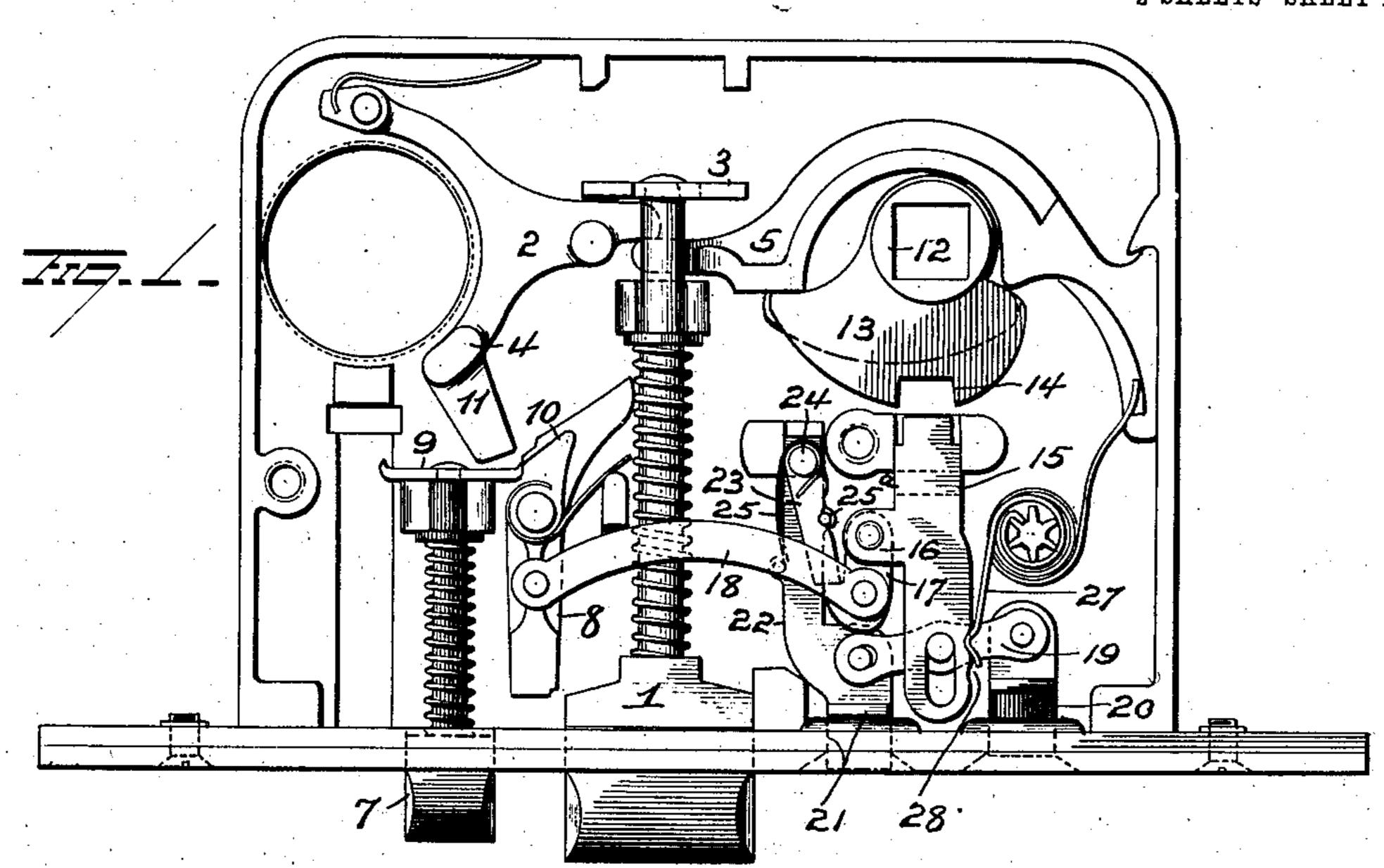
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