

A. WOMACK.

LOCK.

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999,938.

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Fig. 1.

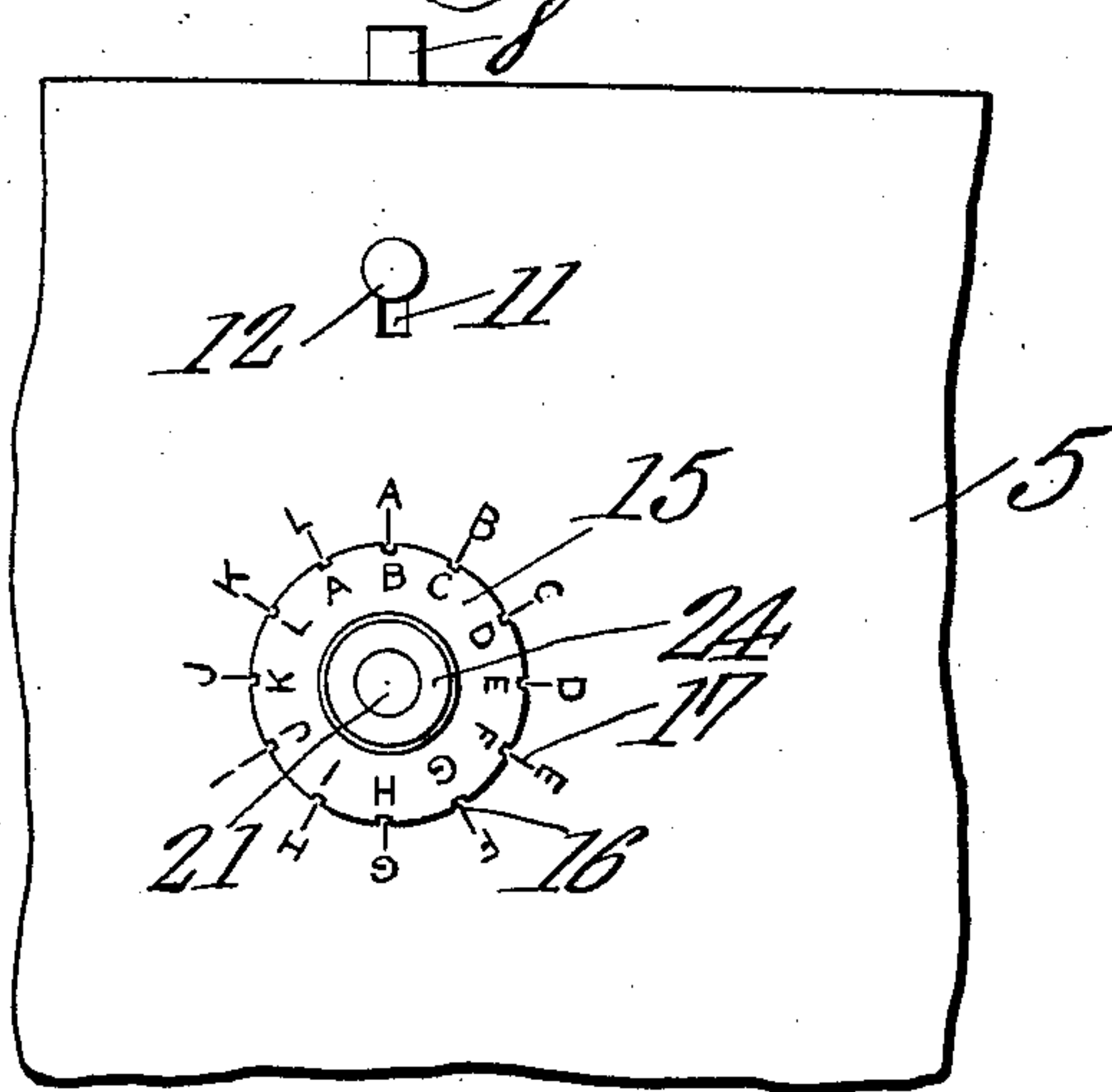


Fig. 3.

