

No. 790,091.

PATENTED MAY 16, 1905.

R. A. TURNER.
LOCK.

APPLICATION FILED AUG. 17, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

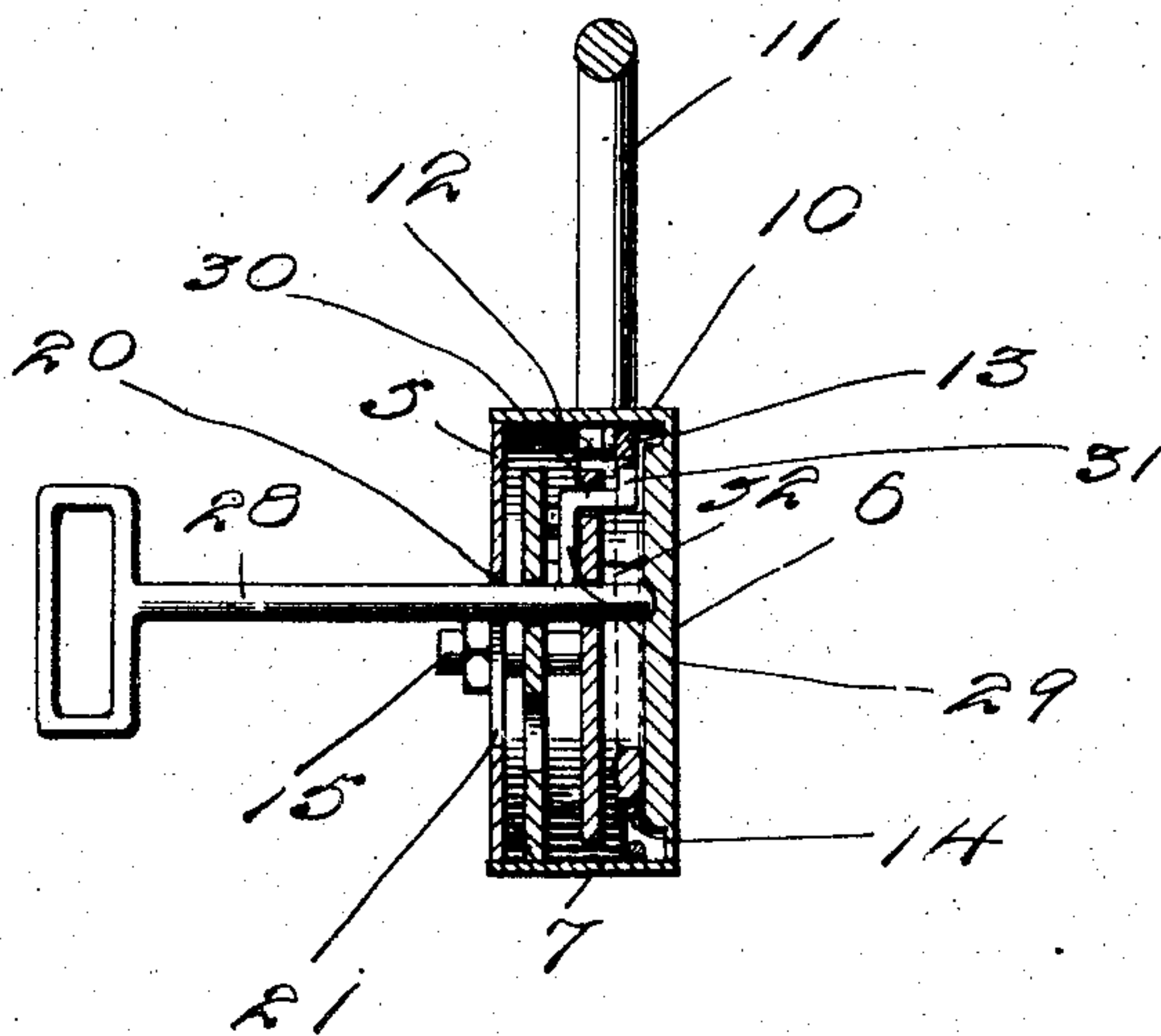
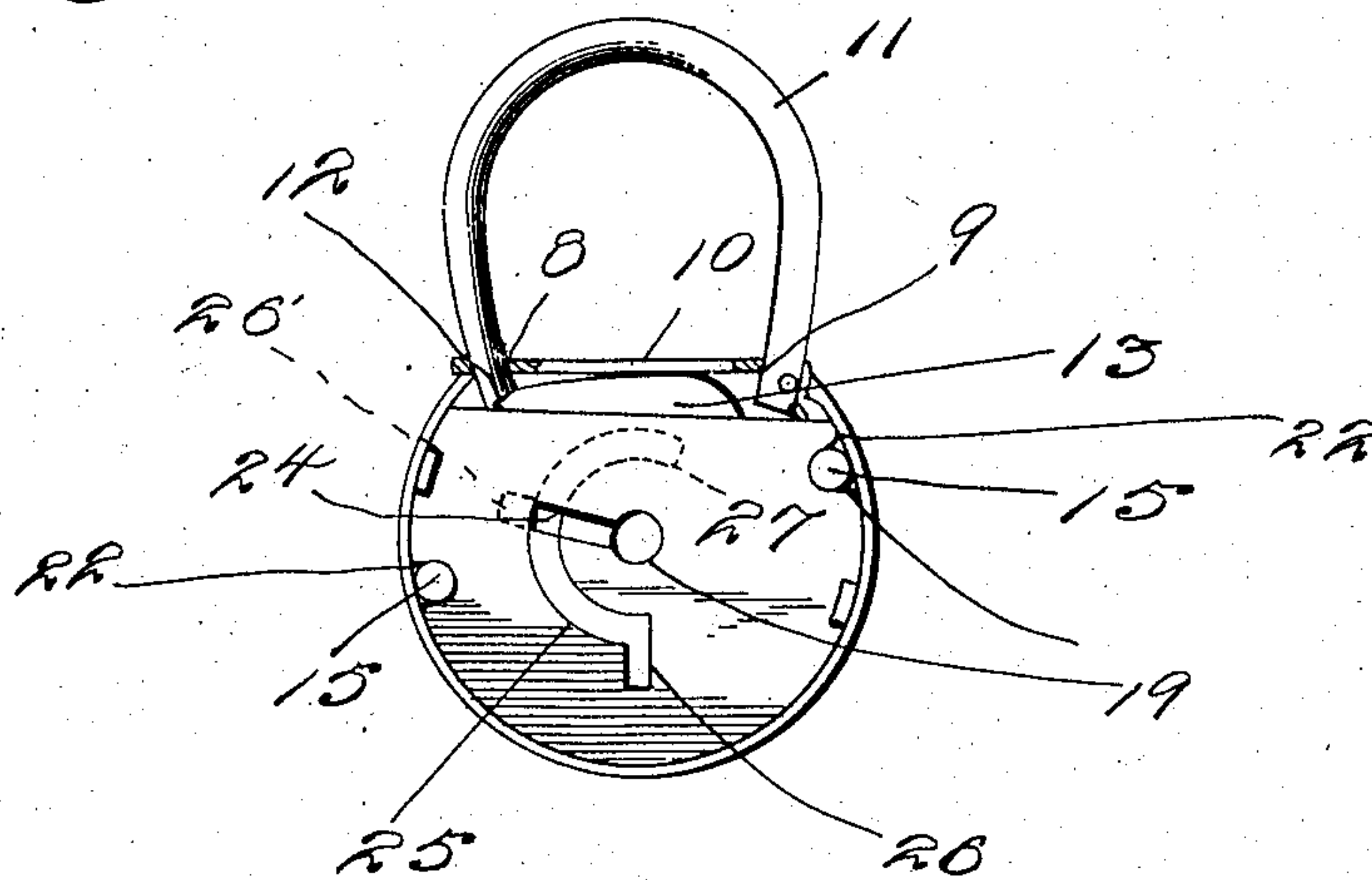


