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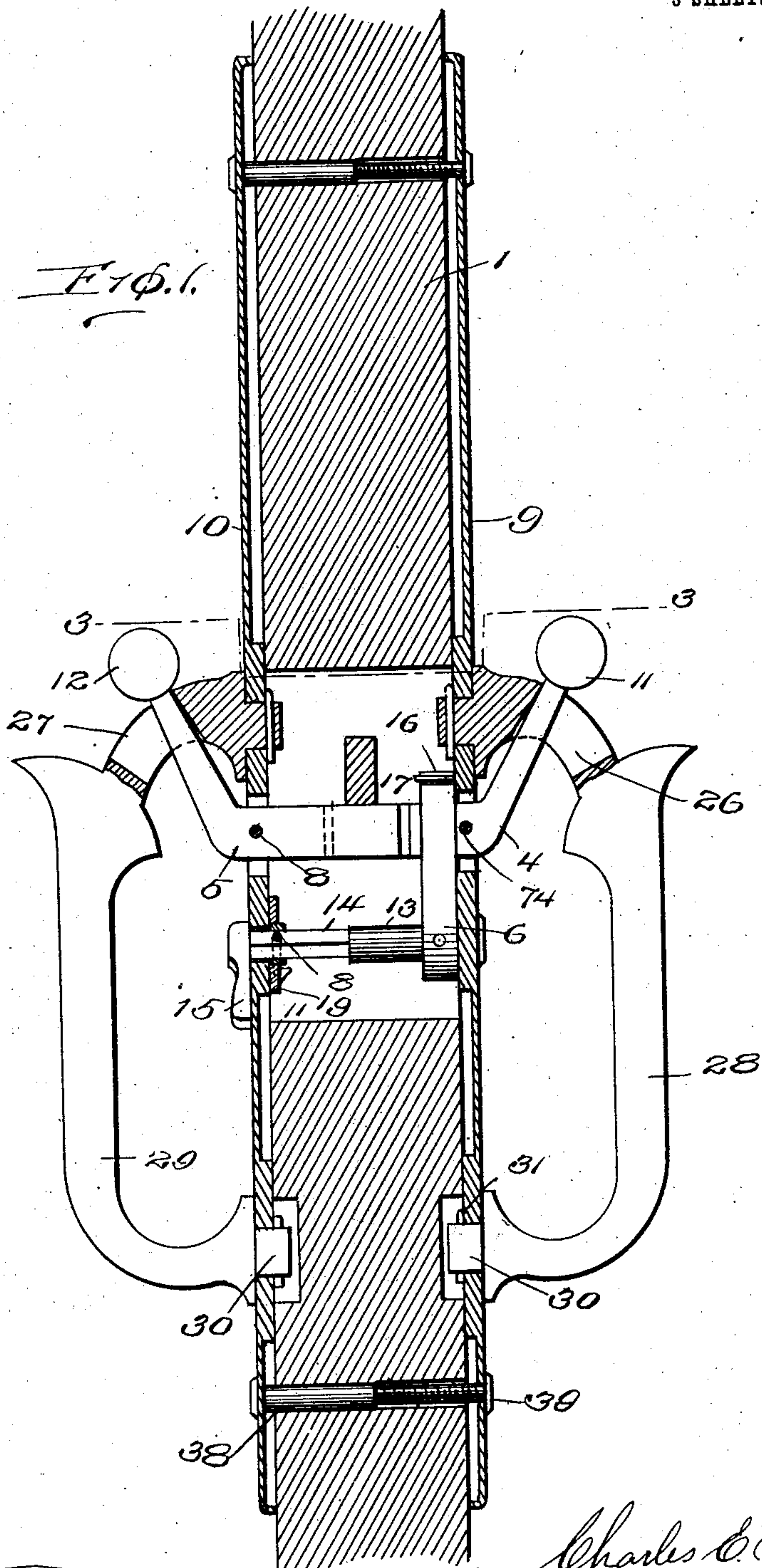
LOCK.