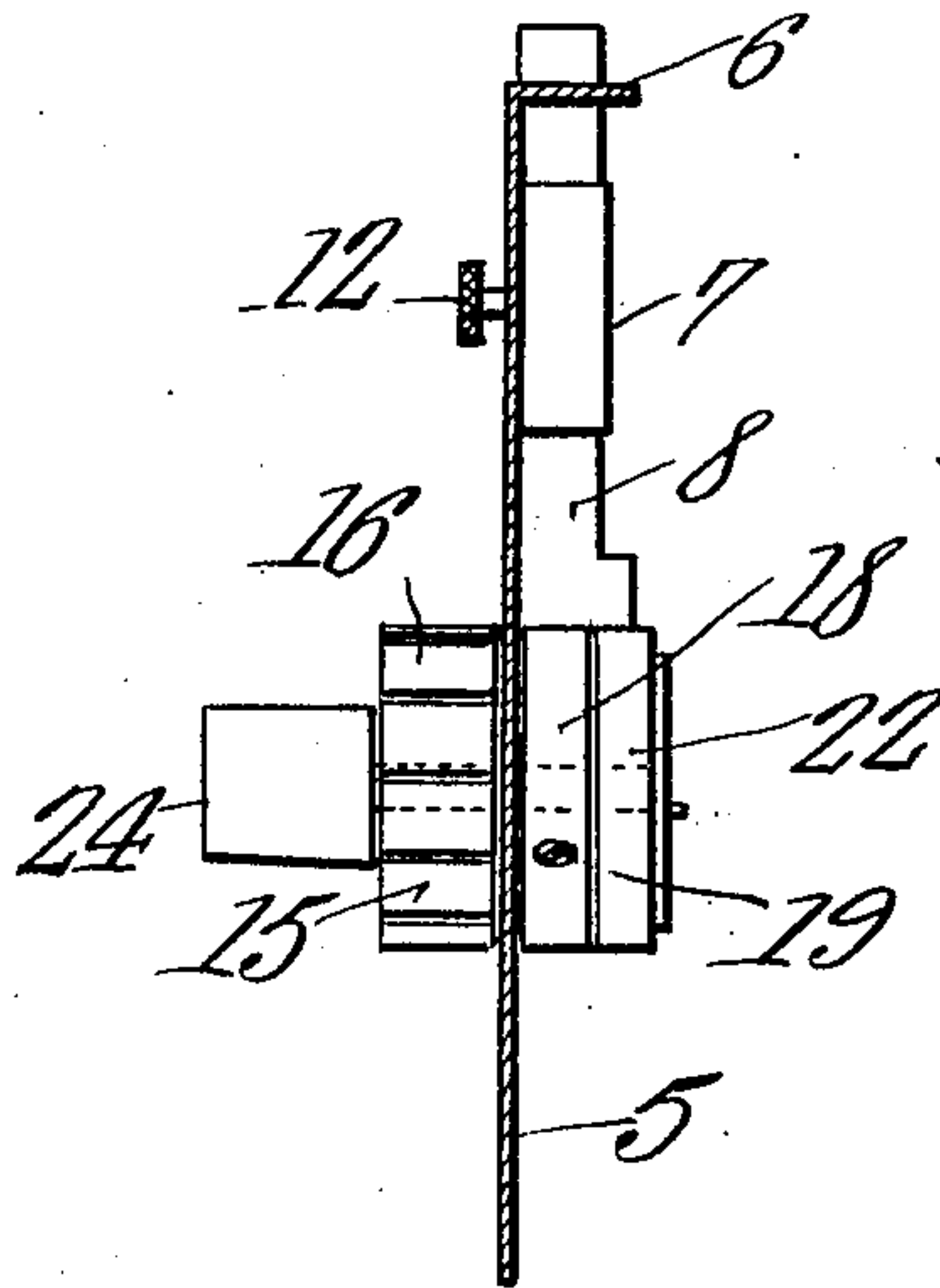


Fig. 2.

