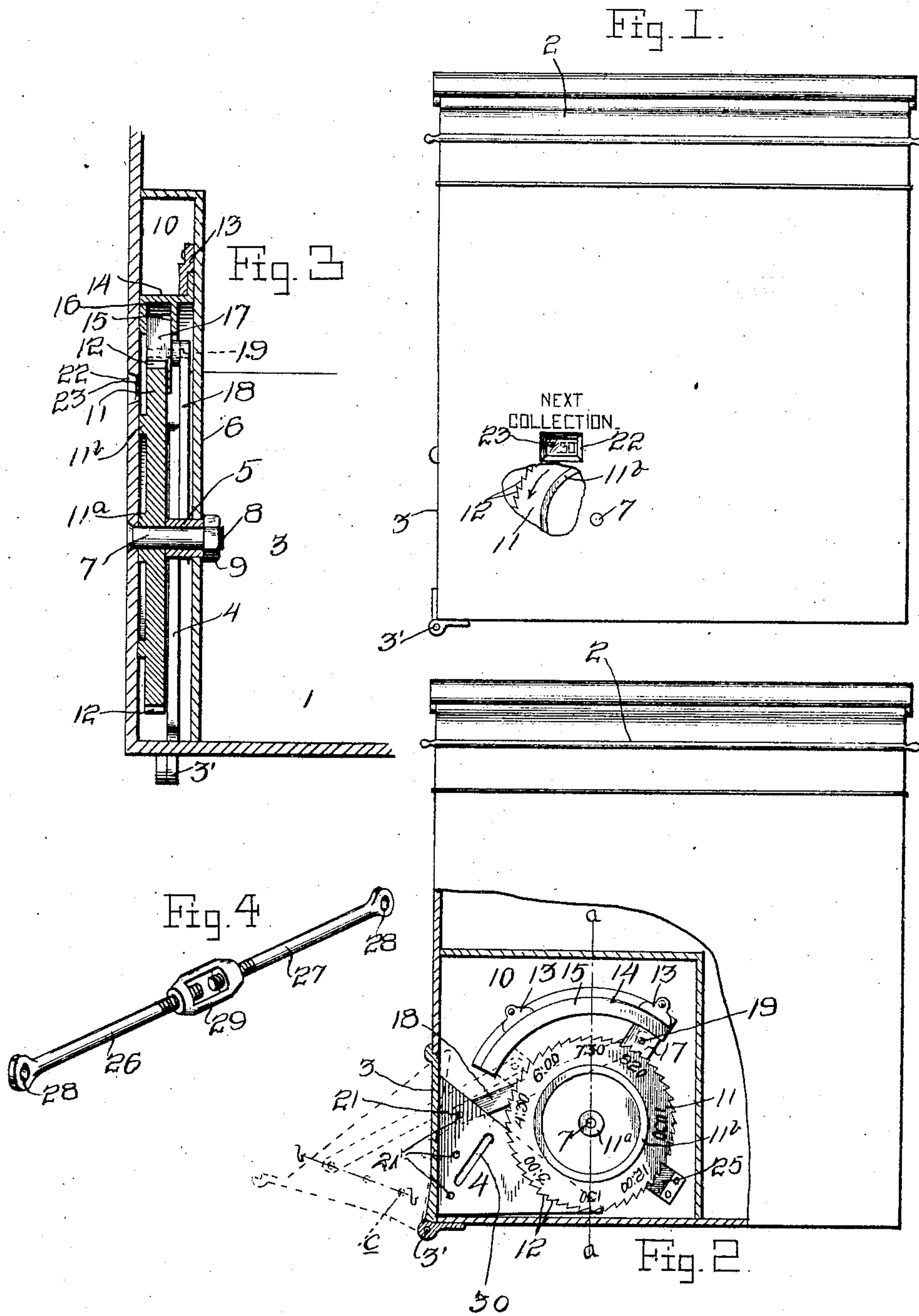


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J. L. LISTER.
INDICATOR FOR LETTER BOXES.
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INDICATOR FOR LETTER-BOXES.

SPECIFICATION forming part of Letters Patent No. 786,225, dated March 28, 1905.

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To all whom it may concern:

Be it known that I, JOHN L. LISTER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain
5 new and useful Improvements in Indicators for Letter-Boxes; 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
10 make and use the same.

This invention relates to letter-boxes.

One object of the invention is to indicate automatically the time at which the next collection will be made.

15 Another object of the invention resides in the construction and arrangement of mechanism wherein the parts will be few and the mechanism of such type that it may readily be applied to any of the ordinary letter-boxes
20 now in general use.

A still further object of the invention is to provide a comparatively inexpensive and a durable and efficient mechanism for attachment and association with letter-boxes that the
25 door of the latter will manipulate or operate the mechanism for the purpose specified.

It is still further designed to provide a construction and arrangement wherein in the event of the times of collection being changed
30 there will be no inconvenience and very little if any difficulty experienced in altering the indicating mechanism to the necessity of displaying the changed times, whether there be less or more occasions ordered for the collection of the mail.
35

With these and other objects in view the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit
40 or sacrificing any of the advantages of the present 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 front elevation of a letter-box, a part being broken away to illustrate the indicating-dial. Fig. 2 is an elevation of the indicating mechanism, the front of the box being eliminated, illustrating the operation of the device in dotted lines. Fig. 3
55 is a sectional view on the line *a a* of Fig. 2. Fig. 4 is a modified or different form of draw-bar.

Referring now more particularly to the accompanying drawings, the reference character 1 designates a mail or letter box, having the usual entrance-opening 2 at the upper portion thereof for insertion of mail and the door 3 pivoted, as at 3', at the lower portion to permit of access to the box for the purpose of extracting the letters contained therein, the door
60 having the usual wings or sides 4, as shown.