Fig. 2.

Witnesses
Amber

H. C. Chandler

Inventor
R. A. Turner
By

Chandler Chandler Attorneys

No. 790,091.

PATENTED MAY 16, 1905.

R. A. TURNER.
LOCK.

APPLICATION FILED AUG. 17, 1904.

2 SHEETS—SHEET 2.

Fig. 4.

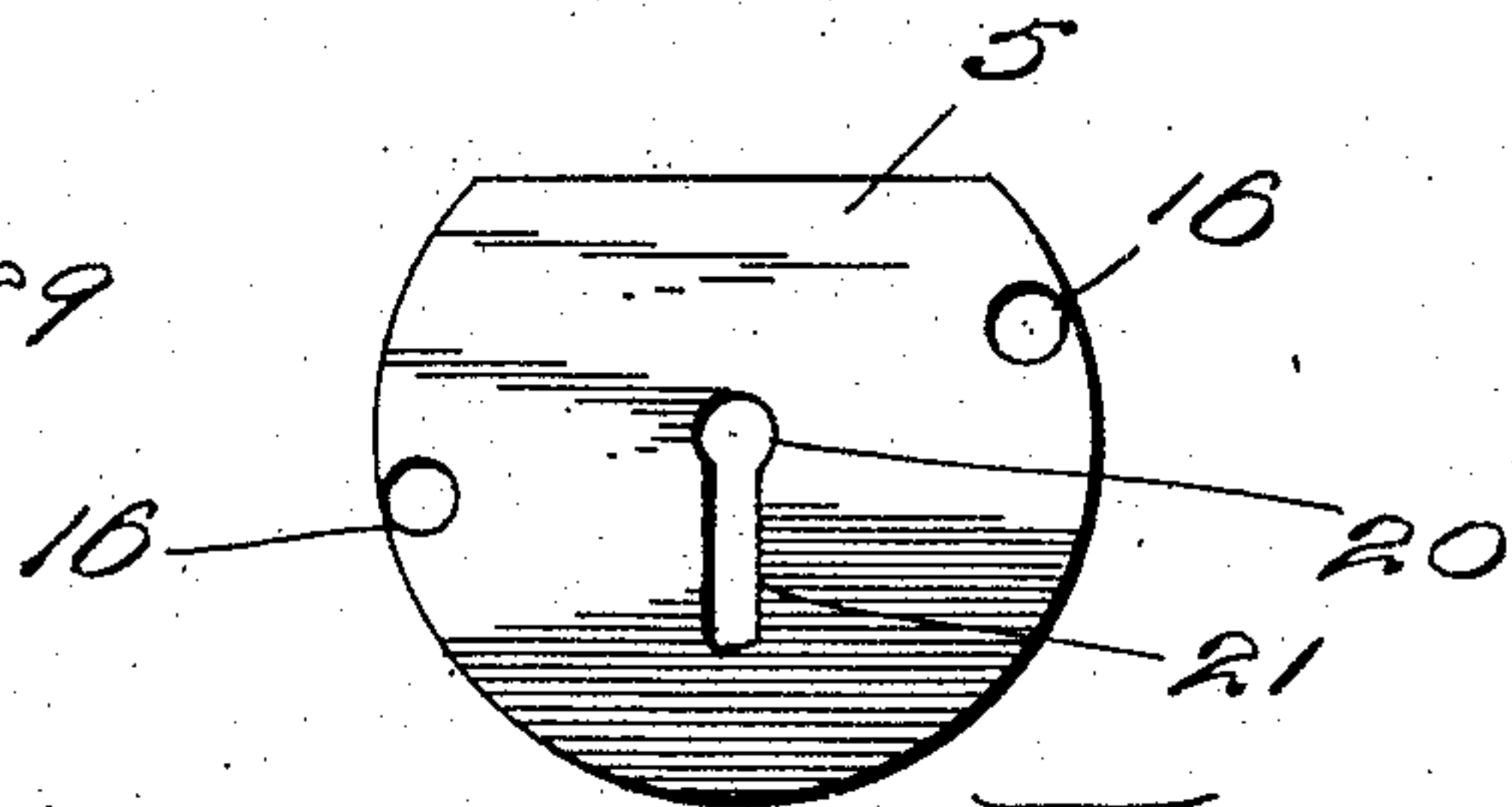
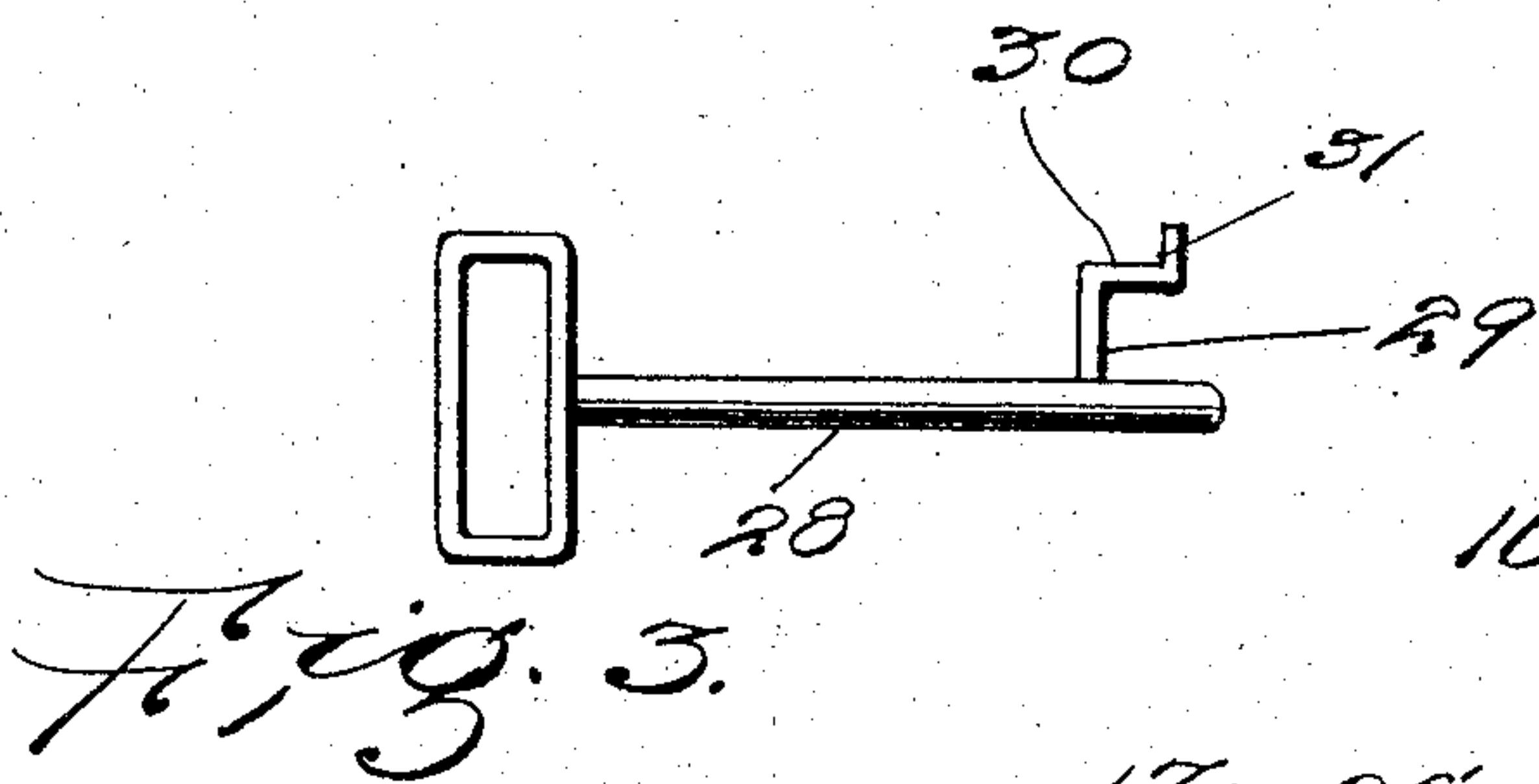
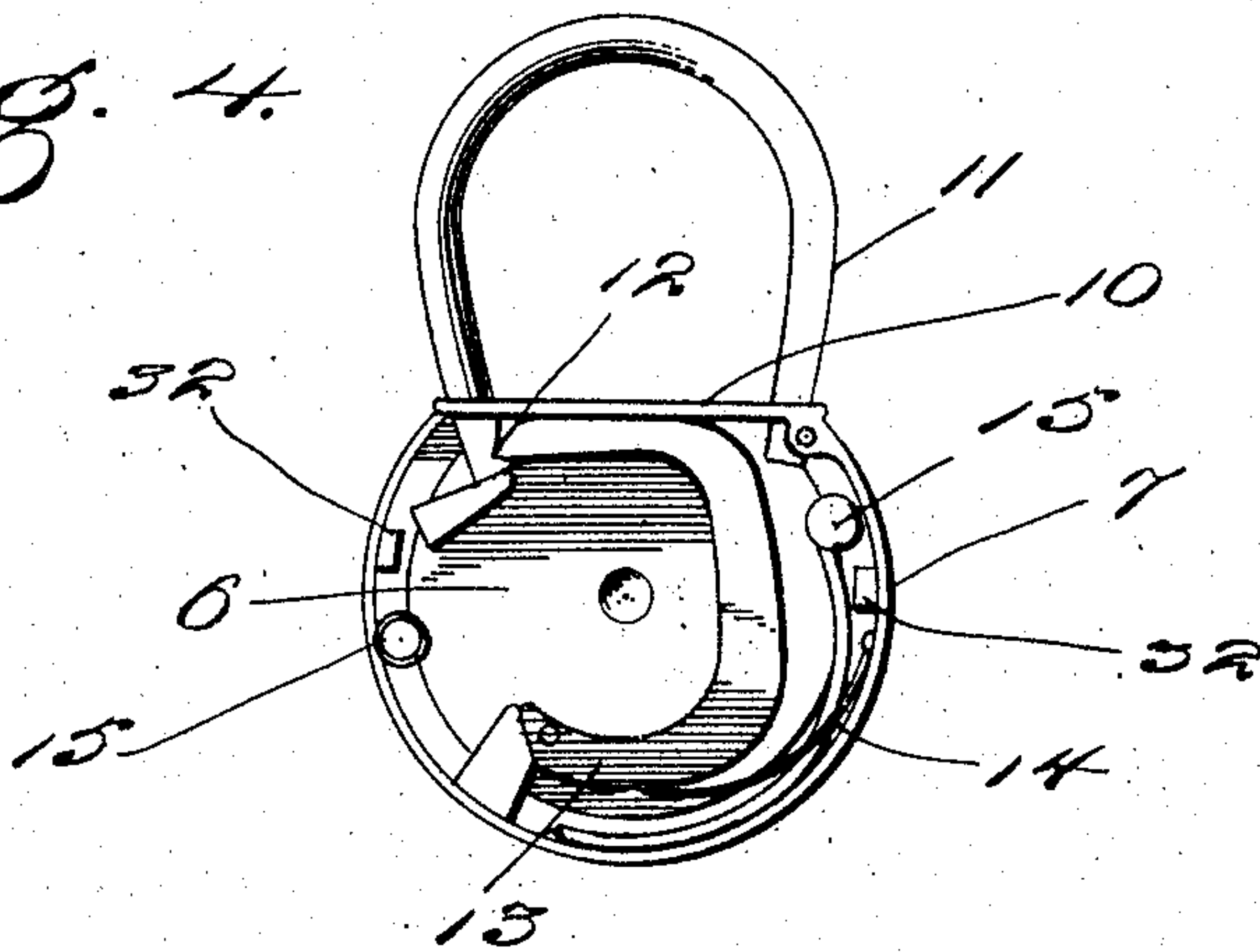