APPLICATION FILED NOV. 29, 1909.

973,928.

Patented Oct. 25, 1910.

3 SHEETS—SHEET 1.



Inventor

Witnesses

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By

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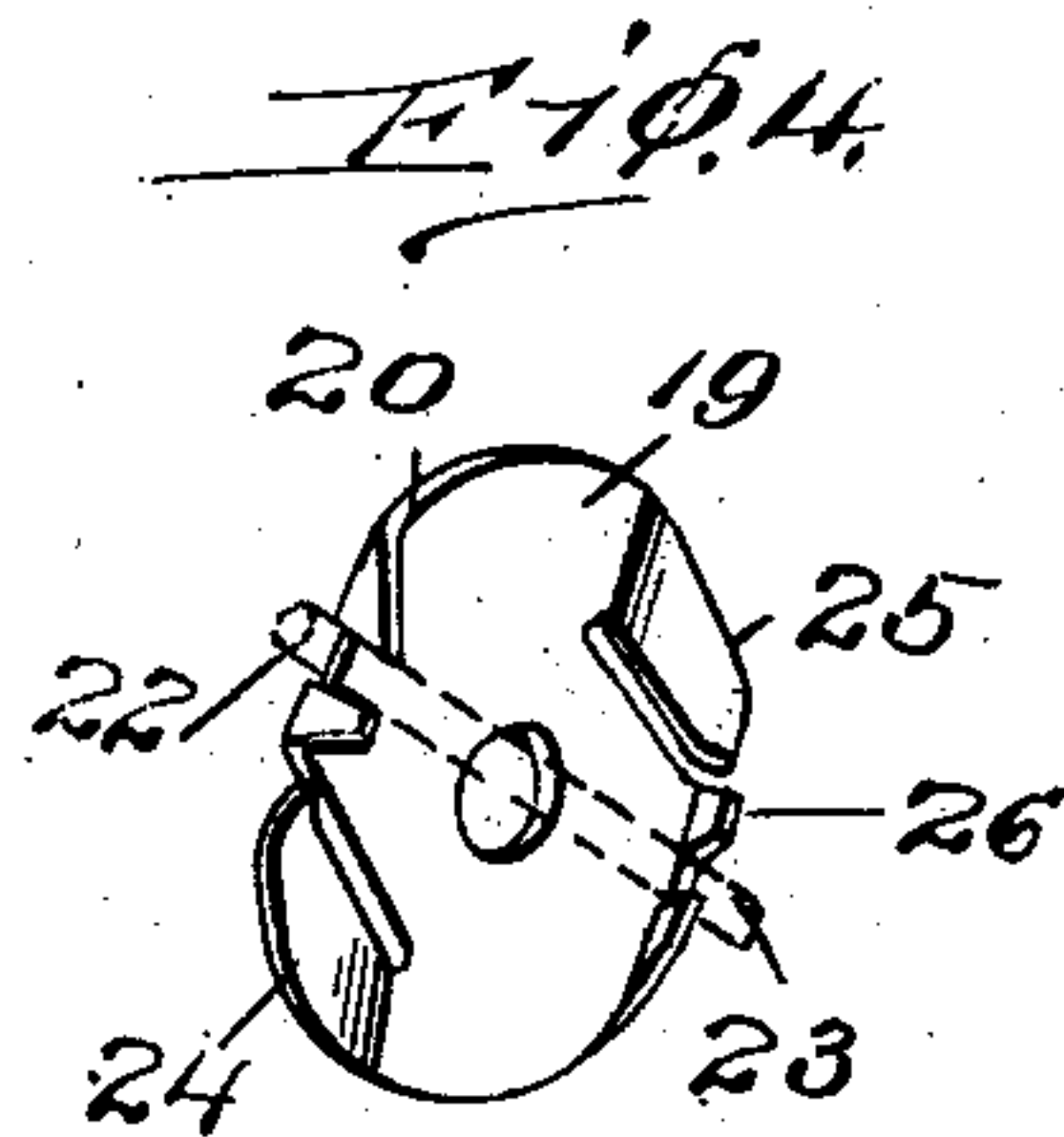
