

J. B. CLAY.
BOTTLE VENDING MACHINE.
APPLICATION FILED JUNE 26, 1909.

969,747.

Patented Sept. 6, 1910.

3 SHEETS—SHEET 1.

Fig. 1.

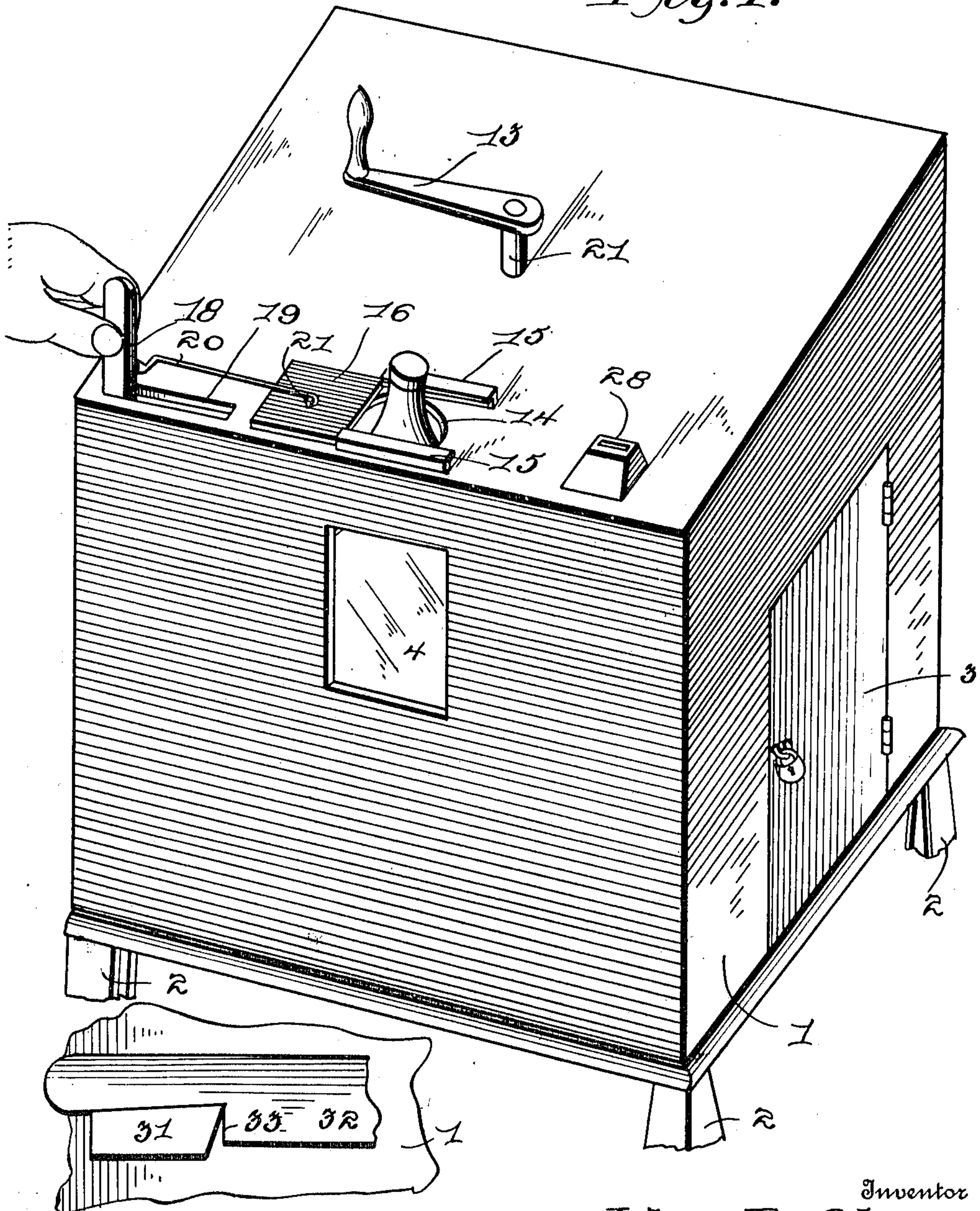


Fig. 7.