Fig. 5.

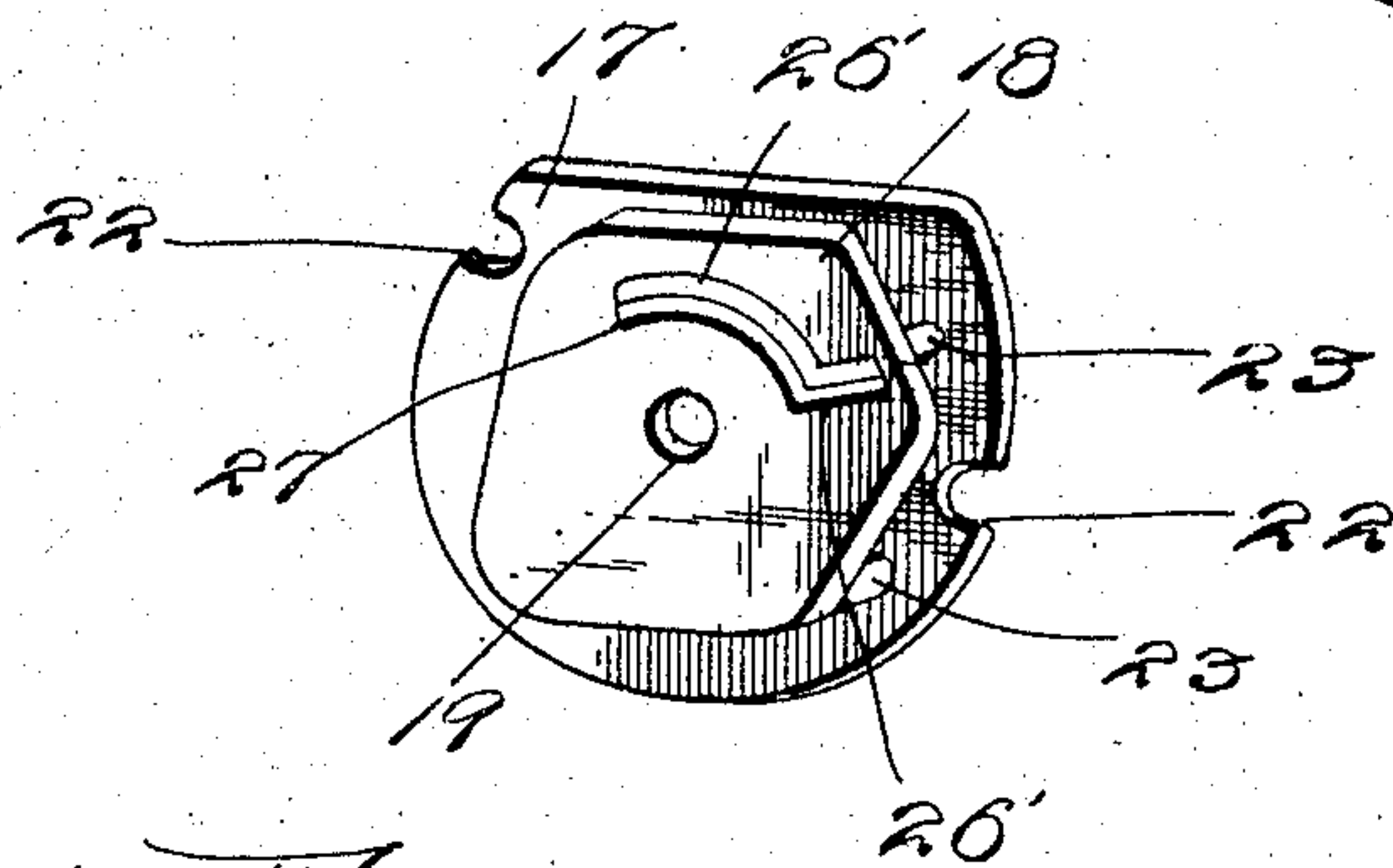


Fig. 6.

Witnesses
W. S. Chandler

Inventor
R. A. Turner
By *W. S. Chandler* Attorneys

UNITED STATES PATENT OFFICE.

RICHARD A. TURNER, OF PANTHER CREEK, NORTH CAROLINA.

LOCK.

SPECIFICATION forming part of Letters Patent No. 790,091, dated May 16, 1905.

Application filed August 17, 1904. Serial No. 221,036.

To all whom it may concern:

Be it known that I, RICHARD A. TURNER, a citizen of the United States, residing at Panther Creek, in the county of Yadkin, State of North Carolina, 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 locks, and has for its object to provide a lock so arranged as to prevent opening thereof with any instrument other than the key provided therefor, a further object being to provide a lock of this kind which can be manufactured at a low cost.

Other objects and advantages will be apparent from the following description, and it will be understood that modifications of the specific construction shown may be made and any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a view of a lock with the front plate removed and showing the forward slotted plate, the slot in the rearward plate being indicated partly in dotted lines. Fig. 2 is a section on line 2-2 of Fig. 1 and showing the key in engagement with the bolt. Fig. 3 is a side elevation of a key used in connection with the lock. Fig. 4 is a view showing the slotted plates removed and illustrating the interior mechanism of a lock. Fig. 5 is a view of the front plate. Fig. 6 is a view showing the rear side of the front plate and the slotted plate connected thereto.

Referring now to the drawings, there is shown a lock comprising front and rear plates 5 and 6 and a connecting side wall 7, the wall being provided with spaced perforations 8 and 9 at opposite ends of a flattened portion 10 thereof. Projecting through the perforation 9 and pivoted within the body of the lock is the yoke 11, it being understood that the lock illustrated is of the padlock type, and this yoke is movable upon its pivot to bring it into and out of position to lie with its free end extending through the perforation 8 into

the body of the lock and with its notch 12 engaged by the bolt 13 of the lock, which is pivoted to the rear plate 6 and is held normally in position to engage the notch 12 by means of a spring 14.