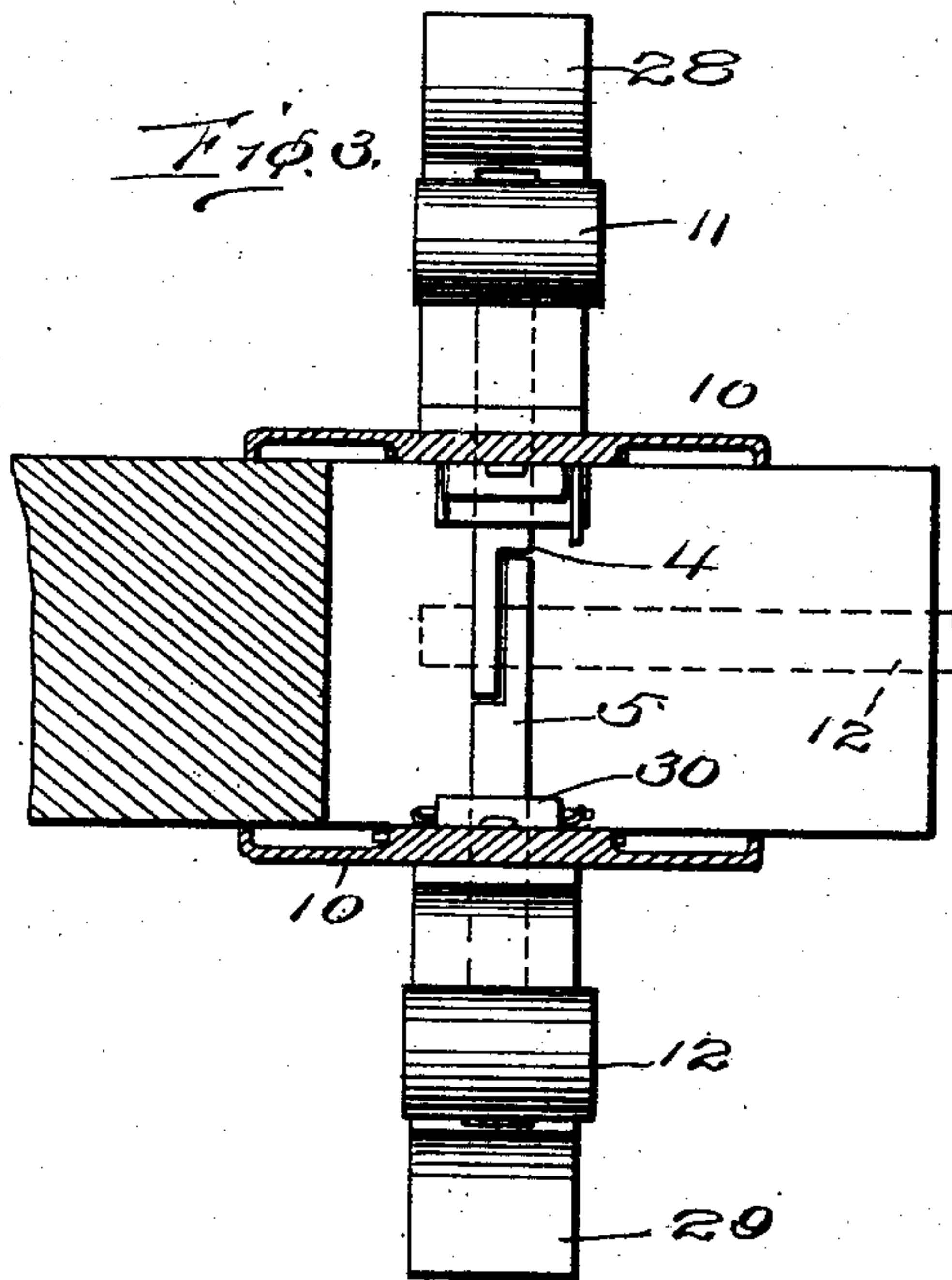
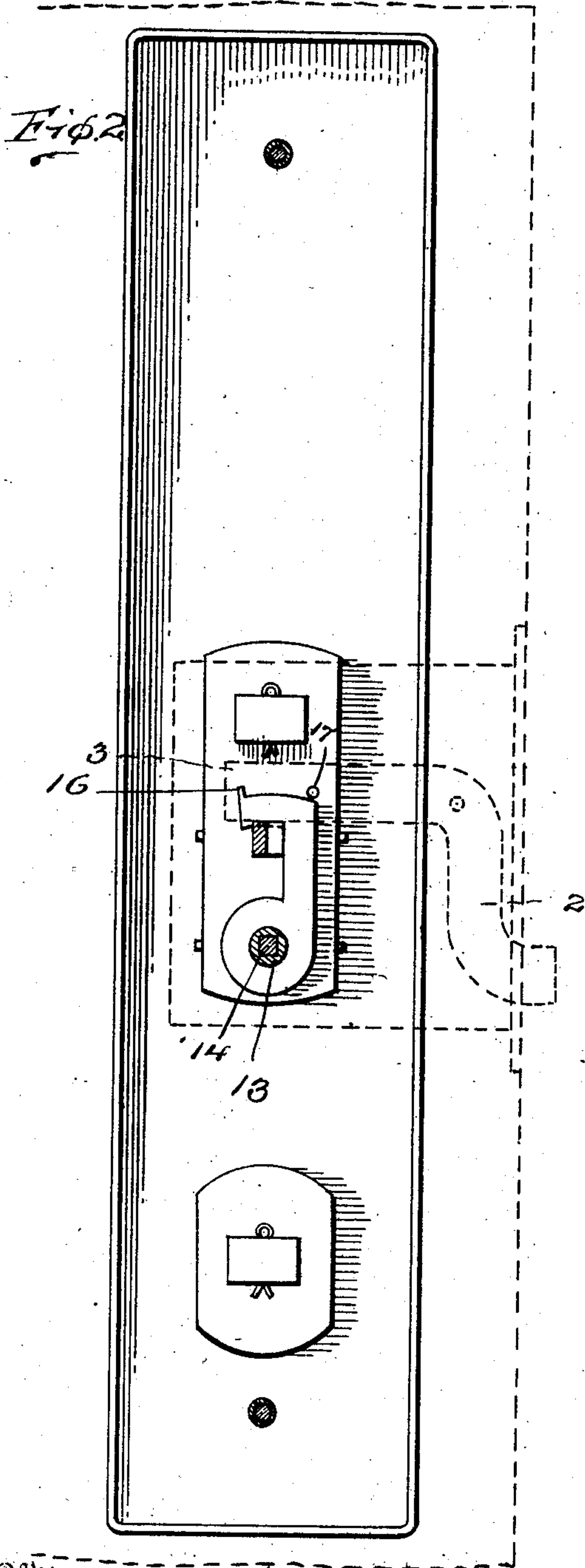
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3 SHEETS—SHEET 2.



