May 12, 1925. 1,537,220

J. N. BORROUGHS

COIN CONTROL TOWEL CABINET

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Fig. 1.

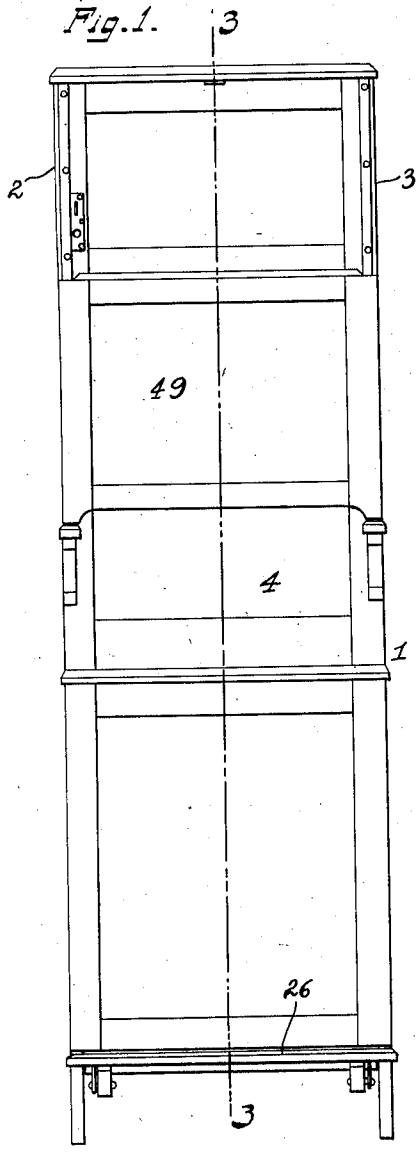
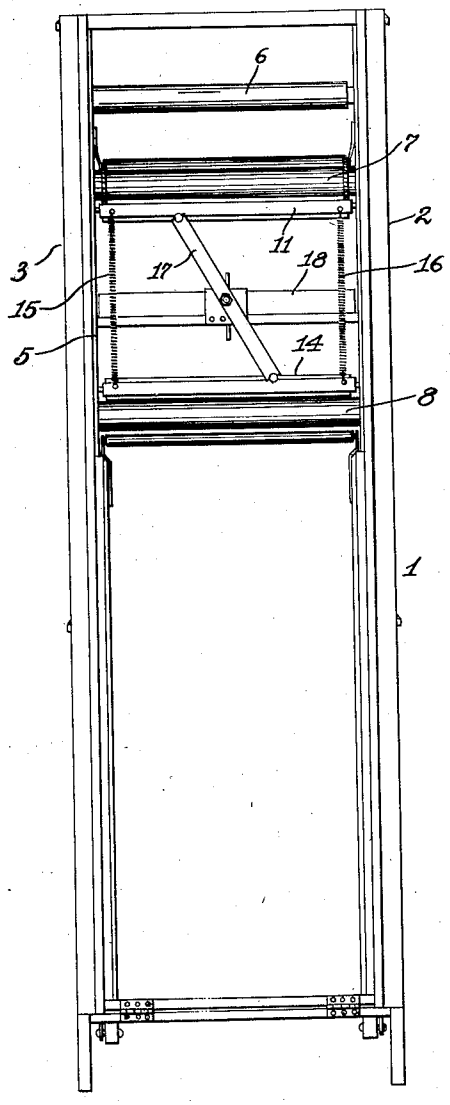


Fig. 2.



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Fig. 3.