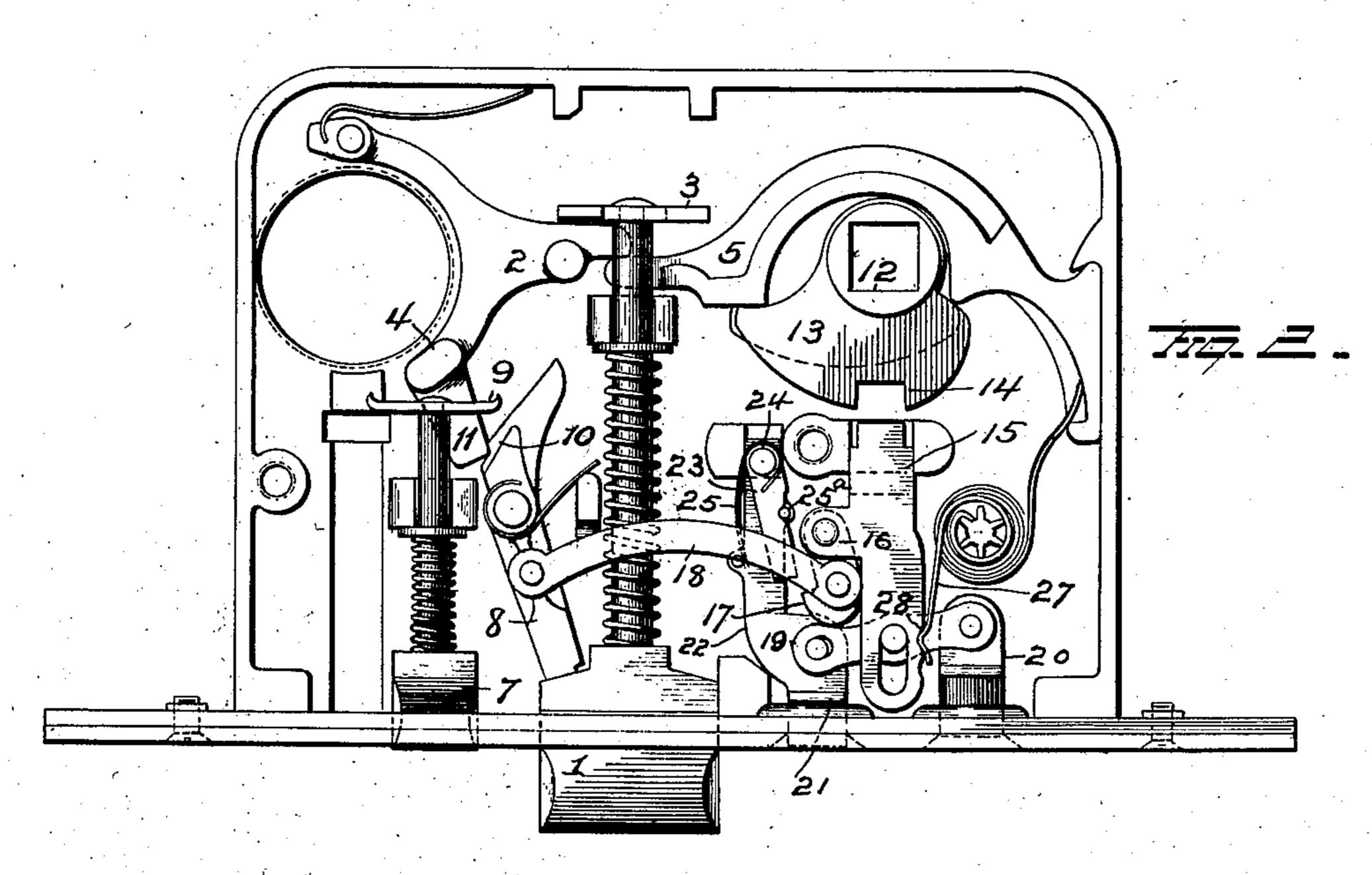
PATENTED JAN. 29, 1907.