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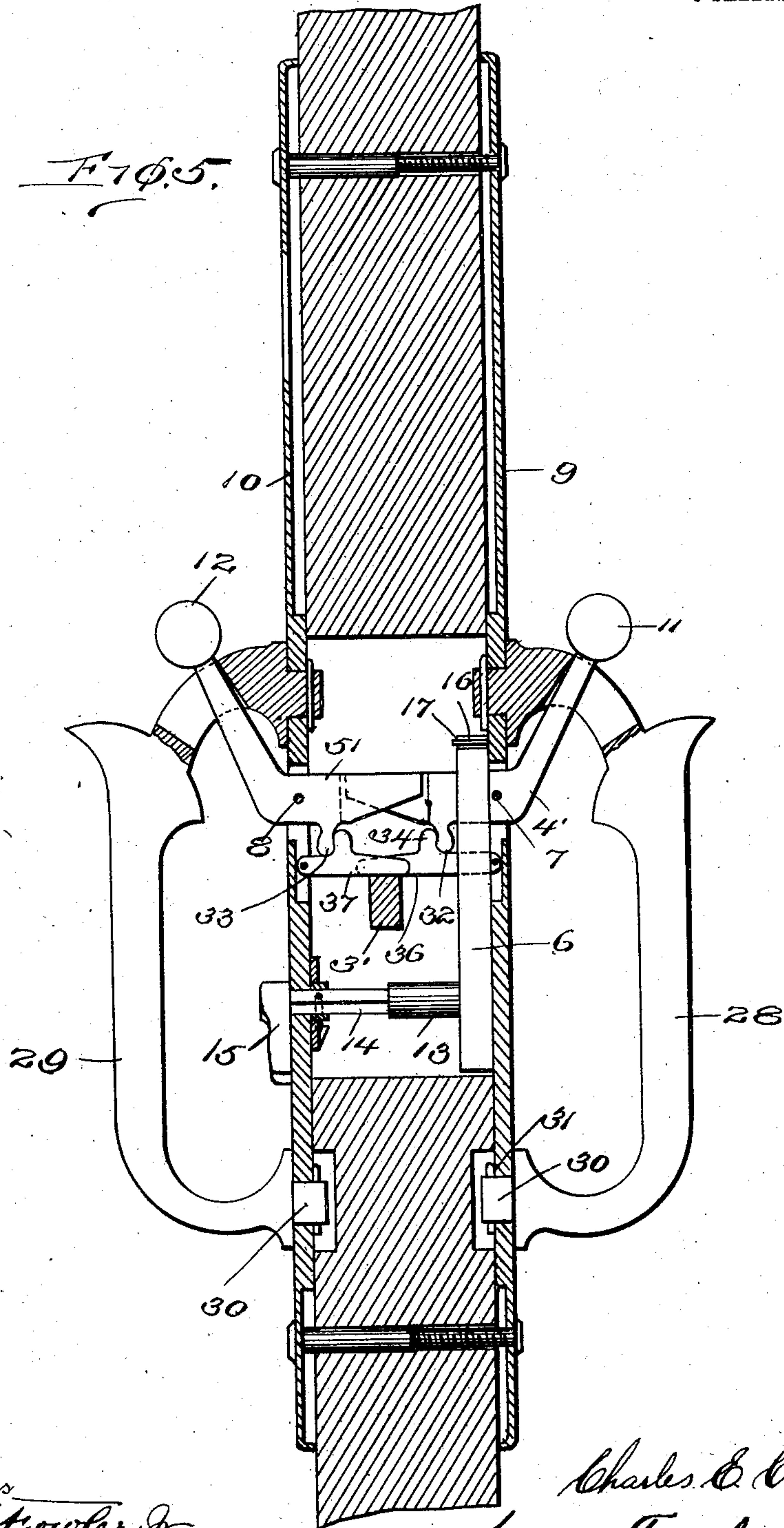
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3 SHEETS-SHEET 3.