Witnesses

W. Wells

St. Joseph Dyer

Inventor

John B. Clay.

By

E. C. Crooman,
Attorney.

J. B. CLAY.
BOTTLE VENDING MACHINE.
APPLICATION FILED JUNE 26, 1909.

969,747.

Patented Sept. 6, 1910.

3 SHEETS—SHEET 2.

Fig. 2.

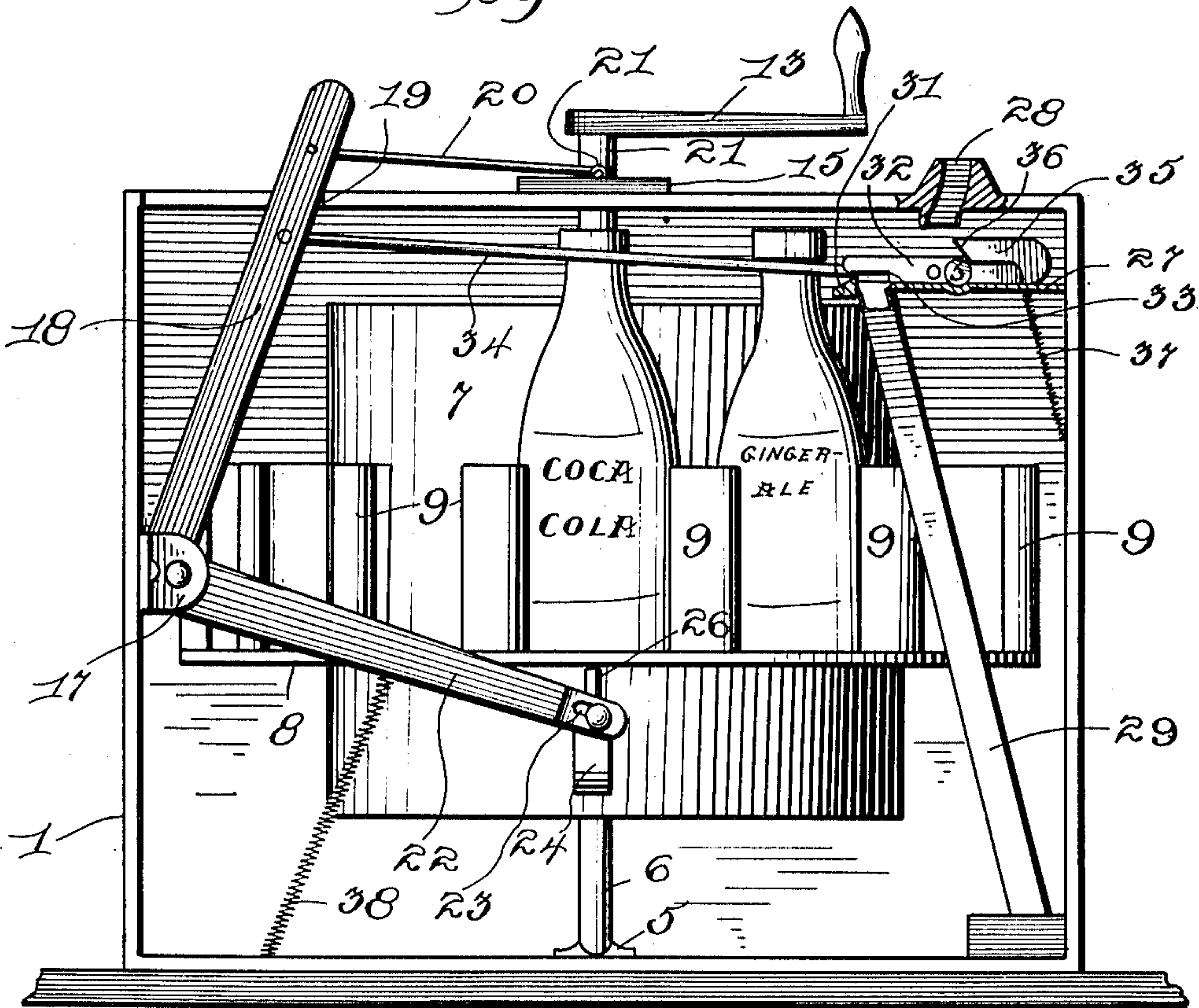


Fig. 4.

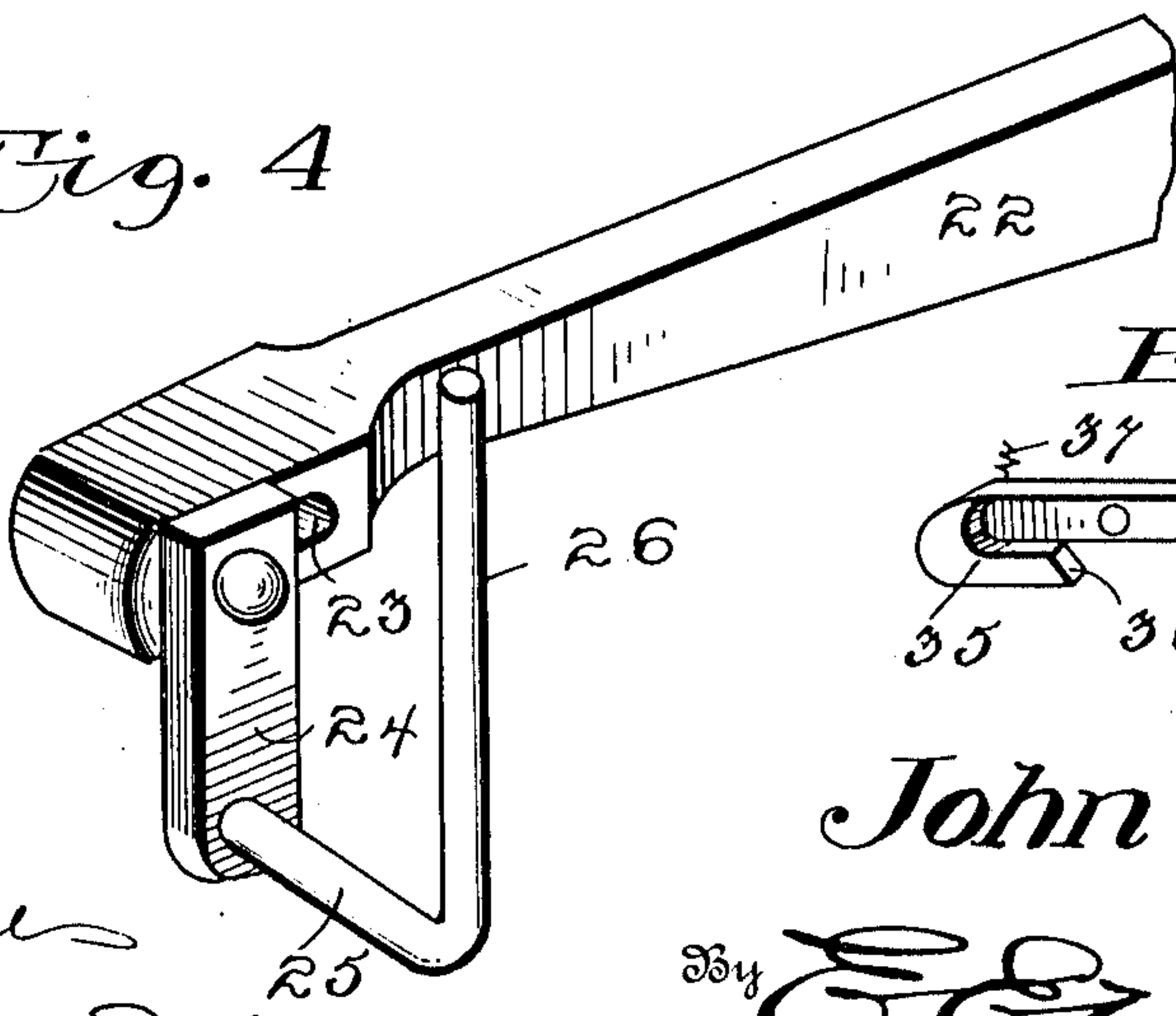
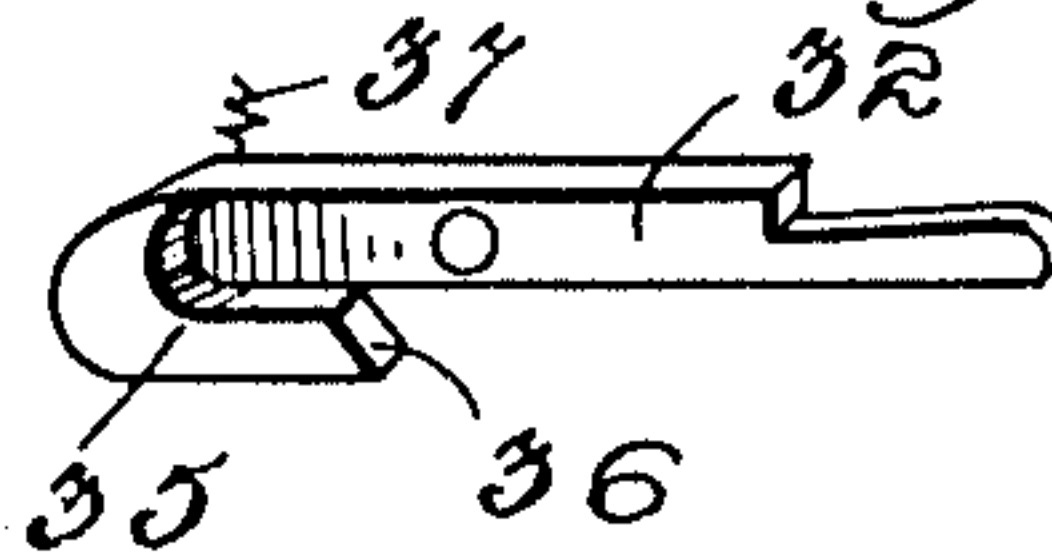


