

No. 819,291.

PATENTED MAY 1, 1906.

J. H. W. LANDRÉ.  
COIN CONTROLLED DELIVERY APPARATUS.

APPLICATION FILED JAN. 11, 1905.

2 SHEETS—SHEET 1.

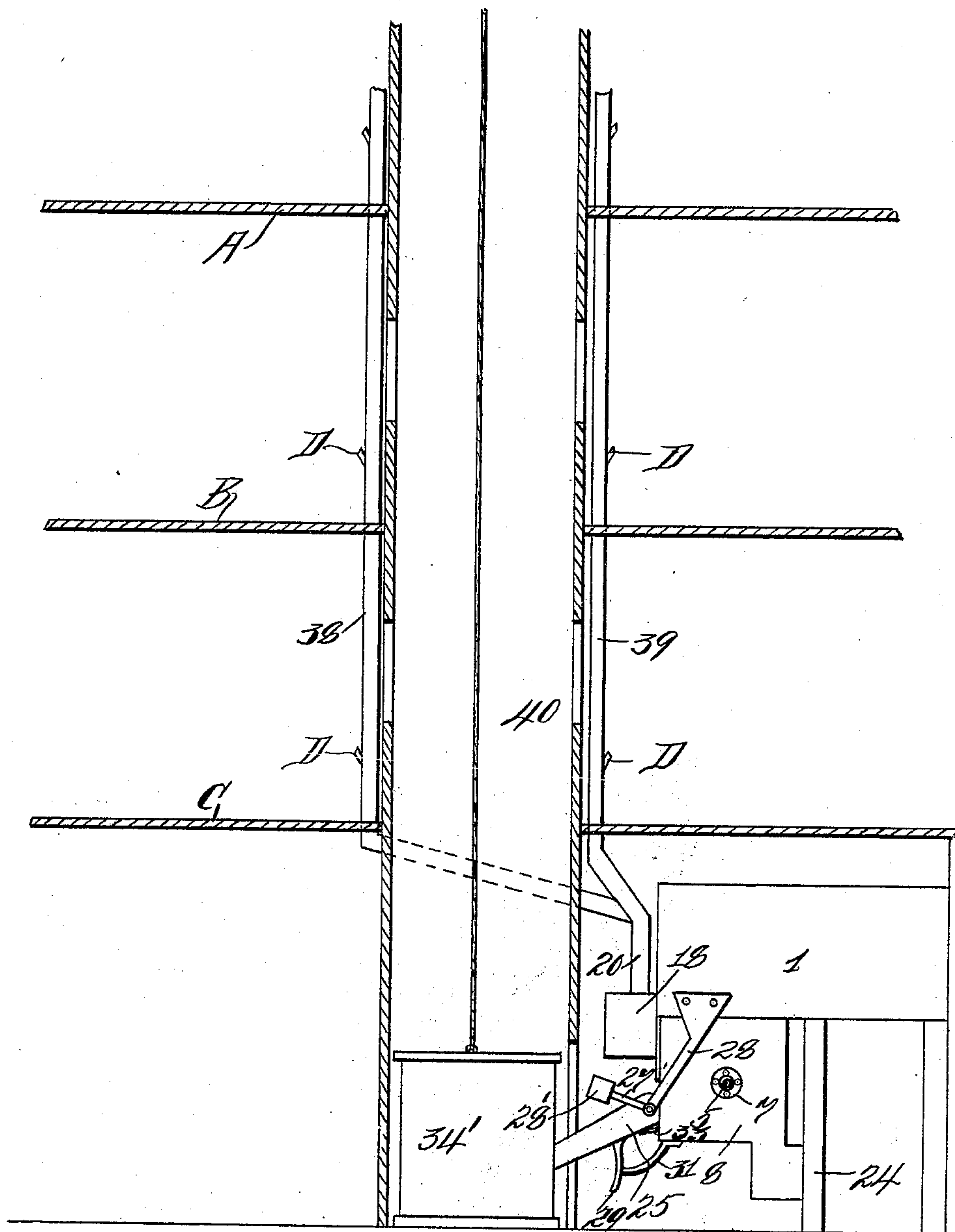


Fig. 1.

WITNESSES:  
C. A. Jarvis.  
Haskel Coenthal

INVENTOR  
Julius H. W. Landré  
BY  
Maurice Bloch  
his ATTORNEY.