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UNITED STATES PATENT OFFICE.

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LOCK.

973,928.

Specification of Letters Patent.

Patented Oct. 25, 1910.

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To all whom it may concern:

Be it known that I, CHARLES E. C. EDEY, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in 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.

This invention relates to improvements in locks, and particularly to latches.

The object in view is the arrangement of improved means for operating a bolt by latch mechanism which may be locked against operation from the outside.

Another object of the invention is the arrangement in a latch, of lever mechanism extending from each side of the door to which the latch mechanism is secured associated with a bolt to be operated by the lever mechanism, and locking means operated from the inside for locking the outer lever mechanism against movement.

A further object of the invention is the arrangement in a latch mechanism of means for operating a bolt either in an upward or downward direction, and a lock for said latch mechanism arranged to be thrown into and out of engagement, whereby the latch may be locked against movement from the outside.

With these and other objects in view the invention comprises certain novel constructions, combinations, and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawing: Figure 1 is a vertical sectional view through a latch mechanism embodying the invention, the same being shown in connection with a door. Fig. 2 is an interior view of one of the escutcheons and latch mechanism connected therewith, the door being shown in dotted lines. Fig. 3 is a section through Fig. 1, approximately on line 3—3. Fig. 4 is a detail fragmentary view of a tension plate for the latch locking mechanism. Fig. 5 is a sectional view similar to Fig. 1, but disclosing a slightly modified form of the invention.

In the construction of a latch mechanism embodying the invention it is aimed to arrange a pair of escutcheons carrying hand-

holds or grips which are removably secured to the escutcheons. Each of the hand-holds or grips are provided with slots through which lever mechanism is passed that operates the bolt of the lock or latch. The bolt or latch mechanism may be moved by the levers either in an upward or downward direction according to the construction of the bolt. A pivotally mounted hook-shaped member is arranged to fit into a groove or cut-out portion in the lever extending to the outside of the door, which hook-shaped member locks the lever extending to the outside of the door against movement when so engaged. A shaft and suitable turn-button or lever are provided for manipulating or moving said hook-shaped member into and out of engagement with the outside lever. By this construction and arrangement the bolt may be operated from either side at any time, regardless of whether or not the outside lever is locked, and the outside lever may be locked or unlocked for permitting or preventing the movement of the bolt.

In order that the invention may be more clearly understood, an embodiment of the same is shown in the accompanying drawings, in which 1 indicates a door of any desired kind, to which a lock is applied, also of any desired or preferred kind, having a bolt or latch 2 formed with an extension 3 for being moved by levers 4 and 5. Lever 4 is the outside lever and may be locked by a pivotally mounted hook-shaped member 6, and lever 5 is the inside lever and is designed to freely operate bolt 2 at all times. Levers 4 and 5 are pivotally mounted at 7 and 8 in extensions rigidly secured to or formed integral with the escutcheons 9 and 10. The levers 4 and 5 are provided with thumb members 11 and 12 which when depressed cause the inner end of the levers 4 and 5 to raise projection or extension 3 and withdraw bolt or latch 2. The moving downward of either of the thumb members 11 and 12 and the consequent movement of either of the levers, will cause the withdrawal of bolt 2 when the locking hook-shaped member 6 is in the position shown in dotted lines in Fig. 2, but when in the position shown in full lines in Fig. 2 only the inside lever 5 will operate bolt 2. Locking member 6 is rigidly secured to a pivotally mounted shaft 13 which shaft has secured thereto an

operating shaft 14. The operating shaft 14 extends to the interior of the door, and has secured thereto a thumb piece or operating lever 15 so as to move the hook-shaped lever member 6 into and out of engagement with lever 4. Member 6 has formed thereon an extension 16 which engages a stop 17 for limiting the movement of the locking member. Secured to the operating shaft 14 by any desired means, as for instance pin 18, is a tension member 19. Tension member 19 is formed in the shape of a disk with turned up portions 20 and 21 having slots 22 and 23 formed therein for accommodating the ends of pin 18. Member 19 also has bent down portions 24 and 25 for frictionally engaging the escutcheons for preventing any longitudinal movement of shaft 14. The plate or member 19 is preferably made from spring material so that the members 24 and 25 will yieldingly resist any rotary movement of member 19, and consequently shaft 14 so that the locking member 6 will stay either in a locked or unlocked position. The levers 4 and 5 are arranged to operate in slots 26 and 27 formed in hand-holes or grips 28 and 29. Hand-holes or grips 28 and 29 are each provided with a plurality of lugs or extensions 30. Each lug 30 is designed to pass through the respective escutcheons, and to be held in place by suitable pins 31. If desired the escutcheons may be thickened at the point that the lugs 30 pass through or may be provided with an additional plate rigidly secured in place.