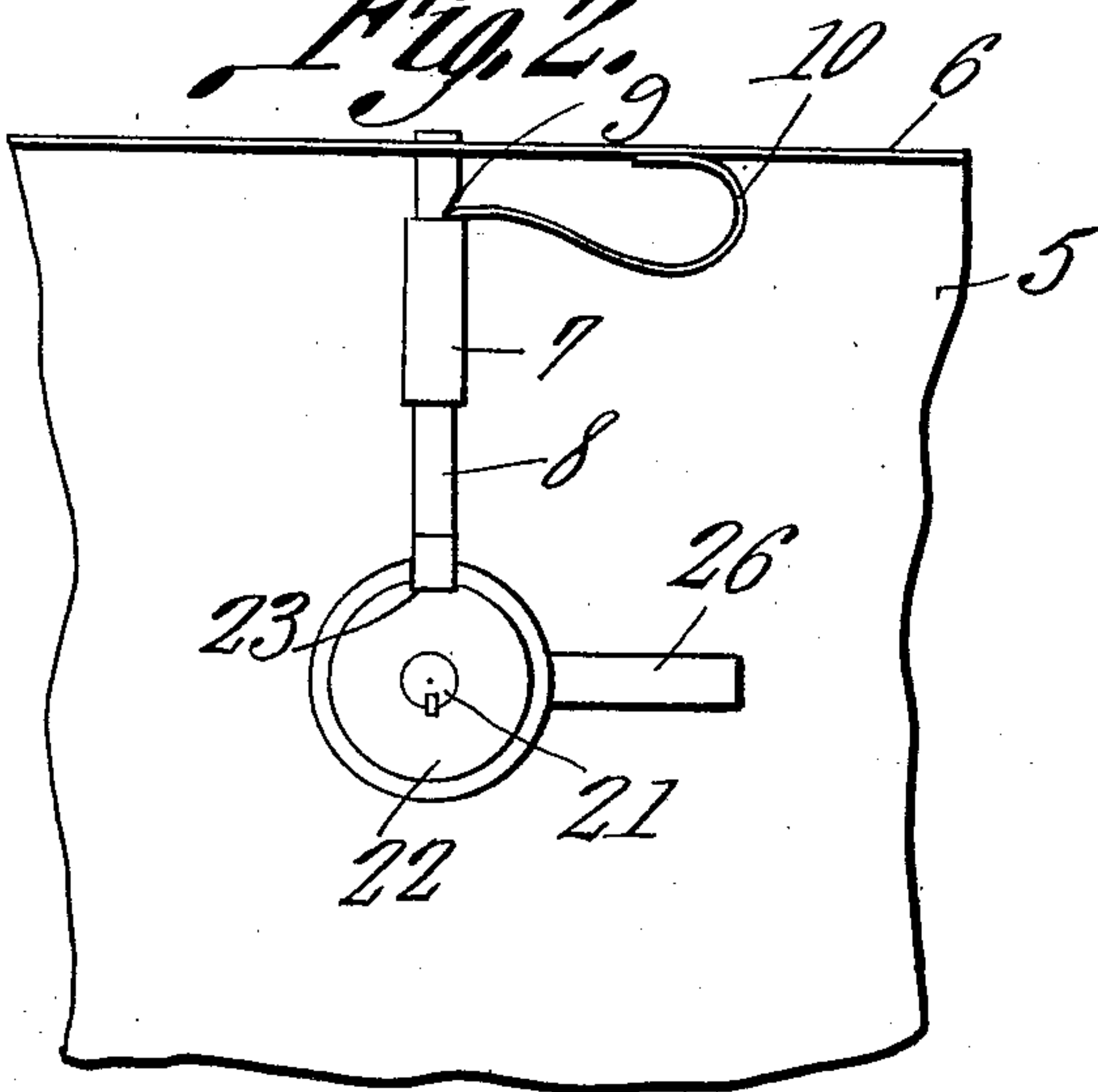
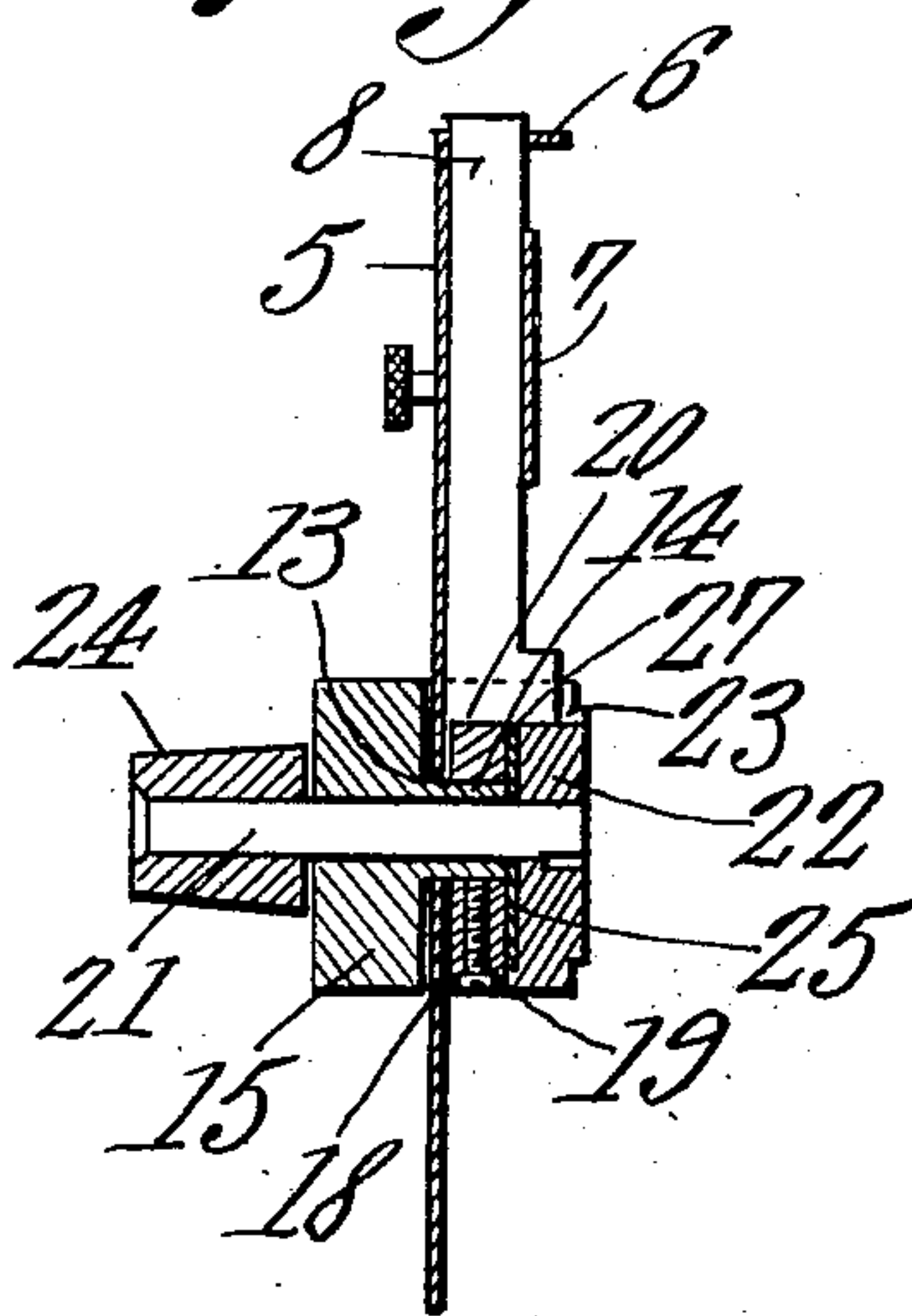