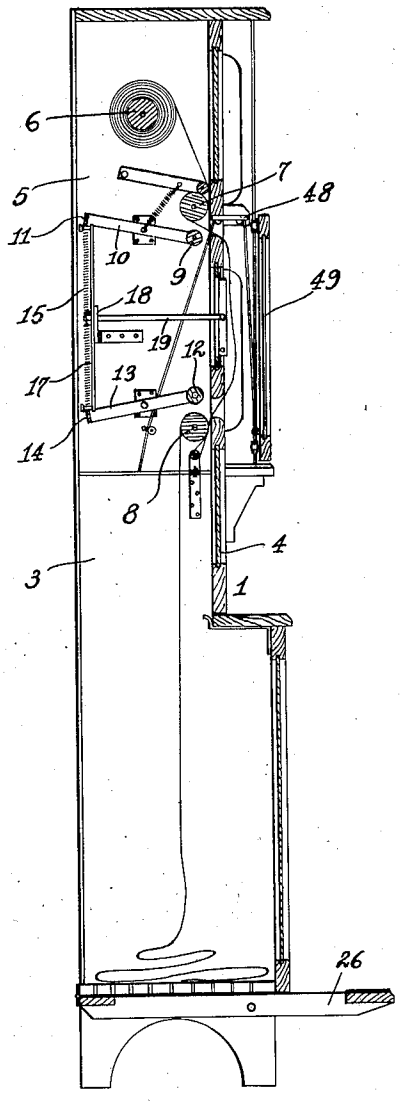
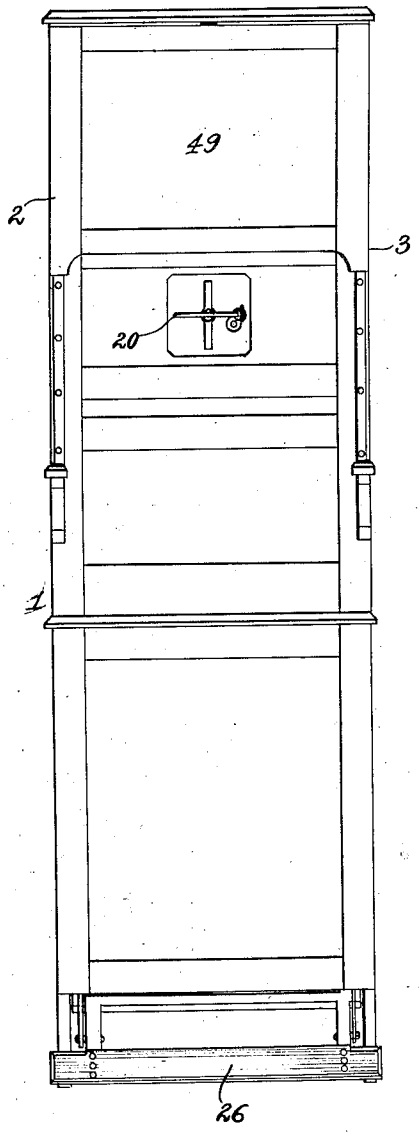


Fig. 4.



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Fig. 5.