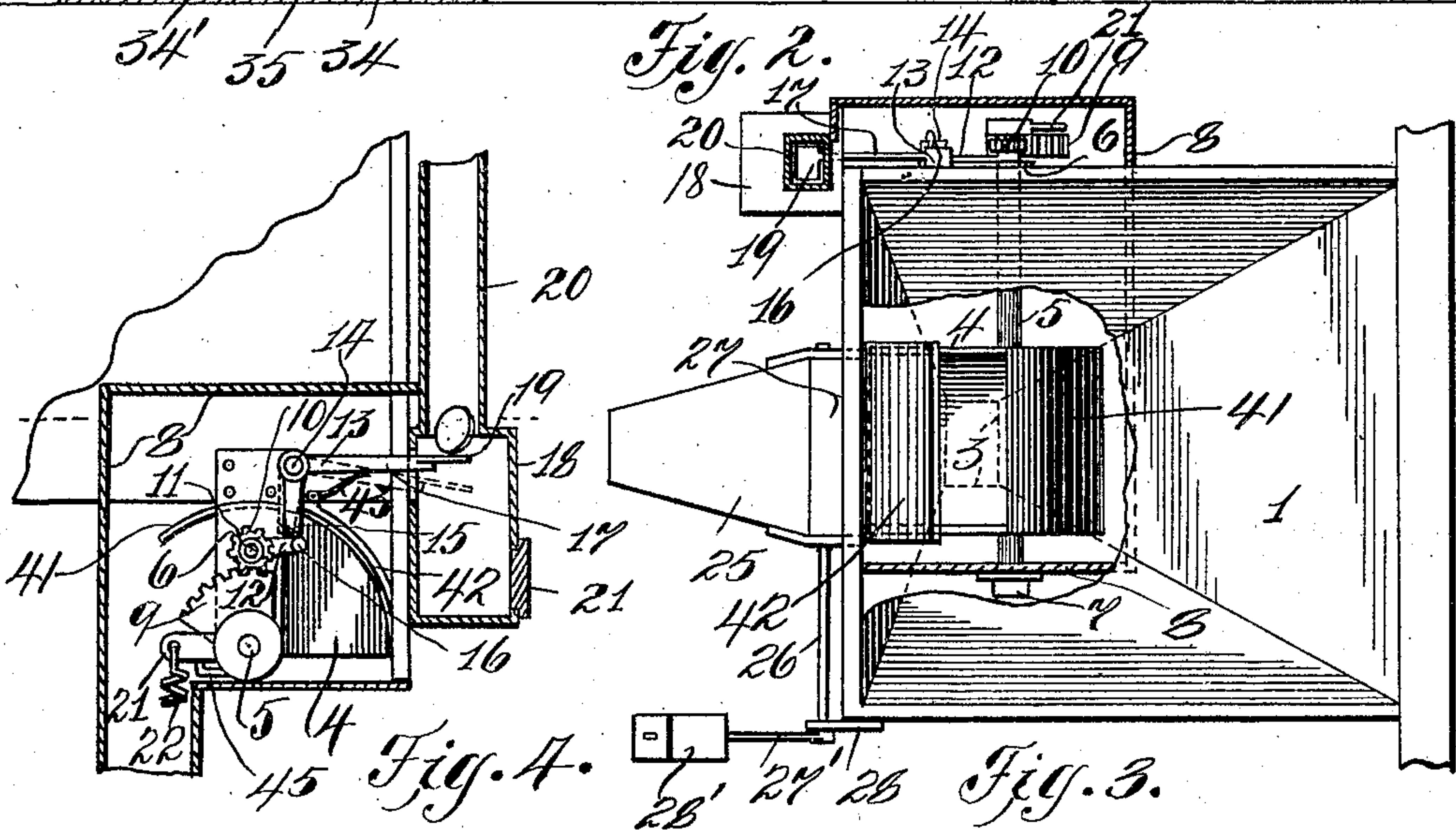