Fig. 6.



Witnesses

J. Ward

H. J. Ward

Inventor

John B. Clay.

By

E. E. Sproman,
his Attorney.

UNITED STATES PATENT OFFICE.

JOHN B. CLAY, OF SHELBY, NORTH CAROLINA, ASSIGNOR OF ONE-HALF TO J. W. SPANGLER, OF SHELBY, NORTH CAROLINA.

BOTTLE-VENDING MACHINE.

969,747.

Specification of Letters Patent.

Patented Sept. 6, 1910.

Application filed June 26, 1909. Serial No. 504,585.

To all whom it may concern:

Be it known that I, JOHN B. CLAY, a citizen of the United States, residing at Shelby, in the county of Cleveland and State of North Carolina, have invented certain new and useful Improvements in Bottle-Vending Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to coin controlled vending machines, and the principal object of the same is to provide a machine of the type specified which may be used for vending bottled goods.

In carrying out the object of the invention generally stated above it is contemplated employing a casing in which a bottle carrier is rotatably mounted and which is adapted to support a plurality of bottles, said carrier being provided with suitable cooling medium in order to preserve the contents of the bottles, the casing being provided with coin-controlled mechanism which by the use of an inserted coin is adapted to force a selected bottle from the casing.

It will be understood, of course, that in the practical application of the invention the essential features thereof are necessarily susceptible of changes in details and structural arrangements, but a preferred and simple embodiment of the same is shown in the accompanying drawings, wherein—

Figure 1 is a perspective view of the improved bottle vending machine. Fig. 2 is a view in side elevation of the improved machine, one side of the casing thereof being removed. Fig. 3 is a top plan view, the cover being removed. Fig. 4 is a similar view of one end of the bottle lifting lever. Fig. 5 is a detail perspective view showing the locking lever and the manner in which it is released by means of a coin. Fig. 6 is an inverted perspective view of the locking lever. Fig. 7 is a view in side elevation of a portion of the casing and showing the engagement between the locking lever and its latch.

Referring to said drawings by numerals, 1 designates a casing which may be of a rectangular shape and which, in practice will be ornamented. Said casing has been shown supported by corner standards 2 and provided with a door 3 in one side through which access may be had to the interior of

the casing. Another side of the casing is provided with a sight-opening 4 which is covered by glass or other transparent material and by means of which the contents of the casing may be inspected so that the same may be selectively obtained from the machine by the operation of the mechanism which will be described later.

The inner face of the bottom of the casing is provided with a centrally located bearing 5 in which one end of a shaft 6 is mounted, said shaft being vertically arranged and supporting a cylindrical receptacle 7 which is adapted for containing ice or other cooling material. Said casing is provided with a flat horizontally arranged flange or shelf 8 which surrounds the lower portion of said receptacle and is provided with a plurality of upstanding partitions 9 which divide said shelf into a plurality of regularly spaced apart individual bottle cells 10. An opening 11 is formed through the bottom of each cell 10.

A shaft 12 projects through the top of the casing 1 and has its inner end rigidly connected to the top of the receptacle 7, the upper end of said shaft which projects beyond the top of the casing 1 being provided with a handle 13 by means of which said shaft may be rotated to impart its movement to the receptacle 7 so that the bottles in the cells 10 may be brought in line with the sight opening 4 to enable the purchaser to select a bottle.

An opening 14 is formed through the top of the casing 1 directly over the sight opening 4, said opening being large enough to permit a bottle to be passed therethrough. A pair of cleats 15 are arranged alongside said opening and form guides for a sliding door or hatch 16.

A bell-crank lever is pivotally mounted in a bracket bearing 17 carried by the casing, the vertical arm 18 of said lever projecting through a guide slot 19 formed in the top of the casing and having a rod connection 20 with an eye 21 carried by said sliding door 16. Said vertical arm 18 projects well above the top of the casing 1 and forms a handle by means of which the bell crank lever may be rocked. The horizontal arm 22 of said lever projects to about the central portion of the casing 1 and has its end provided with a horizontal slot 23 in which a pendent arm 24 is adjustably

mounted, the lower end of said arm 24 carrying a laterally projecting rod 25 the outer portion of which is bent at right angles thereto and projects upwardly to form a lifting finger 26 adapted to be projected through the openings 11 of the bottle cells 10 to lift the bottles therefrom and force them through the opening 14 in the top of the casing 1.

A shelf or trough 27 is horizontally arranged within the casing 1 opposite the bell crank lever, said shelf being directly below a coin slot 28 projecting through the top of the casing and has its outer end in communication with a coin chute 29 the lower end of which discharges into a receptacle 30 on the bottom of the casing. An abutment shoulder 31 is carried by the upper end of said chute 29, said shoulder being in the path of movement of a locking bar 32 slidable on said trough 27 and provided with an abutment shoulder 33 which normally contacts with the abutment shoulder 31 to limit the sliding movement of said bar. A rod 34 connects said bar with the vertical arm 19 of the bell crank lever. A cam surface 35 is formed on one side of said bar 32, said surface projecting above the top of the bar and having one end on an incline as indicated at 36 so that when a coin is dropped through the slot 28 and falls onto the shelf or trough 27 it will rest in contact with said inclined end, and when said bar is moved by means of the bell crank lever, the coin will be guided under the cam surface and rolled along the shelf or trough and at the same time raise the bar so as to clear the two abutment shoulders and hold the bar in the raised position until the coin is brought to the upper end of the coin chute 29. A spring 37 connects the bar 32 with one side of the casing and exerts a tension tending to retain the bar in contact with the trough or shelf 27.