Piercing the front wall of the box 1 and bushing 5 in the partition 6, which latter is arranged in close juxtaposition to the inner
70 face of the front wall of the box, is a pivot bolt or pin 7, having a reduced screw-threaded end 8 for the reception of the nut 9, which latter holds the bolt or pin tightly in place.

The partition 6 is quite close to the front
75 wall, forming a very narrow chamber or compartment 10, in which and revolubly mounted upon its axis—that is, the bolt or pin 7—is a disk or dial wheel 11, having teeth 12 formed in its periphery, all of which point in the direction opposite to the direction of movement of the disk or dial wheel 11, the direction of movement of the latter being indicated by the arrow in Fig. 1. This dial-wheel is provided upon one of its faces with cut-out portions or
85 the like, resulting in the formation of the increased thickness 11^a at its center and the annular rib 11^b, whereby friction is reduced between the dial when rotated, as hereinafter described, and the inner face of the front wall
90 of the box 1, as clearly shown in Fig. 3.

Disposed above the disk or dial wheel 11 and secured to the partition 6 by means of suitable fastenings 13 is a curved plate 14, having a flange 15, between which latter and
95 the inner face of the front wall of the box is

thereby formed a guideway 16, designed to guide the movement of the toothed traveling block 17, the latter having its teeth pointed in an opposite direction to the teeth of the dial-wheel and having a draw-rod 18 pivotally secured thereto by means of a suitable pin or the like 19, having its opposite end pivotally secured to the inner face of the wing 4 of the door 3 by a pivot 21, engaged in one of the series of perforations 21', as shown.

Whenever the door 3 of the box is opened for the purpose of extracting the letters contained therein for transmission, the draw-rod 18, by reason of its connection with one of the wings 4, draws upon the same, causing the traveling block 17 to be pulled through the path provided by the guideway 16 to the opposite end of the guideway, as shown by dotted lines in Fig. 2, thereby causing—say, for instance, the time of opening the door to be 7.30 p. m.—the dial to be rotated through an arc of a circle sufficient to bring the time of the next collection, 9.20 p. m., (the times of collection being marked upon the outer face of the dial, as shown,) before the indicator-opening 22, covered by mica or other transparent material 23, thereby placing to view for the consideration of the public an idea as to when the next collection will be made.

Secured upon the partition 6 by means of suitable fastenings 24 is a brake 25, composed of rubber or any other suitable material, the object of the brake being to hold the dial-wheel positively against reverse movement and permit the teeth of the sliding or traveling block 17 to ride over the teeth of the dial-wheel when the door 3 of the box is closed, thereby not disturbing the time previously set for the next collection when the dial was moved forwardly by the door being opened to extract the mail from the box.

Hours for the collection of mail are sometimes changed, necessitating a difference in the movement of the time-dial to register or indicate proper times at which the next collection will be made, and as the dial in the present instance is provided with necessary graduations for such an event it is only necessary to change the point of connection of the draw bar or rod 18 to the corresponding point along the line *b b* on the wing 4 of the door. For instance, the accompanying drawings illustrate an arrangement wherein an allowance is made for four collections a day, the dial-wheel therefore necessarily making a complete revolution in four movements; but in the event that it should be desired to make a change to seven collections, the point of contact of the draw bar or rod 18 should be, I will say, for instance, connected with the wing 4 at *c*, a change between four and seven collections being provided for along the line *b b*, as hereinbefore intimated.

The particular form of draw bar or rod 18 is but one means to be employed for the purpose described, for other forms may be employed, one other form being shown in Fig. 4 of the drawings, wherein two short rods 26 and 27, each having an end provided with a perforation 28 through which a fastening of any suitable nature might be inserted to engage the rods, one with the wing 4 of the door and the other with the sliding or traveling block, the free ends of the same being screw-threaded and connected to the turnbuckle 29, whereby this particular form of draw bar or rod may be lengthened or shortened without changing the points of application of the same.

It will thus be seen that my invention is very simple, resulting in very little if any possibility of the same becoming out of order; that the mechanism is all installed in one part of the box, presenting no hindrance whatever to the incoming or outgoing letters, the same occupying but very little and compact space in the box; that there is not a single spring employed, which fact in itself is manifestly an excellent feature, and that the public will be enabled to determine the time of the next collection without any labor or loss of time by the person collecting the mail.

In addition to the series of perforations 21', which permit of adjustment of the bar 18 to give the desired throw to the member 17, a slot 30 is formed in the wing 4 and the pivot-bolt 21 may be engaged in this slot at different points of its length instead of in one of the perforations 21'. It will of course be understood that either the perforations or the slot may be omitted.

What is claimed is—

1. In a device of the class described, a box having a partition therein forming a compartment, and also provided with a door and an indicator-opening; an indicating-dial arranged within the said compartment and provided with graduations for registration with the said indicator-opening; a guideway arranged above the dial; a sliding block arranged for travel in said guideway, the block being adapted to engage the dial; and a connection between the said block and the door for moving the dial through a portion of a revolution when the door is opened.

2. In a device of the class described, a box having a partition therein forming a compartment and also provided with a door and an indicator-opening; a dial arranged within said compartment for step-by-step movement and provided with graduations for registration with the indicator-opening; a guideway arranged above the dial; a sliding block arranged for travel in said guideway, the block being adapted for engagement with the dial; a connection between the said block and the door

for causing the said step-by-step movement
of the dial when the door is opened; and a
brake arranged within the compartment for
contact with the dial to prevent the latter be-
5 ing reversed in movement when the said door
is closed, forcing the sliding block back in its
normal position in the said guideway.

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

JOHN L. LISTER.

Witnesses:

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