Jan. 1, 1924 1,479,744

A. SALATA

LOCK

Filed Sept. 23, 1922

Fig. 3.

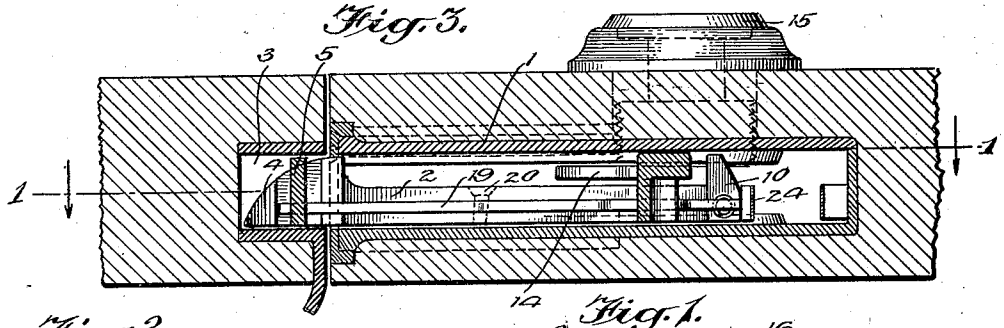


Fig. 2.

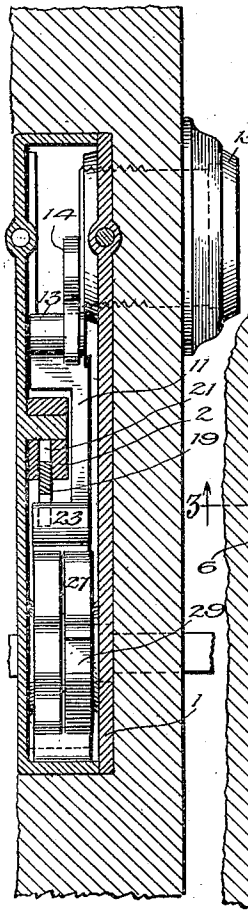


Fig. 1.

WITNESSES

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Patented Jan. 1, 1924. 1,479,744

UNITED STATES PATENT OFFICE.

ANDREW SALATA, OF NEW YORK, N. Y.

LOCK.

Application filed September 23, 1922. Serial No. 590,139.

To all whom it may concern:

Be it known that I, ANDREW SALATA, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Lock, of which the following is a full, clear, and exact description.

This invention relates to a lock, and has for an object the provision of a simplified and improved construction of lock of the general type set forth in my copending application, Serial No. 541,987, filed March 8, 1922, entitled "Lock."

Another object resides in the provision of means whereby a simple, efficient lock is produced involving the necessity for a minimum number of parts, enhancing the economy of manufacture.

A further object resides in such simplification of the operation of the device that the liability of the parts to get out of order is still further reduced.

A still further object resides in the particular construction and arrangement of parts which are hereinafter described and claimed and shown in the accompanying drawings.

The invention is illustrated in the drawings, of which—

Figure 1 is a vertical section taken on the line 1—1 of Fig. 3.

Fig. 2 is a section taken on the line 2—2 of Fig. 1.

Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 1.

The form of the invention shown in the drawings is a preferred form, although it is understood that modifications in the construction and arrangement of the parts and in the character of the materials used may be adopted without departing from the spirit of the invention.

The invention contemplates the inclusion of certain elements within a lock casing when suitably fastened within a recess in a door or similar member. This casing contains a slidable bolt 2 adapted to be moved backward and forward, so that its end when it is moved forward will project into a keeper casing 3. The end of the bolt has a dependent portion 4 to be engaged by a flange 5 mounted on the upper edge of a spring-pressed latch member 6 held upward by a spring 7 and disposed within the keeper casing 3. As long as the flange 5 projects upwardly back of the depending portion or finger 4 of the bolt 2 the bolt cannot be withdrawn from the keeper casing 3. This bolt is mounted within the casing 1 by being provided with a slot 8 through which a flange 9 formed on the casing projects and supports said bolt for sliding movement.

The rear end of the bolt 2 is provided with an enlarged head 10. This head is adapted to be engaged by one part of a lever 11 pivoted at 12 and having an enlarged laterally extending head portion, such as 13, shown particularly in Figs. 2 and 3, which is adapted to be engaged by a key-operated member 14. This key-operated member is connected to a lock barrel 15 which is in any well known manner operated by a key from one side of the door 16.