W. H. TAYLOR. MORTISE LOCK.

APPLICATION FILED AUG. 18, 1906.

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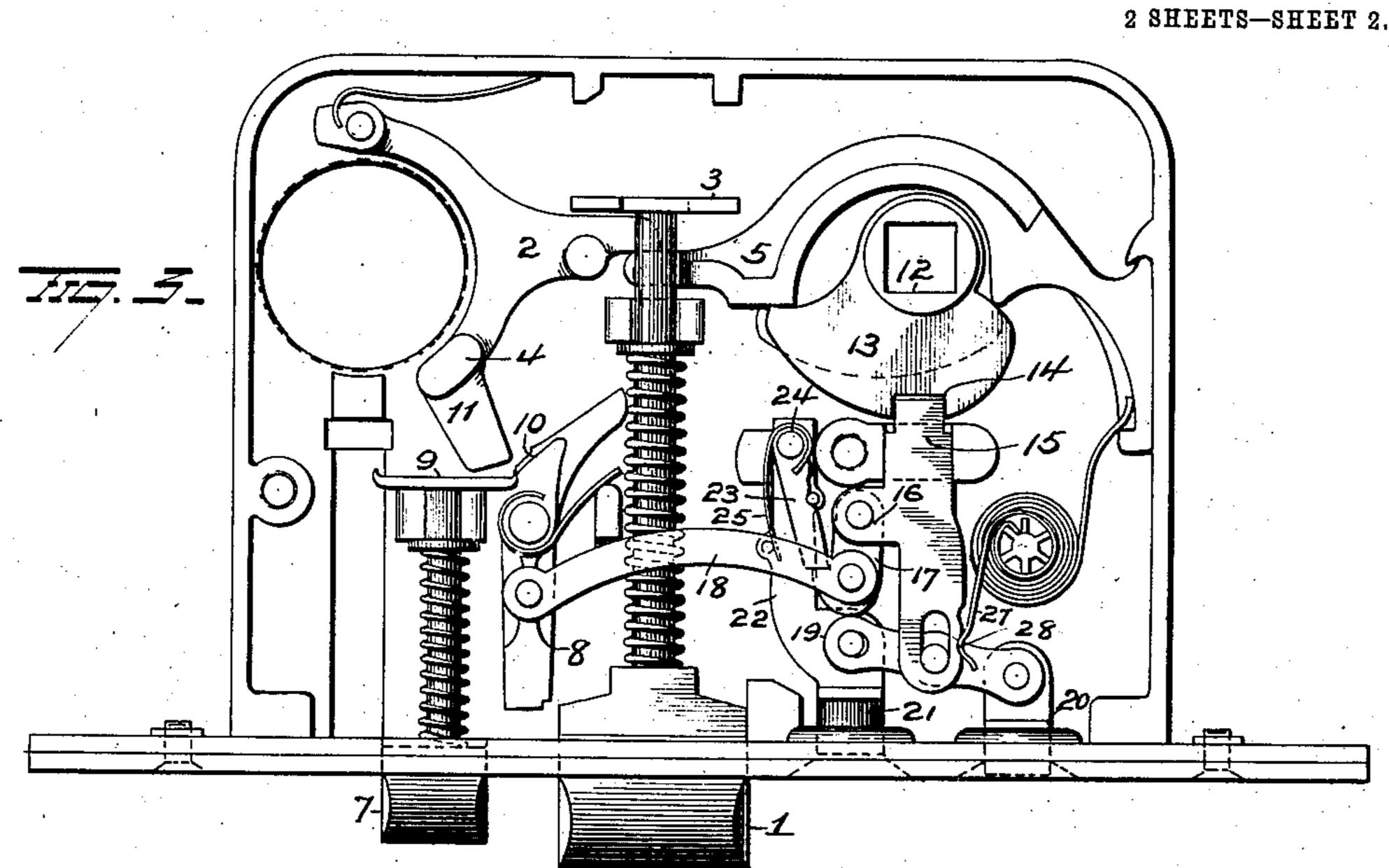