Assuming the parts of the invention to be in the position indicated in Fig. 2, it will be seen that when a coin is dropped onto the shelf or trough 27, a rocking movement imparted to the vertical arm of the bell crank lever will cause the bar 32 to ride over the coin and also convey the coin to the chute 29, and at the same time the door 16 will be removed from over the opening 14. While this operation is being performed, the horizontal arm of the bell crank lever raises its lifting finger 26 and projects the same through the opening 11 of one of the cells 10, thereby elevating a bottle from said cell and forcing it through the opening 14 so that it may be readily removed by the purchaser. As soon as the bell crank lever is released the tension of the spring 37, supplemented by a spring 38 which connects the horizontal arm 22 to the casing, throws the locking bar 32 to its locking position on

the trough or shelf and also removes the lifting finger from the cell.

It will be seen from the foregoing that the present invention provides means whereby various bottled goods may be retained in close contact with the cooled receptacle, said receptacle being so mounted that its contents may be readily brought to view for the purchaser to make selections, after which, by the insertion of a proper coin, the selected bottle may be readily removed.

It will also be seen that the arrangement of the bar 32 is such that but one bottle at a time can be removed for the reason that while a bottle is being removed, the cam surface of said bar is in a position to prevent a coin being passed to the trough or shelf.

What I claim as my invention is:—

1. A vending machine comprising a casing provided with an opening, a bottle support rotatably mounted therein, a lever mounted in said casing, and a bottle lifter pivoted to said lever and adapted to lift a bottle from said receptacle and force the same through said opening.

2. A vending machine comprising a casing provided with an opening, a bottle supporting receptacle rotatably mounted therein, a plurality of bottle cells carried by said casing, a lever mounted in said casing, and a bottle lifter pivotally connected to said lever and adapted to remove a bottle from one of said cells and force the same through said opening.

3. A vending machine comprising a casing, a bottle supporting receptacle rotatably mounted therein, a plurality of spaced apart bottle cells carried by said casing, each cell being provided with a bottom opening, a bell crank lever mounted in said casing, a locking bar carried by said lever, and a bottle lifter carried by said lever and adapted to be forced through the bottom opening of one of said cells to remove a bottle therefrom when said bar is released.

4. A vending machine comprising a casing with an opening in its top, a bottle support in said casing, a rocking lever pivotally mounted in said casing, a door for said opening having a connection with said lever, and a bottle lifter also carried by said lever and adapted to raise a bottle from said support and force the same through the opening in the casing when said lever is rocked to remove the door.

5. A vending machine comprising a casing provided with an opening, a receptacle rotatably mounted therein, a handle for rotating said receptacle, a shelf surrounding said casing and provided with a plurality of bottle cells, and a lifter adapted to be forced through said opening in said casing.

6. A vending machine comprising a casing provided with an opening, a receptacle

rotatable therein, a plurality of individual cells carried by said receptacle, and pivotally mounted lifting means adapted to be passed through said cells to remove an article there-
5 from and project the same through said opening.

7. A vending machine comprising a casing provided with a top opening, a door normally closing the same, a bottle support
10 in said casing, and a rocking lever pivotally mounted in said casing and adapted to re-

move the door from the top opening of the casing, and lift a bottle from said support and pass the same through the top opening of the casing.

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

15

JOHN B. CLAY.

Witnesses:

W. RAMSAM,
J. F. LEDFORD.