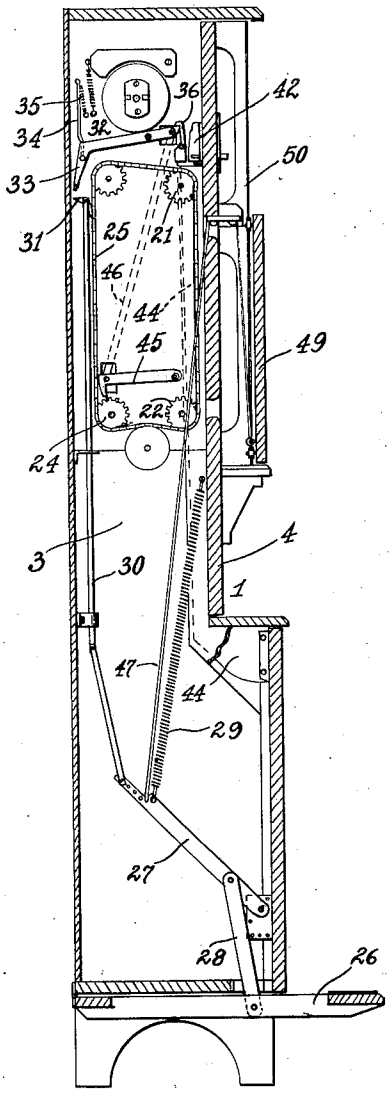
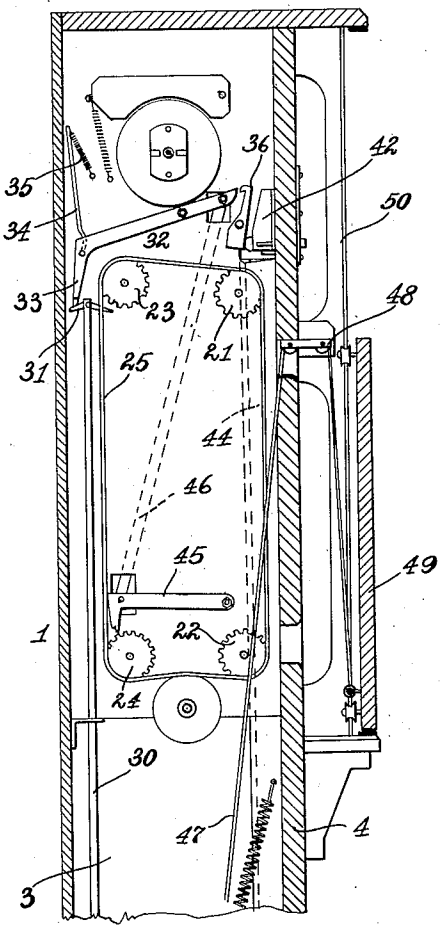


Fig. 6.



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Fig. 7.

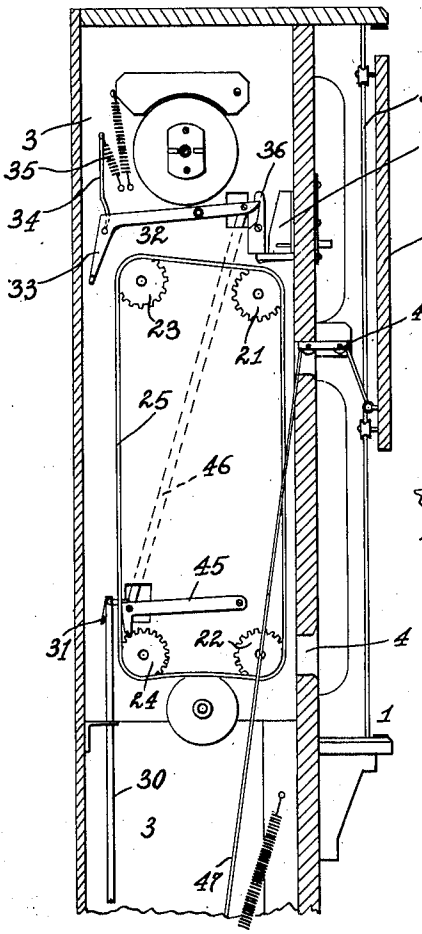
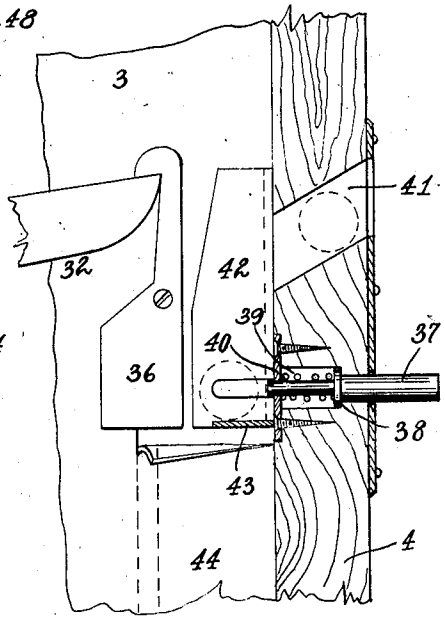


Fig. 8.



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Patented May 12, 1925. 1,537,220

UNITED STATES PATENT OFFICE.

