(No Model.)

# H. Y. DICKINSON & A. G. MACCULLOCH.

## COIN ACTUATED AUTOMATIC MECHANISM FOR THE DELIVERY OF ICES.

No. 517,847. Patented Apr. 10. 1894.

Fig. 1.

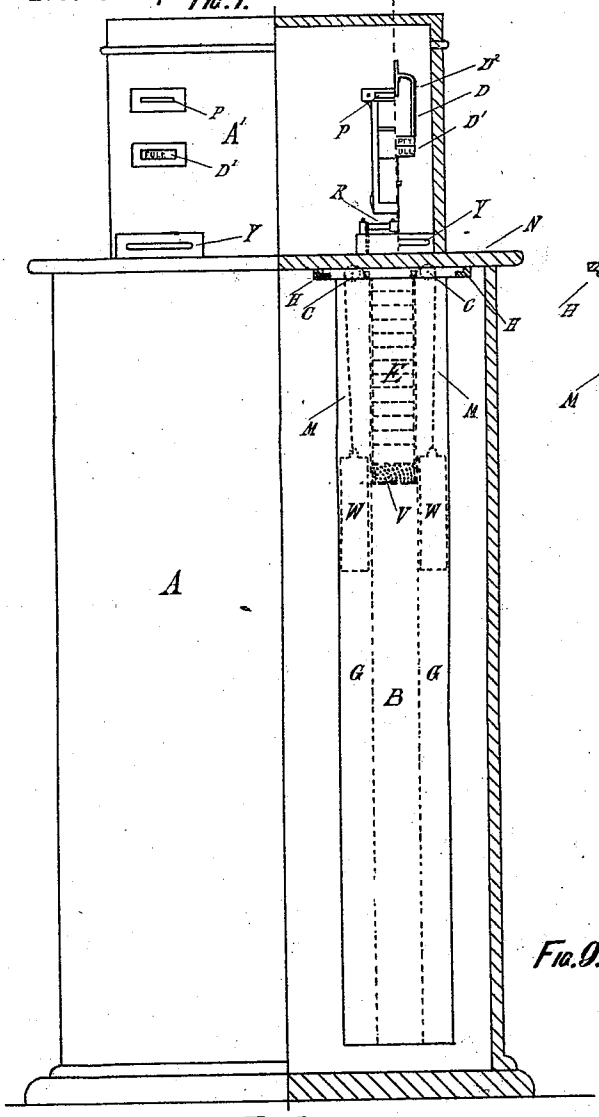



Fig. 2.

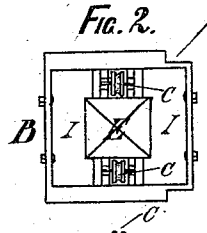
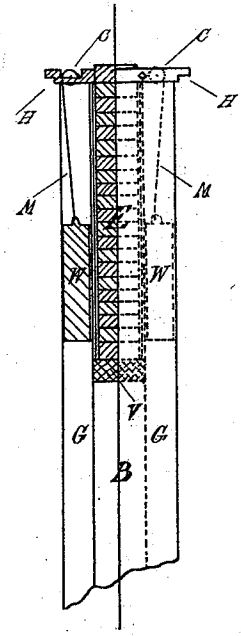



Fig. 3.



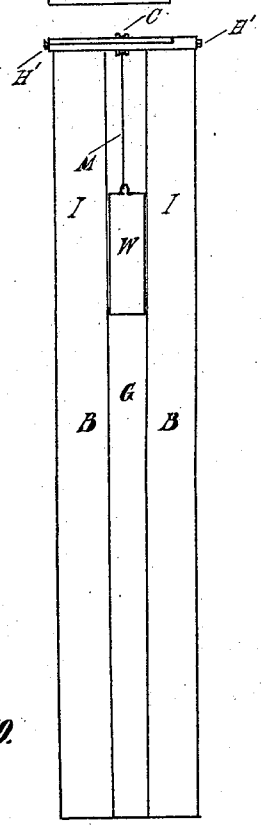




Fig. 4.

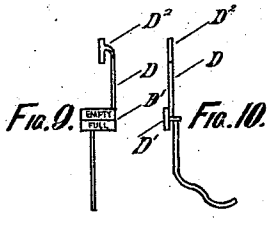



Fig. 9. Fig. 10.

Fig. 5.

