

No. 705,211.

Patented July 22, 1902.

A. COYNE.
ALARM LOCK.

(Application filed Aug. 28, 1901.)

(No Model.)

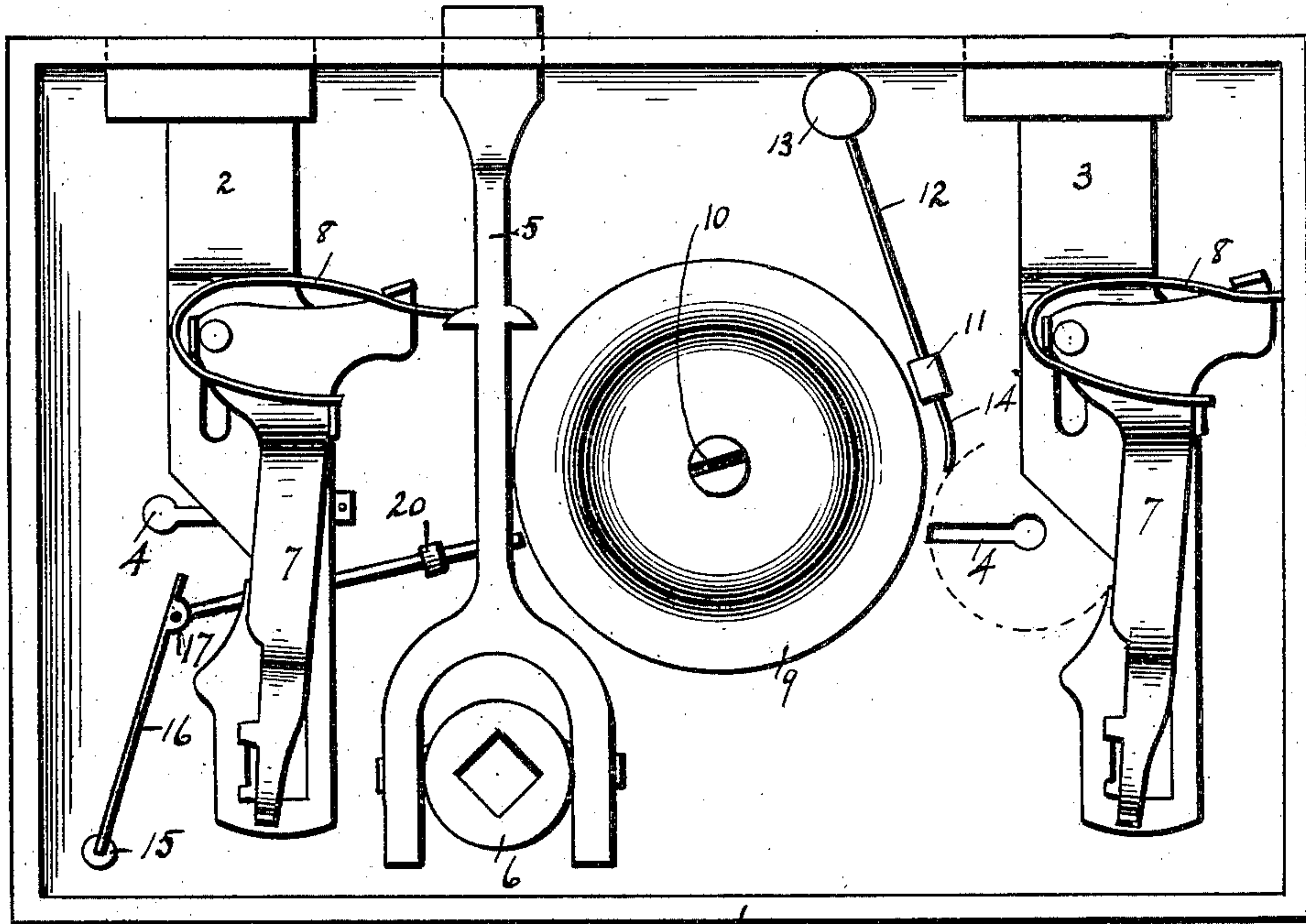


Fig. 1.