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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LOCK.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALEXANDER WOMACK, a citizen of the United States, residing at Emmett, in the county of Canyon and State of Idaho, have invented a new and useful Lock, of which the following is a specification.

It is the object of the present invention to provide a cheap and simple construction of lock designed primarily for use upon mail boxes.

One aim of the present invention is to provide a lock of this type which may be readily manipulated with one hand, the bolt of the lock being automatically retracted as soon as the elements of the lock have assumed a predetermined relation, which relation they may be caused to assume by the employment of one hand. Thus, the lock is particularly well adapted for use on mail boxes, the post-man being permitted to use the other hand to carry his mail sack or, on rural routes, to retain his hold upon the reins.

With the above and other objects and aims in view, the invention consists in the general construction and arrangement of parts shown in the accompanying drawings, in which,

Figure 1 is a front elevation of the lock as embodied in a mail box door, this view being however fragmentary in character. Fig. 2 is an inside view similar to Fig. 1. Fig. 3 is a vertical section through the door showing the lock in side elevation. Fig. 4 is a vertical sectional view through the lock taken in a vertical plane with the bolt thereof and showing the bolt retracted.

In the drawings, the numeral 5 indicates a portion of the door of an ordinary mail box or the like, the door being, in the present instance, as usual, formed of sheet metal and having at its upper edge an inwardly projecting flange 6. Mounted to slide vertically in a guide 7 upon the inner face of the door 5, is a bolt 8, formed adjacent its upper end, with a notch 9 and having its said upper end projecting through an opening in the flange 6 and above the upper edge of the door it being understood that this end of the bolt is to engage with a keeper at the upper edge of the door casing. A bowed leaf spring 10 is secured at one end to the underside of the flange 6 and at its other end engages in the notch 9 and this spring exerts a retractive force upon the bolt 8 or in other

words tends to slide this bolt downwardly in its guide 7. The door 5 is formed with a vertically extending slot 11 and the bolt 8 is provided with a finger knob 12 which projects through this slot and which may be grasped for the purpose of sliding the bolt in an upward direction against the tension of the spring 10, in setting the lock, as will be presently explained.

