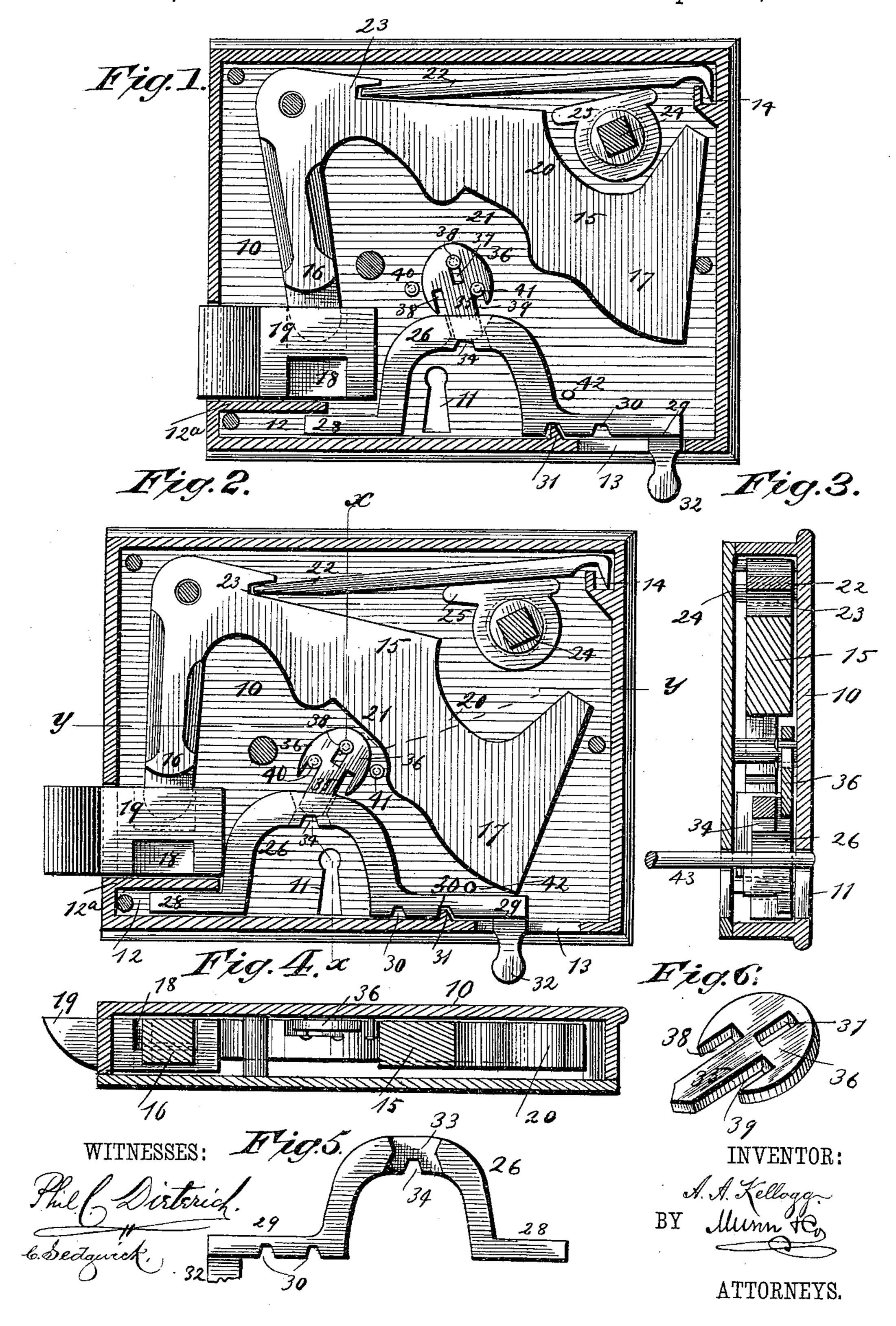
## A. A. KELLOGG.

## LATCH AND LOCK COMBINED.

No. 389,304.

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ALBERT A. KELLOGG, OF CLINTON, MISSOURI.

## LATCH AND LOCK COMBINED.

SPECIFICATION forming part of Letters Patent No. 389,304, dated September 11, 1888.

Application filed March 16, 1888. Serial No. 267,347. (No model.)

To all whom it may concern:

Be it known that I, Albert A. Kellogg, of Clinton, in the county of Henry and State of Missouri, have invented a new and useful 5 Improvement in Latches and Locks Combined, of which the following is a full, clear, and exact description.

My invention relates to an improvement in locks, and has for its object to combine a lock re and latch, and also to provide an article effective in operation and durable and simple in construction.

The invention consists in the construction and combination of the several parts, as will 15 be hereinafter fully set forth, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate 20 corresponding parts in all the figures.

Figure 1 is a plan view of the lock with the back plate removed, and the locking bolt being in position to admit of manipulation of the catch. Fig. 2 is a similar view illustrating 25 the catch as locked. Fig. 3 is a transverse section on line xx of Fig. 2. Fig. 4 is a longitudinal section on line y y of Fig. 2, and Fig. 5 is a perspective view of the locking device. Fig. 6 is a perspective view of the tumbler.

In carrying out the improvement the case 10, which may be of any desired shape, is provided with a key-hole, 11, located at or near the center, approximately the lower longitudinal edge, a longitudinal partition, 12a, in one 35 lower corner, forming a recess, 12, a slot, 13, near the opposite lower corner, and a vertical pocket, 14, in the upper corner, diagonally opposed to the recess 12.