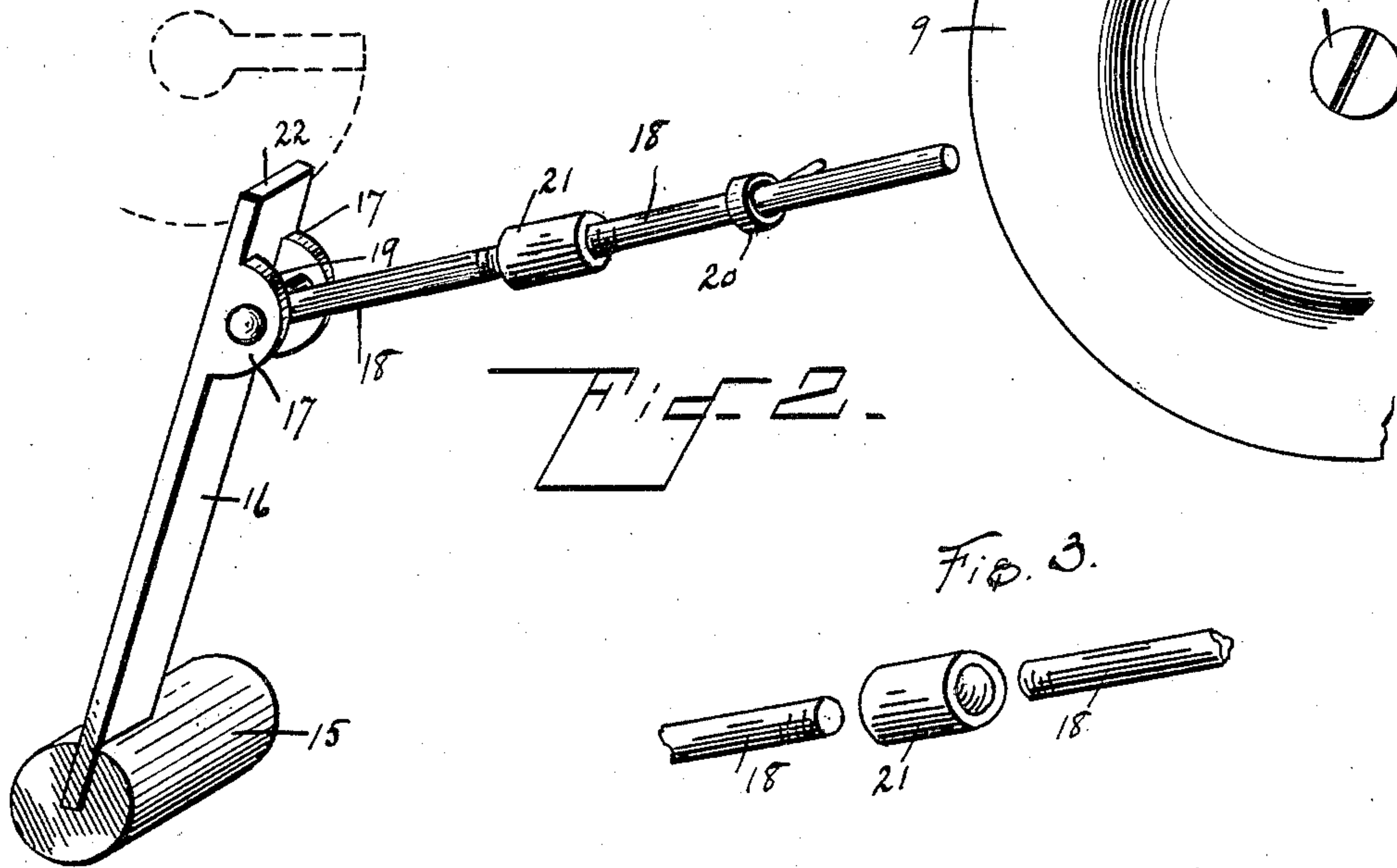
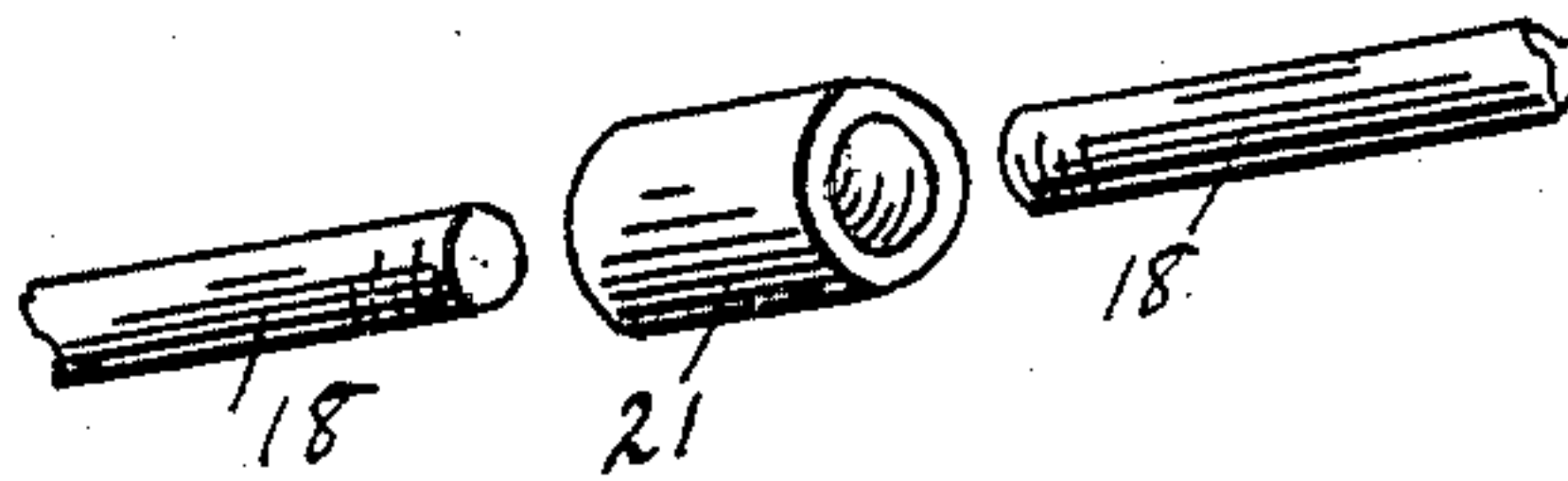


