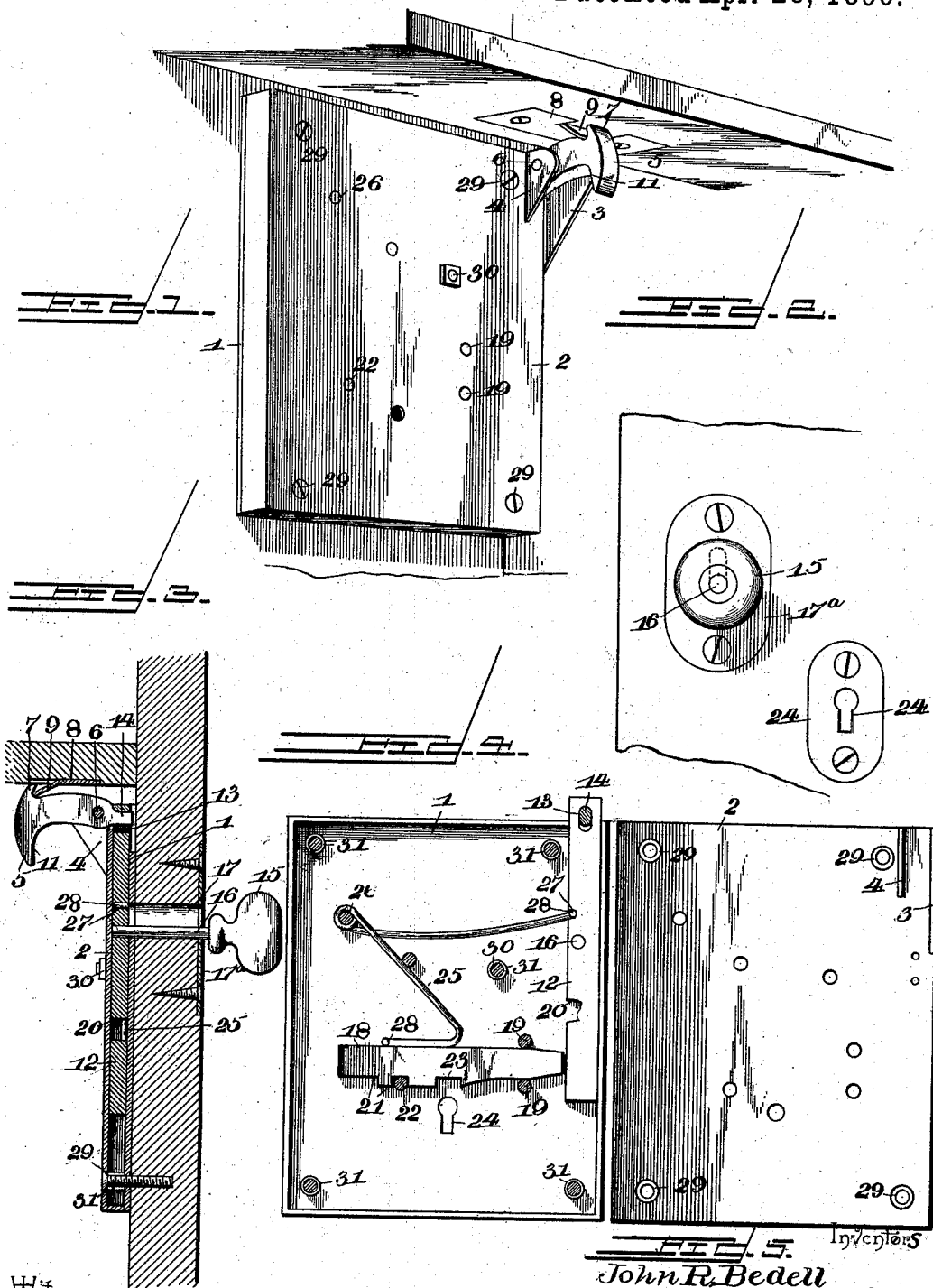


(No Model.)

J. R. BEDELL & C. J. BLACKBURN.
COMBINED LATCH AND LOCK.

No. 558,925.