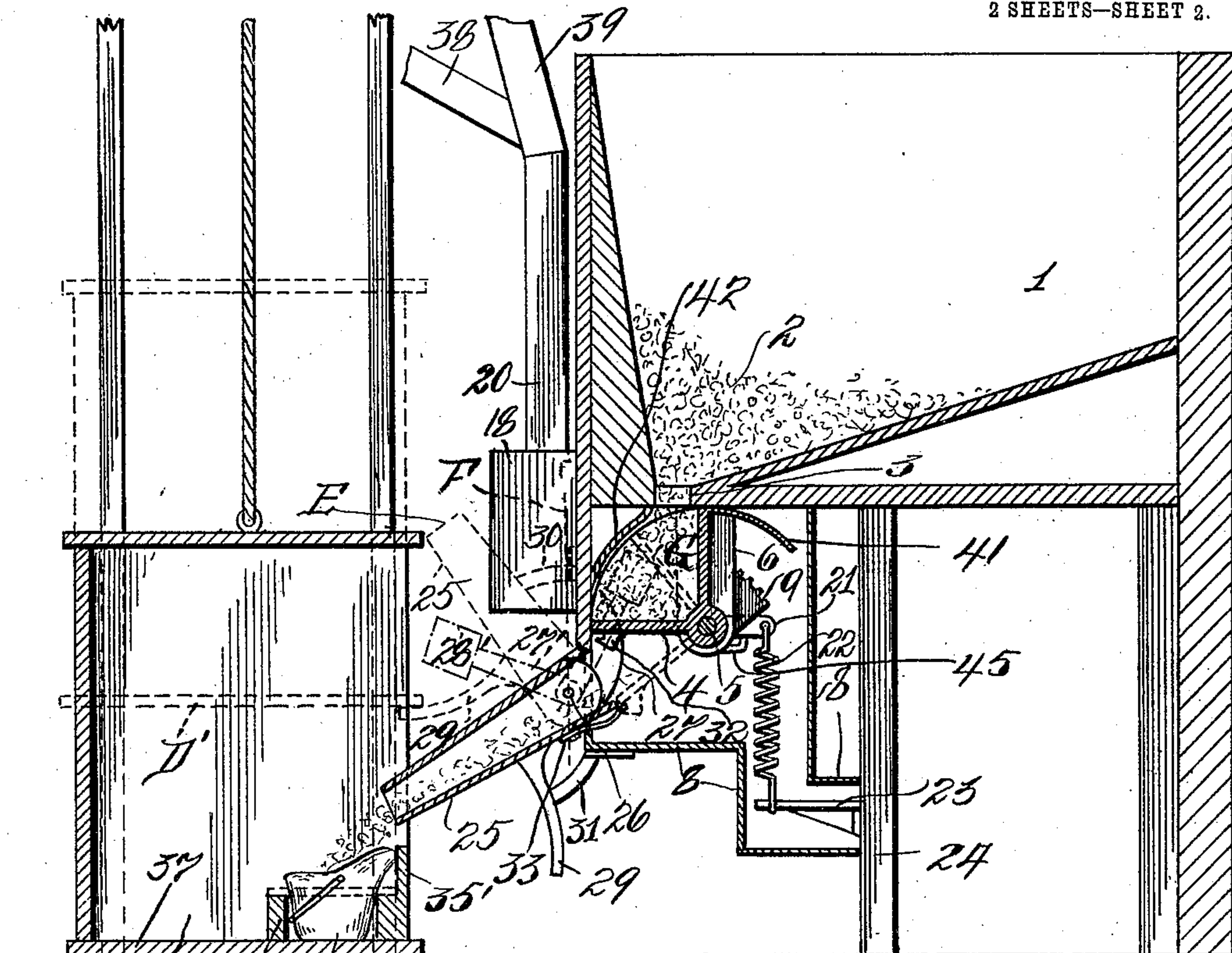
No. 819,291.