Fig. 2.

Fig. 3.



Witnesses

George Hilton.

T. C. Miller.

ANTHONY COYNE.

Inventor

by W. J. Fitzgerald & Co.

Attorneys

UNITED STATES PATENT OFFICE.

ANTHONY COYNE, OF HARTRANFT, TENNESSEE.

ALARM-LOCK.

SPECIFICATION forming part of Letters Patent No. 705,211, dated July 22, 1902.

Application filed August 28, 1901. Serial No. 73,530. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY COYNE, a citizen of the United States, residing at Hartranft, in the county of Claiborne and State of Tennessee, have invented certain new and useful Improvements in Alarm-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 lock construction, and has for its special object the provision of a lock which will combine a device designed to cooperate with the lock mechanism proper which will produce an alarm, as by ringing a bell, when the bolt is thrown into an unlocked position.

Other objects and advantages will be made clearly apparent from the following specification, considered in connection with the accompanying drawings, in which—

Figure 1 is a plan view of my lock mechanism, showing the outer part of the casing removed. Fig. 2 is a detail view showing the device employed for ringing the bell. Fig. 3 illustrates means for adjusting the longitudinal extension of part of said mechanism illustrated in Fig. 1.

Referring to the numerals on the drawings, which are employed to designate the features of my invention and the cooperating accessories, 1 indicates the casing of the lock, of the usual or any preferred construction, comprising the double bolts 2 and 3, while 4 designates the keyholes formed in the casing, whereby said bolts may be thrown by the key, as is common, by engagement with the inclined portions thereof. 5 designates the bolt controlled by the door-knob, the shaft of the knobs extending through the aperture in the controlling device 6, all of said parts being formed substantially in the usual manner. The bolts 2 and 3 are provided with the controlling mechanism, comprising the tumblers 7 and the spring 8, as usual, said parts being sustained in their operative positions by means commonly employed for such purpose.

