 of a securing plate 14, will allow said securing plate to swing out of engagement with a shackle 16 permitting the release of a tongue portion 17 of the securing plate from a notch in the shackle, said shackle being adapted to swing laterally upon its pivot 18 secured to the casing 1 as in providing for the unlocking action of said shackle. Said shackle is provided with a groove 19 at one end adjacent to its pivot 18, and with a lug 20 projecting from one wall of said groove, while a spring 21, having one end thereof looped around the pivot 18 and engaging the stud 20, provides for the automatic retraction of the notched end of the shackle 16 from the casing 1 when disengaged from the locking or securing plate 14, said spring having its opposite end resting against the inner surface of the lock casing 1.

What I claim is:

A device comprising a casing, a shackle pivoted at one end therein, means for the retention of said shackle under resilient action, a plurality of disks arranged upon a stud projecting from the inner surface of said casing, said disks having circular channels therein, each disk having a pin arranged intermediately of the terminals of each channel, a stem arranged in said casing and carrying an indicating hand for registering with a dial upon said casing, a wheel integral with said stem and having a series of peripheral notches adapted for engagement

with a pin of one of said disks, said channels also receiving pins of adjoining disks and a locking plate adapted for engagement with said shackle and having an extension
5 for engagement with radial notches in said disks.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

DAVID DORMAN.

Witnesses:

JAMES R. CHRISTIAN,
F. G. CHRISTIAN.