The door 5 is formed with an opening 13 through which is fitted the hub 14 of a dial disk indicated by the numeral 15, this disk fitting against the outer face of the door 5. This disk 15 is provided in its periphery with a plurality of notches indicated by the numeral 16 which notches are adapted to be brought selectively into registration with indications 17 upon the outer face of the door 5 and upon the face of the disk 15 at each notch 16 there is a letter, number or other character distinguishing this notch from the other notches. In a like manner, each indication 17 has opposite it a character such as a letter or number and, as will be readily understood, any one of the notches upon the disk 15 may be brought into selective registration with the notches upon the door 5 by rotating the disk. As stated, the hub 14 of the disk 15 projects through the opening 13 and a disk, indicated by the numeral 18 is fitted upon the hub 14 and held thereon by means of a set screw 19. This disk 18 is formed with a notch indicated by the numeral 20 the function of which notch will be presently explained.

A spindle 21 is fitted rotatably through the hub 20 and upon its inner end has fixed a disk 22 with a notch 23 corresponding in depth to the notch 20 in the disk 18. As stated, the disk 22 is held for rotation with the spindle 21 and such rotation of the spindle may be had through the medium of a finger knob 24 secured upon the outer end of the spindle and outwardly of the disk 15. At this point it will be observed that the disk 15 and hub 14 are confined between the disk 22 and the knob 24 and that owing to the fact that the disk 18 is located between the disk 22 and the door 5, displacement of the elements with respect to the door in a direction coincident with the axes of the disks, is prevented. A washer disk indicated by the numeral 25 is fitted upon the spindle 21 between the disks 22 and 18 and is provided with an extension 26 secured to the inner face of the door 5 whereby it will

be held against rotation upon the spindle. This washer disk is formed with a notch 27 of the same depth as the notches 20 and 23.

From the foregoing description of the invention it will be readily understood that normally the bolt 8 is elevated and in engagement with a keeper (not shown) upon the upper edge of the door opening of the mail box and at such time, the lower end of the bolt will be held by the spring 10, against the peripheries of the two disks 18 and 22. It will also be understood that the disk 18 having been properly adjusted upon the hub 14, rotation of the dial disk 15 will serve to bring a predetermined one of the notches 16 into registration with a predetermined indication 17 upon the door 5, and will bring the notch 20 in the disk 18 into registration with the lower end of the bolt. After this has been done, the knob 24 is turned thereby rotating the spindle 21, the spindle 21 rotating the disk 22 until the notch 23 in the disk 22 is brought into registration with the lower end of the bolt whereupon the spring 10 will force the bolt 8 downwardly with its lower end seating in the two notches which are thus alined. This movement of the bolt will permit the door to be opened. In closing the door, the fingerpiece 12 is grasped and the bolt slid upwardly against the tension of the spring whereupon the disk 15 and knob 24 are rotated promiscuously for a turn or two and the lock must then be opened in the manner above described when it is desired to open

the door 5. It will be readily understood, furthermore, that the combination, so to speak, may be readily changed by adjusting the disk 18 upon the hub 14, the set screw 19 being first loosened, the disk turned to the proper point, and the set screw then tightened, for this purpose.

What is claimed is:—

A lock of the class described, comprising as constituent parts, a base plate; a dial having a hub rotatably mounted in and extended through the plate; a disk rotatable upon the hub and bearing against the plate; a spindle rotatable in the hub; a knob upon the spindle adjacent the dial; a washer upon the spindle, abutting against the disk and secured to the plate; a disk secured to the spindle and abutting against the washer, both disks having notches adapted to be alined with a notch in the washer; a locking bolt slidable in contact with the plate and adapted to register in the notches; and an element for securing the first named disk to the hub, said element being mounted in said disk radially of the hub, whereby the said disk may be adjusted rotatably, without disturbing the abutting relations of the lock parts.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ALEXANDER WOMACK.

Witnesses:

L. E. MOODY,
H. S. BOSYE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."