I will now call attention specifically to the means employed by me to ring the bell or gong 9, properly secured to the lock-casing

at a convenient point, as by the bolt or screw 10.

11 is a hammer, which is disposed adjacent to the edge of the gong 9 by being mounted upon the spring member 12, the opposite end of the spring being mounted in the post 13, an extension 14 of the spring being left to reach beyond the hammer 11 into the path of the key passing through the keyhole 4, and it is obvious that when the key is turned in the hole the free end thereof will engage the extension 14 and withdraw the hammer 11 from the gong until the key is moved sufficiently for the extension 14 to slip off the key, when the hammer thus released will strike the gong. The key is designed to engage with a part on the bolt to retract it. This movement of the key designed to operate the hammer 11 is not possible except when the bolt is thrown backward into the casing.

The mechanism controlling the hammer may be varied—as, for instance, the anchoring-post 15 may be secured to the casing at any desired point and the spring-lever 16 connected rigidly to said post, the outer end of the lever 16 thus mounted being provided with the laterally-extending ears 17. Between the ears 17 I pivotally mount the shaft 18, as by forming a cross-head 19 upon said shaft and extending the ends of the cross-head into engagement with apertures provided in the ears 17.

The shaft 18 is extended loosely through the head of the eyebolt 20, secured at a convenient point to the casing, and in order to control the longitudinal extension of the shaft 18 I provide the rotatable tubular member 21, the bore of which is provided with oppositely-disposed threads adapted to receive the contiguous threaded ends of the parts of the shaft 18, and it is obvious that by properly rotating the member 21 the length of the shaft 18 may be placed reliably under the control of the operator, so as to properly adjust and dispose the free end of the shaft with respect to the edge of the gong.

The spring-lever 16 is extended beyond the ears 17, as indicated by the numeral 22, said extension 22 being designed to lie in the path of the key, whereby the spring-lever may be engaged and the shaft 18 withdrawn during

the movement of the key incident to throwing the bolt 2 back in the casing or into an unlocked position.

By means of the rotatable member 21 the shaft 18 may be very accurately adjusted, even after the spring-lever has become casually bent or otherwise displaced from its original position.

It will be understood that the parts of my invention may be formed of any preferred material and any desired size deemed most suitable for meeting the various requirements of such a lock and that the results arising from the use of my improved alarm-lock will be found to be very desirable, inasmuch as the lock will give off an alarm when the bolt is thrown into an unlocked position, thereby notifying the occupants or others.

The lock bolts and tumblers may be of any typical form and mode of operation, no claim being made herein thereto. As will be seen upon reference to Fig. 1, when the key is turned downward and to the left in said view—that is, toward the right-hand side—the said key will enter the notch in the bolt, actuating the tumbler to allow the bolt to be thrown outward by the further movement of the key. With the bolt thrown out and it is desired to unlock the same the key is turned in the other direction, and as it rides upon the inclined surface of the bolt it actuates the tumbler, and then further movement of the key will throw the bolt inward.

Having thus fully described the construction and combination of parts deemed necessary in materializing my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an alarm-lock the combination with the lock mechanism of a gong; a post mounted in the casing of the lock; a spring-lever connected to said post and having a laterally-extending pivotal seat 17; a shaft pivotally connected to ears on said lever and means to adjust the length of said shaft and an extension carried by said spring-lever—designed to be engaged by the key when the latter is moved to throw the bolt of the lock into an unlocked position, all combined substantially as specified and for the purpose set forth.

2. In an alarm-lock, the combination with the lock mechanism, of a gong, a post mounted within the lock-casing, a spring-lever connected at one end to said post, a shaft pivotally mounted in the free end of said lever, means for the longitudinal adjustment of said shaft, a guide for the free end of the shaft, and an extension on the lever beyond its connection with the shaft, to be engaged by the key, as and for the purpose specified.

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

ANTHONY COYNE.

Witnesses:

W. G. FARLEY,
Q. A. TIPTON, Jr.