PATENTED MAY 1, 1906.

J. H. W. LANDRÉ.  
COIN CONTROLLED DELIVERY APPARATUS.

APPLICATION FILED JAN. 11, 1905.

2 SHEETS—SHEET 2.



WITNESSES:  
C. A. Jarvis.  
Haskell Corntal

INVENTOR  
Julius H. W. Landré  
BY  
Maurice Bloch  
his ATTORNEY.



# UNITED STATES PATENT OFFICE.

JULIUS H. W. LANDRÉ, OF FORT LEE, NEW JERSEY, ASSIGNOR OF ONE-FOURTH TO BERNHARD ZINKE, OF HOBOKEN, NEW JERSEY.

## COIN-CONTROLLED DELIVERY APPARATUS.

No. 819,291.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed January 11, 1905. Serial No. 240,528.

*To all whom it may concern:*

Be it known that I, JULIUS H. W. LANDRÉ, a resident of Fort Lee, Bergen county, in the State of New Jersey, have invented certain new and useful Improvements in Coin-Controlled Delivery Apparatus, of which the following is a specification.

The object of this invention is to provide a coin-controlled apparatus adaptable for domestic purposes, particularly in apartment-houses in which the several families therein are enabled to procure merchandise—such as coal, wood, or the like—by depositing a coin of any predetermined value in a tube or chute and to have the deposited coin operate mechanism which will cause merchandise which will be equivalent in amount to the value of the coin to be deposited in a suitable receptacle placed upon a dumb-waiter or any suitable device for elevating the same to the person or persons desiring it. In the drawings and specification particular reference is made to coal; but such reference is merely illustrative of the device.

To these and other ends, which will be hereinafter described, the invention consists in the novel features of construction and combination and arrangement of parts, which will be hereinafter set forth and finally pointed out in the appended claims.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 illustrates a side view, partly in section, of my improved apparatus as applied in an apartment-house. Fig. 2 is an enlarged central longitudinal section of my improved apparatus, also showing a dumb-waiter with a receptacle thereupon. Fig. 3 is a plan view of Fig. 2, somewhat reduced, being partially in section and broken away to better show my means for delivering a predetermined amount of merchandise. Fig. 4 is an end elevation of my device, the chute being removed and the merchandise-hopper only partially shown; and Fig. 5 is a perspective view of the end or foot of the escapement which controls the delivery of the merchandise.

Like numerals and letters of reference indicate corresponding parts in the several views.

Referring to the drawings, particular ref-

erence being made to Fig. 2, 1 indicates a hopper in which coal (represented by 2) is stored, being placed therein in any desired manner, the sides of said hopper being angularly disposed in order to insure the free run of the coal toward a spout 3. Immediately below the spout 3 is a receiving and delivering quadrant-drum 4, whose capacity will be predetermined, and capable of receiving the amount of coal which will be equal to the value of the coin. The width of the spout 3 will preferably be somewhat less than the width of the drum 4. The drum 4 is mounted upon a shaft 5, which is rotatably held in a bracket 6, secured to hopper 1, and a bearing 7, which is secured to the casing 8, said casing being arranged to entirely protect the mechanism, so as to prevent any manipulation of the device excepting through the proper source. Upon one end of the shaft 5 is secured a toothed segment 9, having in mesh therewith a pinion 10, Fig. 4, the pinion 10 being rotatably held upon the bracket 6 by means of a short shaft 11, upon which it revolves. The pinion 10 has rigidly secured thereto an arm 12, said arm controlling the action of the drum 4 through the agency of the pinion 10 and segment 9. The means for holding the arm 12 against movement and to allow it to operate when desired consists in this instance of a bell-crank lever 13, pivoted to the bracket 6 at 14. That end of lever 13 which is adjacent to the arm 12 is provided with a wedge-shaped foot 15, Fig. 5, which foot impinges upon a projecting stud 16 upon the arm 12, Fig. 3. The longer arm 17 of the lever 13 projects within a coin-box 18 and is provided with a table 19, which is but a little smaller than the inside of the main chute 20, the object being to prevent a coin from skidding past the end of the arm upon its downward course, the box 18 being provided with a lock-door 21, as is usual. Upon the end of the shaft 5, adjacent to the segment 9, is an arm 21, said arm having upon its outer end a counteracting-spring 22, which is in turn secured at its lower end to an outwardly-projecting arm 23, which is secured to the upright 24. It may be here stated that a weight can be used instead of the spring 22. The means for conveying the coal from the drum 4 is in this instance a spout 25, which is rig-



idly attached to a shaft 26, which in turn is rotatably supported by brackets 27 and 28, secured to the hopper 1, the outer end of said shaft 26 being provided with an arm 27', which carries a weight 28'. A horn 29 is provided upon the bottom of the spout 25. Stops 30 and 31 are carried by the hopper 1 and casing 8, respectively, for the purpose of limiting the inoperative and operative positions, respectively, of the spout 25. Upon the bottom of the drum 4 I provide a locking means 32, which is caught by a spring-clip 33, carried by the spout 25, when the drum 4 is delivering coal. In order that the receptacle 34 can be positioned exactly in relationship to the operative position of the spout 25, I provide the dumb-waiter 34' with a socket or pocket 35, in which the receptacle 34 is placed. If desired, the coal can be delivered directly upon the bottom 37 of the dumb-waiter. In this event the spout 25 could be a little shorter and be rigidly instead of pivotally secured to the hopper.