Patented Apr. 28, 1896.



Witnesses

Wm. L. Doyle
R. M. Smith

By their Attorneys,

John R. Bedell and
Charles J. Blackburn,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN R. BEDELL AND CHARLES J. BLACKBURN, OF BETHANY, MISSOURI.

COMBINED LATCH AND LOCK.

SPECIFICATION forming part of Letters Patent No. 558,925, dated April 28, 1896.

Application filed June 11, 1895. Serial No. 552,449. (No model.)

To all whom it may concern:

Be it known that we, JOHN R. BEDELL and CHARLES J. BLACKBURN, citizens of the United States, residing at Bethany, in the county of Harrison and State of Missouri, have invented a new and useful Combined Latch and Lock, of which the following is a specification.

This invention relates to an improvement in locks, being especially designed for use in connection with the doors of cupboards, wardrobes, bookcases, &c.

The object of the present invention is to provide a simple, inexpensive, and efficient latch and lock combined, which shall be capable of being used either as a right or left hand latch or lock and to engage with the top or bottom of a shelf or with the sides or casing of the door-opening.

Other objects and advantages of the invention will be made apparent in the course of the subjoined description.

In order to provide a lock having the advantages above referred to, the invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally embodied in the claims.

In the accompanying drawings, Figure 1 is a perspective view, looking from the inside of a cupboard-door, showing the improved latch and lock applied to said door and in engagement with a keeper attached to the upper side of a shelf. Fig. 2 is a detail section showing a portion of the outer face of a door, to illustrate the form and arrangement of the keyhole and slotted escutcheon-plates. Fig. 3 is a vertical section through the lock and door, taken in line with the sliding latch-bolt and the operating-shank and knob for operating the same. Fig. 4 is an elevation of the lock with the rear plate of the lock-case removed to show the form and arrangement of the internally-arranged parts. Fig. 5 is a rear elevation of the rear plate of the lock-case.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 and 2 indicate, respectively, the front and rear plates of the lock-case, which may be

either cast or stamped from sheet metal. The front plate 1 is substantially rectangular in form and is provided upon one side with a rearwardly-projecting lug or ear 3. The rear plate corresponds in general shape to the plate 1 and is provided with forwardly-projecting flanges at its top and side edges, which abut against the plate 1 and afford a space between the plates 1 and 2, in which is arranged the lock mechanism. The rear plate 2 is also provided with a rearwardly-projecting ear or lug 4, arranged in horizontal alinement with the lug 3 on the plate 1, and between said lugs 3 and 4 is located a pivoted catch 5, mounted loosely upon a pin or screw 6, connecting said ears or lugs and made removable for giving access to the case.

The rear end of the pivoted catch 5 is provided with a projecting lip or spur 7, which is adapted, when vibrated, to engage a keeper 8, which is preferably made from a flat plate, as shown, and provided with an inclined downwardly and rearwardly extending lip 9, over which the spur of the pivoted catch is adapted to ride and behind which it engages when the door is closed.

The keeper 8 is shown applied to the lower side or face of a shelf and the lock arranged in the proper position upon the inner face of the door for engaging the keeper. It will be apparent, however, that the keeper may be secured to the upper side of the shelf or to any convenient point within the frame or casing of the doorway, the lock being changed in its position to correspond therewith. The pivoted catch 5 is normally held elevated by means of a spring 10, secured to the rear face of the rear plate 2, said spring bearing at its free end behind or under and against the outer end of the pivoted catch 5 and against a shoulder 11 thereon.

12 designates a vertically-movable latch-bolt, which is provided with a slot 13 at its upper end, said slot receiving a forwardly or inwardly projecting arm or extension 14 on the pivoted catch 5, whereby said catch is rocked upon its pivot when the latch-bolt is reciprocated vertically. The latch-bolt 12 is reciprocated by means of a knob 15, arranged upon the outside of the door and having a shank 16 extending through a slot 17 in said door and connected at its inner end with said

latch-bolt. The slot 17 is vertically elongated to permit the necessary play of the shank 16 of the knob and is protected by means of a slotted plate or escutcheon 17^a, secured to the outer face of the door. It will be apparent that by lifting the knob 15 and moving the latch-bolt upwardly the catch 5 will be vibrated out of engagement with the keeper 8, allowing the door to be opened. Upon releasing the knob the spring operates to return said catch to its normal position and to spring said catch behind the keeper when the door is closed.