Whenever the key-operated member 14 engages the head 13 of lever 11, this lever is retracted against the action of the spring 17 disposed within the casing 1 and engages the head 10 at the rear end of the bolt 2, tending to retract the bolt into the casing 1. However, before the bolt can be retracted the latch member 6 must be disposed to disengage the flange 5 from the finger 4. This disengagement is effected by the depression of the end 18 of an arm or lever 19 pivoted at 20 in a slot 21, seen particularly in Fig. 2, formed in the bolt 2. The other end of this lever 19 is provided with a curved portion 22 which is adapted to be engaged by a lug or shoulder 23 on a portion of the lever 11 lying adjacent thereto. This engagement will elevate the rear end of the lever 19 but will depress the forward end, causing the disengagement of the flange 5 as above mentioned. This operation of the lever 19 is effected just before the lever 11 engages the head 10, so that the bolt 2 may be properly retracted. The retraction of the bolt 2 is opposed by a spring 24 also disposed within the casing 1.

The lever 11 is also adapted to be operated by the movement of a knob shaft 25 which is provided with a plate 26 attached thereto having extending portions 27 and 28 on either side of the shaft so that either one of these extensions is adapted to engage the lever 11 in whatever direction the knob shaft 25 is moved to move the lever 11 and retract the bolt 2 in the usual manner. It may be desirable to lock the knob shaft 25, and to this end I provide a slot or recess 29 in the plate

26. In this recess the end of a bar 30 is adapted to lie. This bar can be actuated by the depression of a button 31 disposed within the walls of the casing 1. A cam surface 32 formed on the bar is engaged by the end 33 of a spring 34 to latch the bar 30 in its forward or rearward position. The retraction of the bar 30 is effected by a button 35 through a pivoted lever 36.

It will therefore be observed that in general this device contemplates a pivoted lever which may be actuated either by the movement of a knob shaft or by a key-operated member. This pivoted lever engages a slidable bolt to retract the same, this pivoted bolt, however, being held in its forward position by a latch member which can only be disengaged by the actuation of a pivoted bar or lever the actuation of which is effected by the first mentioned lever just before it engages the bolt to retract it.

What I claim is:

1. A lock including a slidable bolt having a dependent finger portion on its end, a latch member engaging said finger portion to hold the bolt in its forward position, a pivoted lever, key-operated means for moving said lever, and means on the bolt to be engaged by said lever to retract said bolt.

2. A lock including a slidable bolt having a dependent finger portion on its end, a latch member engaging said finger portion to hold the bolt in its forward position, a pivoted lever, key-operated means for moving said lever, means on the bolt to be engaged by said lever to retract said bolt, and a second pivoted lever engaged by the first pivoted lever, said second pivoted lever adapted to disengage the latch member from the end of the bolt just before the first pivoted lever engages the bolt to retract the same.

3. A lock device which includes a casing, a slidable bolt therein, a dependent finger on the end of the bolt, a latch member adapted to engage the finger to hold the bolt in a definite position, said bolt having a recess or slot in its lower face, and a pivoted disengaging lever in said recess adapted to engage the latch member to remove it from engagement with the dependent finger.

4. A locking device which includes a slidable bolt having a head at one end, a pivoted operating lever adapted to engage said head, a pivoted latch disengaging lever mounted on said bolt, a key-operated member, and projections on said first mentioned pivoted lever adapted to engage the latch disengaging lever and the key-operated member.

5. A lock device which includes a slidable bolt adapted to project into a keeper casing, a latching member in said keeper casing to engage the end of the bolt and hold it in its forward position, a pivoted latch disengaging member mounted on said bolt and adapted to be moved to disengage the latch member from the end of the bolt, a head on said bolt, an operating lever within the lock casing, and a projection on said operating lever to engage the latch disengaging member prior to the engagement of said lever with the head on the bolt.

6. A lock device which includes a slidable bolt adapted to project into a keeper casing, a latching member in said keeper casing to engage the end of the bolt and hold it in its forward position, a pivoted latch disengaging member mounted on said bolt and adapted to be moved to disengage the latch member from the end of the bolt, a head on said bolt, an operating lever within the lock casing, a projection on said operating lever to enagage the latch disengaging member prior to the engagement of said lever with the head on the bolt, and key-operated means to engage the operating lever.

ANDREW SALATA.