

No. 667,071.

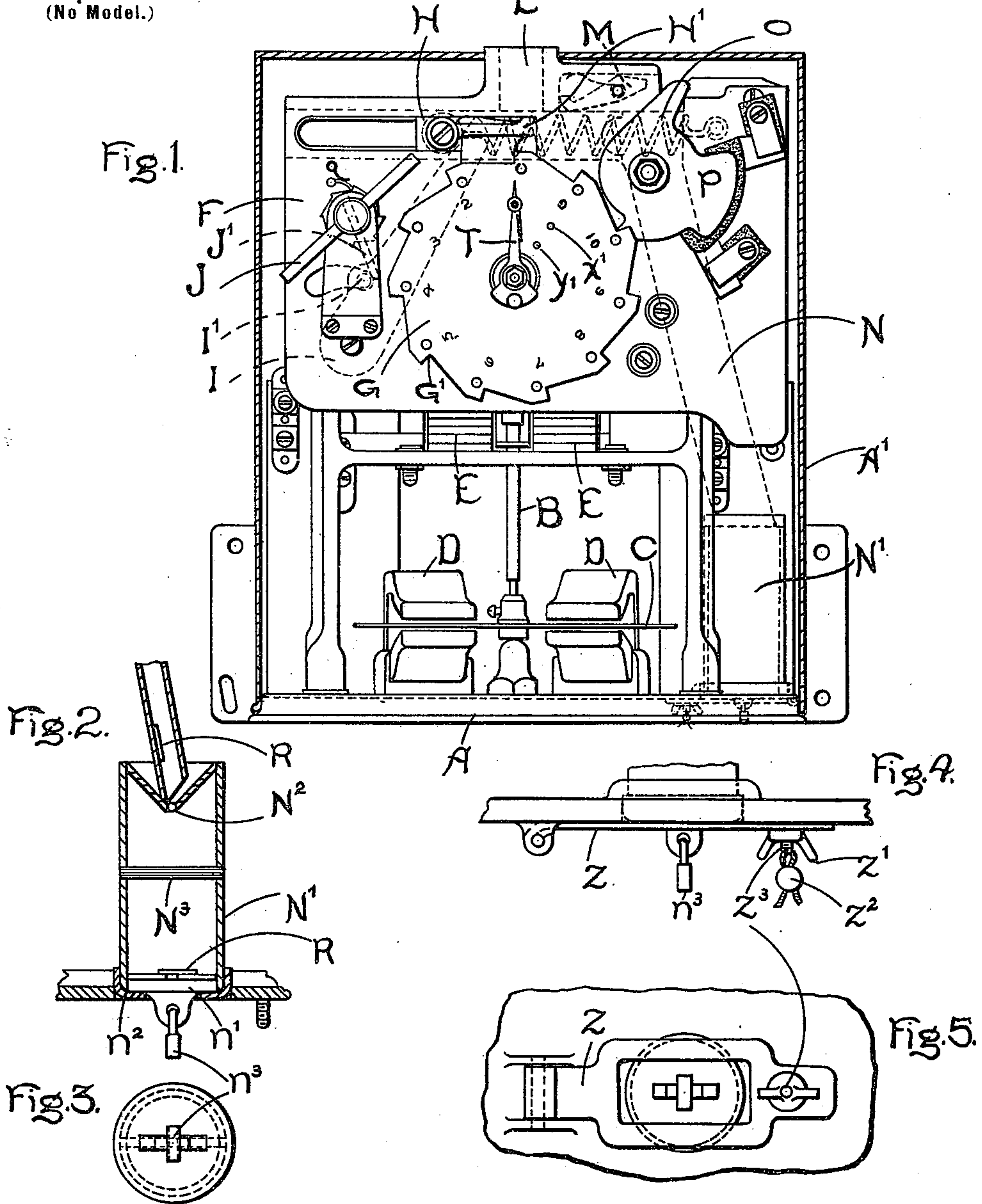
Patented Jan. 29, 1901.

F. P. COX.

COIN BOX FOR PREPAYMENT MECHANISMS.

(Application filed Aug. 13, 1900.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

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COIN-BOX FOR PREPAYMENT MECHANISMS.

SPECIFICATION forming part of Letters Patent No. 667,071, dated January 29, 1901.

Original application filed September 13, 1897, Serial No. 651,401. Divided and this application filed August 13, 1900. Serial No. 26,722. (No model.)

To all whom it may concern:

Be it known that I, FRANK P. COX, a citizen of the United States, residing at Lynn, in the county of Essex, State of Massachusetts, have
5 invented certain new and useful Improvements in Coin-Boxes for Prepayment Mechanisms, (Case No. 1,807,) of which the following is a specification.

The present application is a division of my
10 pending application, Serial No. 651,401, filed September 13, 1897, on prepayment-meters, and is filed in accordance with a requirement made by the United States Patent Office.

The present invention relates to coin-re-
15 ceiving boxes for prepayment mechanism, and has for one object to provide a simple and inexpensive coin-box from which the coins cannot be removed by unauthorized persons.

It further has for its object to provide a
20 box which may readily be removed from the mechanism-box without in any way disturbing the same.