JOSEPH N. BORROUGHS, OF OAKLAND, CALIFORNIA.

COIN-CONTROL TOWEL CABINET.

Application filed July 24, 1922. Serial No. 577,015.

To all whom it may concern:

Be it known that I, JOSEPH N. BORROUGHS, a citizen of the United States, residing at 28th and Filbert Sts., Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Coin-Control Towel Cabinets, of which the following is a specification.

My invention is an improvement in coin controlled towel cabinets, the object of which is to provide a device which is simple in construction and efficient in operation.

Referring to the drawing which forms a part of this specification:

Fig. 1—is a front view of my towel cabinet.

Fig. 2—is a rear view of the same.

Fig. 3—is a sectional view taken on the line 3—3 of Fig. 1.

Fig. 4—is a front view of my cabinet with the screen in the raised position.

Fig. 5—is a transverse sectional view of my cabinet illustrating the coin controlled mechanism.

Fig. 6—is an enlarged fragmentary sectional view of my cabinet with the control mechanism in operative position.

Fig. 7—is a view similar to Fig. 6, illustrating the mechanism at the completion of its operation.

Fig. 8—is an enlarged fragmentary sectional view of the coin chute and control trigger.

Referring more particularly to the drawing the numeral 1 indicates a towel cabinet, which has side walls 2 and 3 and a front wall 4. A metal plate 5 is secured to the wall 3 and spaced slightly therefrom, the purpose of which will be described later.

A towel supply roller 6 is journaled in the wall 2 and plate 5. An upper feed roller 7 and a lower feed roller 8 are also journaled in the wall 2 and plate 5 below the supply roller 6.

A pressure roller 9 bears against the bottom of the roller 7 and is journaled in levers 10. The levers 10 are centrally pivoted in the wall 2 and plate 5, and are joined by a bar 11. A pressure roller 12 bears against the top of the roller 8, and is journaled in levers 13. The levers 13 are pivoted in the wall 2 and plate 5, and are joined by a bar 14. Springs 15 and 16 join the bars 11 and 14 and hold the rollers 9 and 12 against the feed rollers 7 and 8 respectively. A spreader arm 17 for releasing the pressure rollers when a new roll of toweling is to be inserted is positioned between the bars 11 and 14 and pivoted on a plate 18, which is secured to the wall 2 and plate 5.

The pivot for the arm 17 consists of a rod 19 which is secured to said arm and extends through the plate 18 and the front wall 4. A handle 20 is secured to the end of the rod 19, which when rotated will rotate the spreader 17 which bearing against the bars 11 and 14 moves the rollers 9 and 12 away from the rollers 7 and 8 respectively, as shown in Fig. 3.

A gear 21 is secured to the roller 7 back of the plate 5 and a gear 22 is secured to the roller 8. Gears 23 and 24 are journaled in the plate 5 and are so positioned as to form a rectangle with the gears 21 and 22 and a chain 25 which meshes with said gears.

A foot lever 26 is pivoted in the lower part of the cabinet 1. A lever 27 is pivoted to the wall 3 above the foot lever 26 and is joined therewith by a link 28. A spring 29 normally tends to hold the lever 27 in the raised position shown in Fig. 5. A hinged drag link 30 is secured to the end of the lever 27 and rises adjacent to the rear vertical reach of the chain 25. An L shaped engaging pin 31 is pivoted in the upper end of the link 30.

A trip 32 is pivoted to the wall 3 and comprises a downwardly extending finger 33, and an upwardly extending rod 34. A spring 35 secured to the rod 34 and to the wall 3 exerts a downward pressure on the trip 32.

A trigger 36 is pivoted to the wall 3 at the forward end of the trip 32, and is adapted to engage the end of said trip and hold the finger 33 in its raised position (Fig. 5).

The trigger 36 is actuated by a push button 37 which extends through the front wall 4. A flange 38 is formed on the button 37, about midway of said button, and a spring 39 is positioned between said flange 38 and a plate 40 secured to the inner surface of the wall 4. The spring 39 returns the button 37 to its normal extended position.