18 designates a horizontally-movable lock-bolt, which moves between a pair of pins or studs 19, which serve to guide and properly direct the movements thereof. The outer end of said lock-bolt or that end which lies adjacent to the edge of the door is adapted to engage a notch 20 in the adjacent face or edge of the latch-bolt 12, as shown. At its opposite end said lock-bolt is provided with a pair of notches 21, either one of which is adapted to engage a pin or spur 22, carried by the plate 1. About centrally of its length said lock-bolt is provided with a depression or keyway 23, which is adapted to receive the wing of a key inserted through a keyhole-slot 24 in the plate 1 and extending through the door. A plate or escutcheon 24 protects said keyhole-slot upon the outer face of the door in the usual manner.

The lock-bolt is supported and at the same time adapted to yield for relieving it from its engagement with the pin or stud 22 by means of a spring 25, which is provided at its central portion with one or more coils surrounding a pin or stud 26 on the plate 1. Said spring has two arms, one of which is V-shaped and bears against the upper face of the lock-bolt and the other substantially straight and resting with its free end in a notch 27 in the latch-bolt. The extremities of both arms of the spring are bent to form horizontally-extending bearing-points 28, which prevent the ends of the spring from becoming disengaged with the latch and lock bolts.

The plates 1 and 2 are provided with a corresponding series of alining perforations 29, which are adapted to receive screws by means of which the case of the lock may be attached to the door. The lock may also be provided with one or more threaded bolts 30, for securing the front and rear plates thereof together when the lock is detached from the door, and with suitable spacing collars or sleeves 31, arranged between said plates and surrounding the bolts for affording the proper distance between the same. The rear plate 2 may also be perforated, as shown, to receive the rear ends of the various pins or studs carried by the front plate 1.

From the foregoing description it will be apparent that with the aid of a key the lock-bolt may be raised and moved laterally, so as

to engage either one of the notches 21 with the pin or spur 22 for holding said locking-bolt in or out of engagement with the latch-bolt. When in engagement with the latch-bolt, it will be apparent that the pivoted catch will be locked against the keeper, rendering it impossible to open the door. When the lock-bolt is withdrawn, the latch-bolt may be reciprocated against the action of the springs 10 and 25 for withdrawing the pivoted latch from its engagement with the keeper, and this may be accomplished by moving the knob 15 in the proper direction.

The combined lock and latch above described is very simple, inexpensive, and durable in construction, may be used either as a right or left hand lock, and may be applied in a variety of ways.

It will be apparent that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A combined latch and lock, comprising a suitable case, a catch pivoted intermediate its ends thereto, a reciprocating latch-bolt slotted at one end to receive one arm of the catch, a spring bearing against said bolt for giving the same a normal tendency, a reciprocating lock-bolt arranged in the plane of the latch-bolt but moving at right angles thereto and adapted to engage therewith, and a slide-button located upon the outer surface of the door and having its spindle passed through a slot in the door and in engagement with the latch-bolt for sliding the latter against the tension of the spring, substantially as described.

2. A combined latch and lock, comprising a suitable case, a catch pivoted intermediate its ends thereto, a reciprocating latch-bolt engaging at one end with one arm of the catch, a reciprocating lock-bolt moving in a plane at right angles to the latch-bolt and adapted to engage the latter, a slide-button working through a slot in the case and engaging the latch-bolt for reciprocating it, and a two-armed spring arranged in the angle between the latch and lock bolts, one arm of said spring being in engagement with the latch-bolt and the other arm in engagement with the lock-bolt for holding the latter in either its operative or inoperative position, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

JOHN R. BEDELL.

CHARLES J. BLACKBURN.

Witnesses:

H. B. NALLY,

E. D. ROSE.