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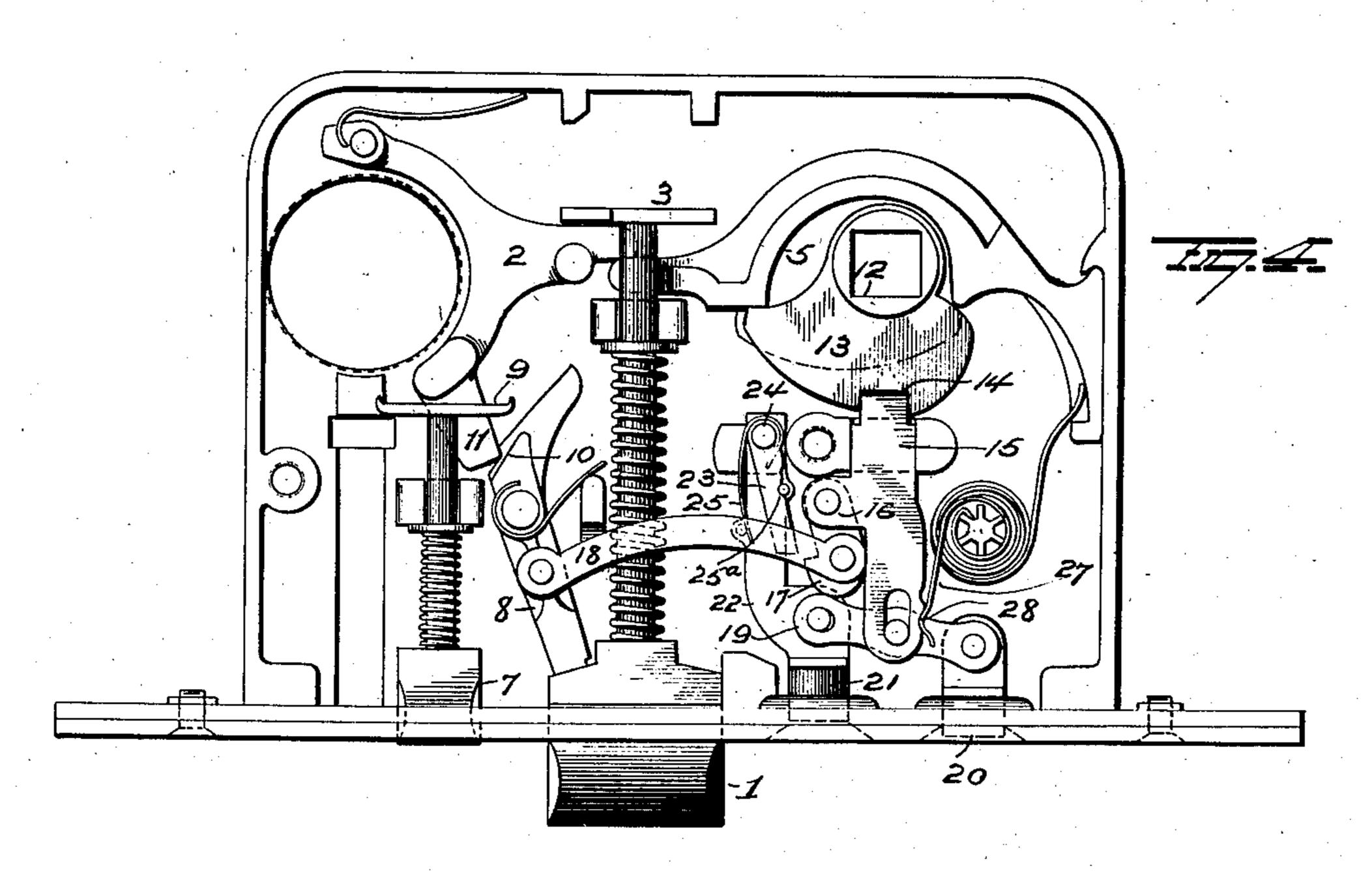
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UNITED STATES PATENT OFFICE.