In Fig. 5 will be seen a slightly modified form of the invention, in which like parts will be referred to with similar reference numerals, and only the modified parts referred to with additional reference numerals. Referring more particularly to this figure, levers 4' and 5' are provided to operate similar to levers 4 and 5. Formed integral with or rigidly connected with the levers 4' and 5' are lugs or projections 32 and 33 which engage co-acting lugs 34 and 35 connected with bolt operating levers 36 and 37. The pivotal upward movement of the inner end of levers 4' and 5' causes a pivotal and downward movement of the bolt operating levers 36 and 37 for operating a bolt extension 3' in a downward direction for causing the withdrawal of the bolt.

The latch mechanism embodying the invention may be used with any kind of a bolt for withdrawing the same by a movement of the operating levers in an upward or downward direction. The escutcheons holding the mechanism in place may be secured in place in any desired manner, preferably by what might be termed an elongated nut 38 and a screw 39.

If desired a lock independent of the latch mechanism may be provided near the upper part of the escutcheons, as for instance a

Yale lock, so as to lock the door if desired independent of the latch mechanism.

What I claim is:

1. In a device of the character described, the combination with a bolt of an inside and outside lever for operating said bolt, means for each of said levers for independently pivoting the same, a pin positioned above one of said levers, a pivotally mounted locking member locking one of said levers against movement and formed with a hook shaped extension projecting beneath said pin when in a locked position, and operating means connected with said locking member for moving the hook-shaped extension between said levers and said pin, said pin preventing accidental removal of said locking member.

2. In a device of the character described, the combination with a lock having a bolt, a pair of levers for independently operating said bolt, a locking member engaging one of said levers for locking the same against movement, means for operating said locking member and at the same time indicating the position thereof, and hand-holds associated with said levers for guiding the same in their movement.

3. In a device of the character described, the combination with a lock formed with a retractile bolt, of levers for moving said bolt, means for locking one of said levers against movement, means for supporting said levers properly in position, and hand-holds formed with elongated slots through which said levers project for guiding said levers.

4. In a device of the character described, the combination with a lock having a retractile bolt, of a plurality of levers for moving said bolt, means for locking one of said levers against operation, means for controlling said locking means, and a pair of hand-holds removably secured in position and arranged to guide said levers in their movement.

5. In a device of the character described, the combination with a lock having a retractile bolt, of levers for operating said bolt, and hand-holds formed with a lug at each end, and a slot at one end, said slot accommodating said levers for holding and guiding the same, and means passing through said lugs for holding the hand-holds in position.

6. In a device of the character described, the combination with a lock having a retractile bolt, of a plurality of levers for operating said bolt, a pivotally mounted locking member for locking one of said levers against movement, a shaft connected with said locking member for moving the same, a resilient disk-shaped member secured to said shaft for preventing any loose motion of said shaft and said locking member, and means secured to said shaft for moving said

locking member into and out of engagement with the lever that the same is designed to engage.

7. In a device of the character described,
5 the combination with a lock having a retractile bolt, of a plurality of levers for operating said bolt, a locking member for locking one of said levers against movement, a shaft for operating said locking member,
10 means for operating said shaft, and means for taking up any loose motion of said shaft

and said locking member, said last mentioned means comprising a disk formed with a pair of spring friction members, and means for securing the disk to said shaft. 15

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. C. EDEY.

Witnesses:

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H. P. BURDICK.