In the upper corner of the case, opposing 40 that containing the pocket 14, an angular gravity-lever, 15, is pivoted, having one short depending member, 16, and a longer and weighty horizontal member, 17. The member 45 same being fitted in a countersunk opening or recess, 18, produced in the latch-bolt 19, which bolt is projected through an opening in the casing above the partition 12a. The bolt 19 has its outer end beveled upon one side, and, 50 as illustrated in Figs. 1 and 2, is provided with two recesses or openings, 18, one upon

each side, produced in the reverse longitudinal edges, whereby the said bolt may be taken from the lock-case and replaced in a reverse position, thus enabling the same lock to be 55 used for either a right or left hand door.

The weighted horizontal member of the gravity-lever is adapted to extend virtually the length of the case, having produced near the extremity, in the upper edge, a concavity, 60 20, and in the lower edge an essentially similar cavity or recess, 21.

In the recess 14 one end of a straight lifting. lever, 22, is pivoted, the other end whereof is seated in an inclined slot, 23, in the upper 65 edge of the weighted angle-lever. Adjacent to and beneath the lifting-lever the knobspindle 24 is passed, carrying a tumbler-collar, 25, adapted for engagement with the said lifting-lever. The normal position of the weighty 7c member of the angular lever is diagonally across the plate, and the upper concave recess in said plate is purposed to receive the idle side of the aforesaid spindle-collar tumbler, as illustrated in Figs. 1 and 2.

A locking-bolt, 26, is provided for the latch, consisting of an essentially inverted-U-shaped bar, the members of which bar are provided, respectively, with horizontal projections 28 and 29, which projections slide upon the lower 80 side or bottom edge of the case, the projection 28 being adapted to enter the recess 12, and the projection 29, having notches 30 in the under side adapted to receive a lug, 31, integral with the case, is fitted with a hand-post, 85 32, which post projects downward through the slot 13. Centrally the under side of the body of the locking-bolt a recess, 33, is provided, and in the under edge centering said recess a slot, 34, is produced. In the recess 33 the 90 shank 35 of a tumbler, 36, is adapted to travel, the end of which shank is preferably beveled from the center in opposite directions, as best illustrated in Fig. 6. The head of the tumbler 16 is provided with a reduced extremity, the | is circular and provided with a central longi- 95 tudinal slot, 37, and open slots 38 and 39, one respectively in each under side, at each side of the shank, the said shank forming one wall of the said lower slots, the latter being projected through the under edge of the head. 100 (See Fig. 6.)

The tumbler 36 is adapted to reciprocate

upon a stud, 38, passing through the central slot, and similar aligning studs, 40 and 41, are located below the central stud, adapted to be alternately received by the slots 38 and 39. 5 The locking-bolt in its forward and rearward throw is prevented from rising too far from its seat on the casing by a pin, 42, integral with the casing and located above the rear horizontal or notched member.

In operation, when the latch is unlocked, the locking-bolt being in the position shown in Fig. 1, the gravity lever and latch located as shown in Fig. 2, by means of the tumblerspindle, the lever 22 is manipulated and the 15 latch drawn in, as illustrated in Fig. 1. When the spindle is released, the weighty arm of the gravity-lever drops, throwing out the catch, these parts again assuming the position illus-

trated in Fig. 2.

To lock the latch the bolt 26 is either lifted and thrown by a key or by hand. To throw the bolt by a key, 43, from the inside or outside, the body of the key, if a proper one, enters the slot 34, the ward engaging the beveled 25 shank of the tumbler. If to throw the latch outward, the parts being positioned as in Fig. 1, as the key is turned toward the latch, the locking bolt is lifted, limited by the pin 42, and simultaneously the tumbler 36 is raised 30 free from the stud 41, the bolt being carried forward, and the tumbler rocking on the stud 38 has its head thrown backward, so that as the key disengages its shank 35 the slot 38 will engage the stud 40, as illustrated in Fig. 2. 35 In carrying the locking-bolt forward the latch is thrown out and the lug 21 entered the rear

tumbler may be slightly varied in shape to ac-40 commodate different styles of keys, and when the lock is used only as a simple catch the

notch, 30. It will be thus observed that the

proper key only will throw the bolt. The

tumbler may be omitted.

If desired, more than one tumbler 36 and corresponding recesses 33 in the locking-bolt may be employed without departing from the 45 spirit of the invention.

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

Patent, is—

1. In a lock, the combination, with a latch, 50 an angular gravity-lever acting on said latch, and a lifting-lever engaging the gravity-lever, of a recessed and slotted locking-bolt adapted to engage the latch, and a tumbler consisting of a vertical shank and slotted cylindrical head 55 positioned above the locking-bolt, the shank reciprocating in the recess of the bolt, a pin on the casing entering the central slot of the head. and two aligning pins on the casing adapted to be alternately engaged with the said head, 60

substantially as specified.

2. The combination, with the case 10, said case provided with an opening, 13, lug 31, projection 42, and pocket 14, the angle gravity-lever 15, pivoted in said case, the latch 19, 75 actuated by the short arm 16 of the lever 15, the knob spindle and collar-tumbler 24 and 25, and the lifting-lever 22, said lever fulcrumed in the pocket 14 and connected to the gravity-lever, said lever 22 disposed above the 70 knob spindle 24 and collar-tumbler 25 and adapted to be operated by said spindle and tumbler, of the locking bar 26, provided with a slot, 34, recess 33, hand-post 32, notches 30, adapted to engage the projection 31, and the 75 tumbler 36, consisting of a vertical shank and slotted cylindrical head positioned above the locking-bolt, the shank 35 reciprocating in the recess of the bolt, all arranged substantially as and for the purposes specified.

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Witnesses:

J. LUBOCK, Louis Theilmann.