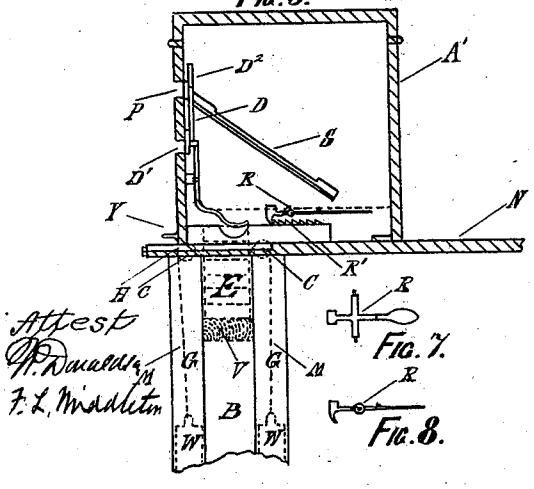


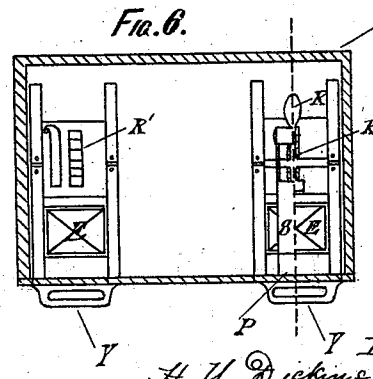

Fig. 7.




Fig. 8.




Fig. 6.

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HERBERT YOUNG DICKINSON AND ANDREW GILLIGAN MACCULLOCH, OF LONDON, ENGLAND.

## COIN-ACTUATED AUTOMATIC MECHANISM FOR THE DELIVERY OF ICES.

SPECIFICATION forming part of Letters Patent No. 517,847, dated April 10, 1894.

Application filed June 24, 1893. Serial No. 478,739. (No model.)

*To all whom it may concern:*

Be it known that we, HERBERT YOUNG DICKINSON, engineer, and ANDREW GILLIGAN MACCULLOCH, inventor, subjects of the Queen of Great Britain and Ireland, residing at 56 Gray's Inn Road, London, in the county of Middlesex, England, have invented a new and useful Improvement in Coin-Actuated Automatic Mechanism for the Delivery and Storage of Solidified Ices, of which the following is a specification.

This invention relates to an improved machine for supplying ice creams, by means of an automatic delivery box, and has for its special object, to deliver the ices stored in the said box in a fresh condition.

In order that the improved mechanism for the delivery of ice creams may be thoroughly understood in its details, we will now refer to the drawings of which—

Figure 1 shows half in outline and half in section of our machine. Fig. 2 shows a plan of our refrigerator. Fig. 3 shows a section of the ice cream storage receptacle and refrigerator. Fig. 4 shows a side view of the refrigerator and action of the weight attachment for raising the packages. Fig. 5 illustrates a section of the automatic delivery and novel device for showing whether box is "empty" or "full." Fig. 6 is a sectional plan view showing two sets of delivery devices that on the right being shown as having the coin chute, while the coin chute is omitted on the left. Fig. 7 shows a top view of pawl R. Fig. 8 shows a side view of the same. Fig. 9 is a front view of a novel arrangement for showing when the delivery box is empty. Fig. 10 shows a side view of the same.

In carrying out our invention we employ an ordinary box A made of wood, cast iron or any other suitable material which serves as the outer casing or receptacle.

B is the refrigerator constructed of zinc or other suitable material, a cast iron frame H attached to the top of the refrigerator by means of bolts and nuts H′ slides into cast iron grooves $H^2$ attached to the inside of the lid N of the box A. The refrigerator is made detachable so that it may be conveniently filled with the ice creams E, which are put up in packages and charged in receptacles I with an ordinary freezing mixture. The ice cream bricks E are elevated by the platform V connected with the weights W arranged to move vertically of the refrigerator by the cords M which pass up over the sheaves C journaled in the top of said refrigerator over the side grooves G in which the weights move. The pulleys and weights are removable with the refrigerator. The ices are prevented from rising more than flush with the top of the sides of the drawer Y by the flanges or guides with which the drawer is provided. This drawer frame Y is released by one, two, or more catches R, raised from one, two, or more rows of ratchets R′. The catches work on the ratchets in the same manner as pawls in ratchet wheels. Each pawl is raised above its rack so as to disengage from the teeth thereof by the weight of a coin passing through the slot P down the slide S. A piece of brass or other suitable metal is bent in the shape shown in Figs. 9 and 10, and is provided with a brass or other suitable shield D′ showing the words "Empty" and "Full," the bottom or foot of this piece rests on the ice cream packages, and will show "full" as long as there is a stock of ice cream packages in the receptacle; when exhausted, the piece D will drop and the shield will show "empty" while the part $D^2$ will prevent any coin being passed through the slot P. If it is desired to have the delivery from below instead of from above, we employ the same refrigerator case B, but leave it open at the bottom and instead of the weight and pulley arrangement, we have a piece of lead or other suitable weight of the same size as the ice cream packages, to insure the delivery of the packages into the drawer; in employing the last described delivery from above, we do not use the mechanism for showing the words "Empty" and "Full."

To improve the action of the refrigerator for the purpose of cooling the ice creams we may employ an extra wooden or metal box,

containing animal hair, charcoal, or other suitable non-conducting material.

What we claim as our invention, and desire to secure by Letters Patent, is—

In combination, the delivery slide, the releasing mechanism thereof, the coin slide with inlet slot, the bar D, having its lower end adapted to bear on the article, an upper end $D^2$ adapted to close the slot opening when the machine is empty and the placard "full" and "empty" connected to the bar D, substantially as described.

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