Secured to the inner face of the wall 7 are rivets 15, which project beyond the forward edge thereof and are engaged in perforations 16 in the front plate 5, the rivets being headed over to hold the plate in position, and within the body of the lock are disposed a pair of slotted plates 17 and 18, which are spaced from each other, as shown, and which have alining central perforations 19, which also aline with the circular portion 20 of a keyhole-slot 21, which is formed through the front plate 5 of the lock. The plate 17 has notches 22 in its edges, with which are engaged the rivets 15 to prevent movement of the plate within the body of the lock, and this plate has formed upon its rearward face lugs 23, which are soldered or otherwise secured to the plate 18 to hold the two plates in spaced relation and against movement with respect to each other.

Formed through the plate 17 and communicating with the central perforation thereof, from which it extends radially, is a slot 24, and communicating with the outer end of this slot and extending in an arc concentric with the perforations 19 is a slot 25, having an outwardly-extending slot 26 at its free end, which also extends radially of the perforations 19.

Formed through the plate 18 and extending from a point below the inner edge of a slot 25 at its union with the slot 24 is a slot 26', which forms a continuation, so to speak, of the slot 24, or rather which extends at the same angle to the perforations 19 as does this slot. Communicating with the inner end of the slot 26' and extending in the line of curvature of the slot 25 is a slot 27, which is thus concentric with the central perforation of the plate 18. It will be apparent from the drawings that at the point of union of the slots 24 and 25 they lie above the point of union of the slots 26' and 27, so that the slots of the two plates overlap.

In connection with the lock just described there is employed a key 28, including the usual

stem having a bit at its lower end and a finger-piece at its upper end. In the present key the bit consists of a portion 29, which extends at right angles to the stem some distance from the lower end thereof, this portion having a downwardly-turned portion 30 at its free end, which in turn has an outwardly-extending portion 31 at its lower end, which lies slightly above the lower end of the stem of the key.

10 In the operation of the lock the key is inserted through the slot 21 to bring the extremity of the stem into the central perforation of the plate 17 and to cause the portion 31 of its bit to extend through the slot 26' into the space between the plates 17 and 18. The key is then moved pivotally to bring the portion 29 of its bit above the slot 24, in which position the portion 31 lies above the slot 26', and the key may then be inserted farther into the lock to cause the portions 29 and 31 to move through the slots 24 and 26', respectively, to bring the former into the space between the two plates and the latter into the space between the plate 18 and the rearward plate 6, the plate 18 being held in spaced relation thereto by means of lugs 32, projecting from the inner face of the plate 6. When the key is in this position, the portion 30 of its bit lies in the slot 27, and the key may be moved pivotally to cause the portion 30 to traverse the length of this slot to bring the portion 31 into engagement with the bolt 13 to move it out of engagement with the notch 12 of the yoke.

35 It will be apparent that the course followed by the bit of the key is so tortuous that the insertion of any instrument other than the key described to disengage the bolt from the yoke will be practically impossible.

40 What is claimed is—

1. In a lock, the combination with a body

portion having a keyhole-slot in one of its walls and having a bolt therewithin, of spaced plates disposed within the body portion between the slotted wall and the bolt, each of said plates having a central perforation therein registering with the circular portion of the keyhole-slot and having also an arcuate slot concentric with the central perforation, said slots extending in a common line of curvature and overlapping at one end, the arcuate slot of the outermost plate having a slot at its overlapping end communicating with its central perforation and having an outwardly-extending slot at the remaining end of its arcuate slot, the innermost plate having an outwardly-extending slot communicating with its arcuate slot at the overlapping end thereof and extending in a line with the second-named slot of the outermost plate, said slots being arranged for the passage of a key therethrough for engagement thereof with the bolt to move the latter out of operative position.

2. In a lock, the combination with a body portion having mechanism therein arranged for operation by a key, and having a slot in one of its walls for the passage of a key therethrough, of spaced plates disposed within the body portion, between the mechanism and slotted wall, said plates having slots therein, the slot of the outermost plate being arranged for the passage of the entire bit of a key therethrough, and the slot of the inner plate being arranged for the passage of a portion of the bit of the key therethrough.

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

RICHARD A. TURNER.

Witnesses:

W. A. HALL,
B. C. DURYEA.