WARREN H. TAYLOR, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE & TOWNE MANUFACTURING COMPANY, OF STAMFORD, CONNECTICUT.

MORTISE-LOCK.

No. 842,270.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed August 18, 1906. Serial No. 331,186.

To all whom it may concern:

Be it known that I, Warren H. Taylor, of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Mortise-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 mortise-locks, the object being to provide means accessible from the outside of the lock-casing for dogging the outer-knob mechanism, combined with means for disconnecting the actuating means from the dogging mechanism when the door is closed, thus absolutely preventing a release of said dogging mechanism while the door is in its closed position.

With this object in view my invention consists in the parts and combinations of parts, as will be more fully explained, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of the lock with one side of the casing removed, showing the dogging slide disengaged from the outer-knob mechanism. Fig. 2 is a view similar to Fig. 1, showing the position of the parts when the door is closed. Fig. 3 is a view showing the dogging-slide in engagement with the flange or roll-back of the outer knob, the parts being shown in their positions when the door is open; and Fig. 4 is a view similar to Fig. 3, showing the position of the parts when the door is closed.

In the drawings I have shown a spring latch-bolt 1, that can be retracted by a key through the engagement of the pivoted lever 2 with the cross-head 3 on the free end of the stem of the bolt and by inner and outer knobs, each knob being mounted on its own shaft, the two shafts being located end to end and connected so as to prevent endwise separation. Each knob-shaft is mounted in a roll-back adapted to engage shoulders on the pivoted lever 5, the free end of which engages or overlaps the adjacent end of pivoted lever 2 and actuates the bolt through the latter.

The key mechanism may be of any approved type; but the lock as shown is designed for use with a Yale & Towne pin-tum-

bler lock, the movable member of which engages the shoulder 4 on lever 2 and rocks the 55 latter.

7 is an auxiliary bolt which engages the strike-plate and is forced inwardly during the closing movement of the door and remains so while the door is closed. The sliding move- 60 ment of the auxiliary bolt releases a springactuated deadlocking-lever 8, which when released is turned by its spring into the path of the bolt 1, as shown in Fig. 2, and dogs the bolt against movement. As the door is 65 opened the auxiliary bolt will be moved outwardly by its spring, and its cross-head 9, engaging the beveled face 10 of the lever 8, will move the latter out of the path of bolt 1, and so hold it while the door remains open. The 70 inner end of the lever 8 lies in the path of movement of the finger 11 of lever 2, so that when said lever 2 is turned either by the key or by the knobs, as heretofore explained, the lever 8 will be moved out of the path of bolt 75 1, thus permitting the latter to be retracted.

The roll-back 12 of the outer knob is provided with a projecting flange 13, having a recess 14 for the reception of the inner end of the deadlocking-slide 15. This slide is suitably mounted to slide longitudinally and is provided at one side with a projection 16, to which is pivotally mounted the hook 17, which latter is connected to the pivoted lever 8 by the yoke 18. Thus it will be seen that 85 when the lever 8 is moved on its pivot the hook 17 will follow its movements.

Pivotally mounted within the casing is the rocking lever 19, to which the push-buttons 20 and 21 are connected. Push-button 21 is 90 provided with an inwardly-extending integral arm 22, which carries the finger 23, the latter being pivoted at 24 to said arm. Spring 25 is connected to said finger and tends to normally hold it against the stud 25^a, 95 integral with arm 22.

When the door is in its open position, the nose of the hook 17 rests between the rocking lever 19 and free end of the spring-pressed finger 23. If now push-button 21 be pushed "in," the rocking of lever 19 will push button 20 "out" and also push against the free end of hook 17 and move it and the deadlocking-slide 15 longitudinally and cause the slide to enter recess 14 in flange 13 and deadlock the outer knob against movement. If the door

be now closed with the parts in the position last described, the movement of the pivoted lever 8 to its deadlocking position, as explained, will move the hook 17 toward the 5 slide 15 and out of the path of finger 23, thus disengaging the deadlocking-slide 15 from the push-button mechanism of the lock and absolutely preventing any movement of the deadlocking-slide 15 by an instrument in-10 serted between the face-plate of the lock and the strike-plate and engaging the push-buttons. With the parts in the position last described either push button may be actuated without moving the slide, nor can the slide 15 15 be moved to release the outer knob until the door has been opened by its proper key or by the inner knob. During the opening movement of the door the movement of the deadlocking-lever 8 through the medium of 20 yoke 18 pulls the hook 17 over against the spring-pressed finger 23. If after the door has been opened the slide be in its deadlocking position and the push-button 21 be out, by now pushing in on button 21 the finger 23 25 will be carried inwardly, and as it passes the nose of the hook 17 its spring forces it under the nose, and by now pushing in button 20 the free end of the finger, engaging the nose of the hook, moves it and its attached slide 15 out-30 wardly until the latter clears the recess 14 in flange 13, thus releasing the outer knob and leaving it free to be rotated.

With this improvement the bolt 1 is always deadlocked by the pivoted lever 8 against any 35 instrument introduced between the strikeplate and the face-plate of the casing, and when the outer knob is deadlocked the act of closing the door disconnects the knob deadlocking-slide 15 from its operating push-butto tons, thus absolutely preventing any movement of said slide until the connection between the slide and its push-buttons has been restored by the opening of the door, which may be done by the inside knob or the key 45 from the outside.