Extending through each of the floors A B C of the building, Fig. 1, are chutes 38 39, one each side of the dumb-waiter shaft 40. At each floor and connecting with the interior of the chutes 38 39 are coin-slots D D. The chutes 38 39 communicate at their lower ends with the main chute 20. The drum 4 is provided with an apron 41, which acts to prevent the coal from dropping from the hopper 1 when the drum is revolved forwardly to deliver same. A shield 42 is also provided to conform to the shape of the periphery of the drum in order to form a more complete box-like formation.

My device is operated in the following manner, assuming that the dumb-waiter 34' is at about the position of its descent, as illustrated by dotted lines D, Fig. 2, and the spout 25 is up, as illustrated by dotted lines E: In this position the weight 28 will be back of a vertical line F, thereby keeping the spout in contact with the stop 30. When the dumb-waiter 34' has reached this position, the bottom 37 will contact the horn 29, and further downward movement of the dumb-waiter will cause the spout 25 to fall forward, and when the weight 28 comes in front of the line F its weight will cause it to fall with the dumb-waiter, the front head 35' of the socket 35 preventing it from falling too rapidly. When the dumb-waiter has reached the bottom, the horn 29 will come in contact with the stop 31 and will be positioned as shown by full lines in Fig. 2, or in juxtaposition to the receptacle 34. Having done this, a coin (a twenty-five-cent piece, for instance) is deposited in any one of the coin-slots D, and it will fall and finally strike the table 19 of the lever 13, and the momentum gathered by the fall of the coin will cause the foot 15 of said

lever to leave the stud 16 of the arm 12. (See dotted lines, Fig. 3.) As the drum 4 is filled with coal, the weight thereof will cause the drum to revolve forwardly, the pinion 10 and segment 9 being now free to go, and the drum 4 will finally assume a position as shown by the dotted lines G, Fig. 2. The lock 32 will be caught by the clip 33 and held thereby, preventing the drum from being drawn back by the spring 22, which will be of course under tension before the coal has been delivered. When the receptacle is filled and the dumb-waiter is drawn up, the front head 35' will force the spout 25 up, and this will draw out the clip 33, whereupon the spring 22 will then cause the drum 4 to be drawn back into position, so that more coal will fall in for the next sale. There will be sufficient movement of the arm 17 of the lever 13 to allow the stud 16 to come back into place. A light spring 43, Fig. 4, will return the arm 17 to position. When the lever 13 is actuated by the coin, the stud 16 will pass over the foot 15 and in returning will pass off the heel 44 of the foot and knock the lever down slightly and pass to position, a stop 45 on the bracket 6 limiting the movement thereof.

It will be understood that the details of construction hereinabove described, and shown in the drawings may be varied in many particulars and that the delivery mechanism described may be arranged to be operated electrically without departing from the spirit of my invention, and it will also be evident that suitable well-known coin-detectors may be applied to the coin-slots D.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an automatic device for delivering merchandise, the combination of a hopper, a pivotally-mounted receiver adapted for rotation, the pivotal point of said receiver being at one side of the center of gravity thereof, releasable means for normally preventing the rotation of said receiver, a coin-controlled means for releasing said rotation-preventing means, and a spring adapted to return said receiver to its normal position after having been rotated, together with a movable chute for delivering merchandise from said receiver, means carried by said chute for holding said receiver until delivered of its contents, and means for moving said chute out of engagement with said receiver.

2. In an automatic device for delivering merchandise, the combination of a hopper, a receiver mounted upon a rotatable shaft, said shaft being at one side of the center of gravity of said receiver, a gear carried by said shaft, a pinion adapted to mesh with said gear, coin-controlled releasable means meshing

with said pinion and adapted to prevent the rotation thereof, a spring attached to said receiver normally out of tension, a movable chute for receiving merchandise from said receiver, a latch upon said chute for holding said receiver when rotated, and means for moving said chute out of engagement with said receiver whereby said receiver is returned to its normal position by the reaction of said spring.

JULIUS H. W. LANDRÉ.

Witnesses:

H. M. COLLYER,  
HASKEL CORENTHAL.