The coin is dropped through a slot 41 in the front wall 4, and passes into a retainer 42 which retainer has a stop 43 at the bottom thereof below the button 37. The coin rests upon the stop 43 and the button 37 advances it against the trigger 36 to re-

lease same and simultaneously pushes the coin over the edge of the rest 43 and drops it into a receptacle 44.

A pawl 45 is pivoted to the plate 5 and is adapted to engage the gear 24, and prevent said gear from rotating. A connecting bar 46 joins the pawl 45 and the trigger end of the trip 32.

A cable 47 is secured to the lever 27 passes over rollers 48 and is secured to the bottom of a screen 49. The screen 49 travels on suitable vertical guides 50 secured to the front wall 4.

The method of operation of my invention is as follows: The coin is dropped into the slot 41, and falls upon the stop 43, the button 37 is pushed inwardly and presses the coin against the trigger 36 and releases said trigger from the trip 32. (The push button is released and the coin drops into the receptacle 44.) The spring 35 forces the trip 32 and finger 33 downwardly, pulls up on the link 46 and pawl 45 to release said pawl, and said finger strikes the engaging pin 31, and forces it into the meshes of the chain 25. The foot lever 26 is now depressed carrying the rod 30 downward which pulls the chain 25 downwards and rotates gears 21, 22, 23 and 24, and rollers 7 and 8. The rollers 7 and 8 unroll a clean strip from the supply roller 6, and the soiled portion drops into the bottom of the cabinet. Depressing the foot pedal 26 pulls on the cable 47 which raises the screen 49 and exposes the towel. When the rod 30 has carried the pin 31 almost to the bottom of its movement, the said pin engages the pawl 45 and pulls it downward into engagement with the gear 24, also pulls the trip 32 downward through the link 46, and the trigger 36 engages the end of the trip 32 to hold said trip in its raised position. The foot pedal 26 is released and the spring 29 raises said pedal and rod 30, the screen 49 drops in front of the towel, to cover it.

Having described my invention, I claim:

1. A coin controlled towel dispensing device comprising a cabinet, a towel supply roller journaled in said cabinet, a pair of feed rollers journaled in said cabinet, a pair of pressure rollers cooperating with said feed rollers, said pressure rollers being mounted on a pair of pivoted arms, means to normally spread said arms apart, means for forcing said arms toward each other against the action of said last-mentioned means, and coin-controlled means for rotating said feed rollers.

2. A coin controlled towel dispensing device comprising a cabinet, a towel supply roller journaled in said cabinet, a pair of feed rollers journaled in said cabinet, a pair of pressure rollers mounted on a pair of pivoted arms and cooperating with said feed rollers, spring means for normally spreading said arms apart, a rotatable member cooperating with said arms to force them toward each other against the action of said spring means, and coin-controlled means for rotating said feed rollers.

3. A coin controlled towel dispensing device comprising a cabinet, a towel supply roller journaled in said cabinet, a pair of feed rollers journaled in said cabinet, a foot pedal pivoted in the bottom of said cabinet, a rod rising from said pedal, gears mounted on said feed rolls, a chain encircling said gears, a pin pivoted on the end of said rod, and coin controlled means adapted to cause said pin to engage said chain.

4. A coin controlled towel dispensing device comprising a cabinet, a towel supply roller journaled in said cabinet, a pair of feed rollers journaled in said cabinet, a foot pedal pivoted in the bottom of said cabinet, a rod rising from said pedal, gears mounted on said feed rolls, a chain encircling said gears, a pin pivoted on the end of said rod, a trip arm mounted above said gears, a finger depending from said trip arm adapted to engage said pin, and force it into the mesh of said chain, means for normally holding said arm out of engagement with said pin, and coin controlled means for releasing said trip arm.

In testimony whereof I affix my signature.

JOSEPH N. BORROUGHS.