The slide 15 is held against accidental longitudinal movement by the spring 27, the free end of which engages notches 28 in the sides of the slide and bears thereagainst with suffi-50 cient pressure to prevent the possibility of

any accidental movement of the slide 15. It is evident that many slight changes might | be resorted to in the relative arrangement of | parts shown and described without departing | 55 from the spirit and scope of my invention. Hence I would have it understood that I do not wish to confine myself to the exact construction and arrangement of parts shown and described; but,

60 Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a latch-bolt, and knob mechanism for retracting said bolt, of 65 deadlocking means for the outer-knob

mechanism, means accessible from the outside of the latch-casing for actuating said deadlocking means, and means actuated by the closing of the door for disconnecting said deadlocking means from its actuating means 70 when said deadlocking means is in its deadlocking position.

2. The combination with a latch-bolt and knob mechanism for retracting same, of a deadlocking-slide for the outer knob, mech- 75 anism accessible from the outside of the casing for moving said slide into its deadlocking position, a deadlocking-lever for the main bolt, means operated by the closing of the door for moving said lever into a position to 80. deadlock the main bolt, and means actuated by the movement of the lever during the opening of the door for connecting the deadlocking-slide and its actuating mechanism, and for disconnecting the deadlocking-slide 85 and its actuating mechanism during the closing movement of the door and when the slide is deadlocking the outer knob.

3. The combination with a latch-bolt, of a lever for deadlocking the bolt when the door 90 is closed, knob and key actuated mechanisms for retracting said bolt and also for withdrawing the deadlocking-lever out of the path of the bolt, a deadlocking-slide for the outer knob, means accessible from the out- 95 side of the casing for actuating said slide; and means actuated by the movement of the bolt deadlocking-lever for disconnecting the deadlocking-slide-actuating means from the slide when the latter is deadlocking the knob.

4. The combination with a latch-bolt and knob mechanism for retracting same; of a slide for deadlocking the outer knob, means for actuating said slide, and means actuated by engagement with the strike-plate of the 105 door for disconnecting the slide from its actuating means when the slide is in its deadlocking position.

5. The combination with a latch-bolt and knob mechanism for retracting same, of a 110 slide for deadlocking the outer knob, pushbutton mechanism, a device pivoted to the slide and detachably connecting the latter to the push-button mechanism, and means actuated by the strike-plate of the latch for 115 moving said pivoted device on the deadlocking-slide, out of the path of movement of the coöperating parts of the push-button mechanism when the slide is in its deadlocking position.

6. The combination with a latch-bolt and knob mechanism for retracting same, of a slide for deadlocking the outer knob, pushbutton mechanism, a spring-pressed finger carried by said push-button mechanism, a 125 hook pivoted to the slide and adapted to be engaged by said spring-pressed finger, and means actuated by the strike-plate of the lock for moving the hook out of the path of the finger on the push-button mechanism. 130

7. The combination with a latch-bolt, of independently-operable inner and outer roll-backs, means of connection between said roll-backs and said bolt, mechanism for dogging one of said roll-backs, manually-operable means accessible from the outside of the lock for actuating said dogging mechanism and means for disconnecting said dogging means from its operating means when the door is closed.

8. The combination with a bolt and independent operating devices for said bolt, of a dogging device for one of said operating devices, means manually operable from the outside of the door for actuating said dogging device, and means automatically operable upon the closing of the door for disconnecting said dogging device from its operating means, whereby an unlocking movement of the dogging means is prevented when the door is closed.

9. The combination with a bolt, a roll-back and means connecting the roll-back and bolt, of means for dogging the roll-back, manually-

operable means for actuating said dogging 25 means and automatically-operated means for disconnecting the dogging means from its actuating means whereby an unlocking movement of said dogging means is prevented when the door is closed.

10. The combination with a bolt and means for retracting same, of a dogging device for said retracting means, manually-operable means accessible from the outside of the lock for moving said dogging means 35 into and out of its dogging position and means actuated by the closing of the door for disconnecting the dogging means from the means by which it is moved, whereby an unlocking movement of said dogging means 40 is prevented when said door is closed.

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

WARREN H. TAYLOR.

Witnesses:

R. C. Lewis, Edgar Werner.