In the accompanying drawings, which illustrate an embodiment of my invention, Figure
25 1 is a front elevation of a meter. Fig. 2 is a vertical section of the coin-box. Fig. 3 is an inverted plan view of the box. Fig. 4 is a detail showing the means employed for holding the box in place, and Fig. 5 is a bottom
30 plan view of the structure shown in Fig. 4.

My invention is shown in connection with the well-known Thomson recording-watt-meter; but it may be applied to any prepayment device.

Referring to the drawings by letter, A represents a metal frame forming a support for the various parts of the meter. Mounted upon the armature-shaft B is a thin disk of copper C, which revolves between the poles
40 of the damping-magnets D. The field-coils E are secured to a cross-piece on the frame A. Mounted on the front of the meter is a dial G, having a number of notches G'. This dial is arranged to be rotated in a right-hand direction by the insertion of coins in the coin-
45 chute L. The indicator or pointer T always rotates right-handedly and follows the dial, and when the circuit is closed between it and the contacts Y' and X' the circuit of the

meter, and also that of the consumer, is inter- 50 rupted through the switch P.

Inclosing the working parts of the meter is a casing A', which is sealed in place in the usual manner to prevent tampering. Mounted for reciprocating movement in a slot in the
55 plate F is a coin-slide H. This slide is provided with a spring-pressed lip H', which engages with the notches G' in the disk G, and each time it is actuated by means of the handle J the disk is advanced one notch. The
60 right-hand end of the coin-slide H is curved to fit the coins or tokens which are deposited. At the end of the main coin-chute and extending downwardly, as shown in dotted lines, is a coin-chute N, the lower end of which pro-
65 jects into the depressed top of the coin-box N'. The coin-box consists of a cylindrical body having a depressed top containing a slot N², through which the coins R enter the box. Situated a short distance below the slot
70 is a cross-bar N³, extending at right angles to the plane of the slot. The object of this bar is to prevent dishonest inspectors from taking coins from the box between the time it is removed from the meter and the time it
75 is deposited at the office of the lighting company. The coins on dropping from the chute strike the cross-bar and are deflected to the right or left. By reason of this bar and the
80 peculiar shape of the top of the box it is practically impossible to fish coins out with a wire or other instrument. Extending across the lower end of the cash-box and secured thereto is a bar n', having a projection arranged to receive the padlock n³. The lower end of
85 the box is provided with a cup-shaped cap or cover n², which is provided with a central opening for receiving the extension on the bar n'. When the padlock n³ is secured in place, the cover cannot be removed from the
90 box.

The coin-box may be secured in place in any desired manner. I have found the arrangement shown in Figs. 4 and 5 to be very
95 satisfactory. On the under side of the base of the meter-frame are formed two lugs, and pivotally supported therein is a strap Z. This strap is provided with a central open-

ing through which the padlock n^3 projects, and also with an extension or tongue through which projects a short bolt or stud Z^3 . Mounted on this stud is a wing-nut Z' , which is sealed in place by the lead seal Z^2 .

The meter is adjusted by means of the handle J, which acts on the coin-slide H through the arm I. (Shown in dotted lines.) When a coin is deposited in the chute L, it falls in front of the coin-slide, and as the handle is rotated clockwise the arm I is moved to the left against the action of extension-spring O until the arm J', carried by the handle J, slips past the pin I', carried by the arm I. As soon as this occurs the spring contracts and in so doing forces the spring-lip into engagement with a notch on the dial, and the latter is advanced. The coin continues its movement, raising the pivoted lock M as it passes, and finally drops into the chute N and through the slot N^2 into the box.

With the arrangement above described the inspector on visiting the meter breaks the seal, removes the wing-nut Z' , swings the strap down, and removes the coin-box and substitutes another in its place, after which it is sealed in place as before. If desired, the inspector may be provided with keys to the several padlocks, enabling him to remove the coins; but the first-mentioned way is preferable.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a prepayment mechanism, the combination of a cash-box provided with a slot for the insertion of the coins or other tokens, a removable bottom adapted to be secured in

position, a strap secured to the base and arranged to engage with the box to retain it in position, and a seal to prevent tampering with the cash-box.

2. In a prepayment electric meter, the combination of a cash-box provided with a coin-slot, means within the box for preventing the removal of the coins, a fixed bar extending across the box and provided with a downwardly-extending lug, a bottom for the box having an opening for the reception of the lug, a lock for securing the bottom to the box, a strap extending across the bottom of the box to retain it in position, means for securing the strap to the meter-frame, and a seal preventing tampering with the cash-box.

3. In a prepayment mechanism, the combination of a removable cash-box provided with a closed upper end containing a coin-slot and a closed lower end, a support for the box, and means for clamping the cash-box to the support.

4. In a prepayment mechanism, the combination of a removable cash-box provided with a downwardly-extending top having a slot therein through which the coins pass, means below the slot for preventing the removal of coins through the slot, a support, and a device provided with a seal for securing the box to the support.

In witness whereof I have hereunto set my hand this 10th day of August, 1900.

FRANK P. COX.

Witnesses:

DUGALD MCKILLOP,
JOHN J. WALKER.