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BAR LOCK.

APPLICATION FILED JUNE 1, 1917.

1,277,412.

Patented Sept. 3, 1918.

2 SHEETS—SHEET 1.

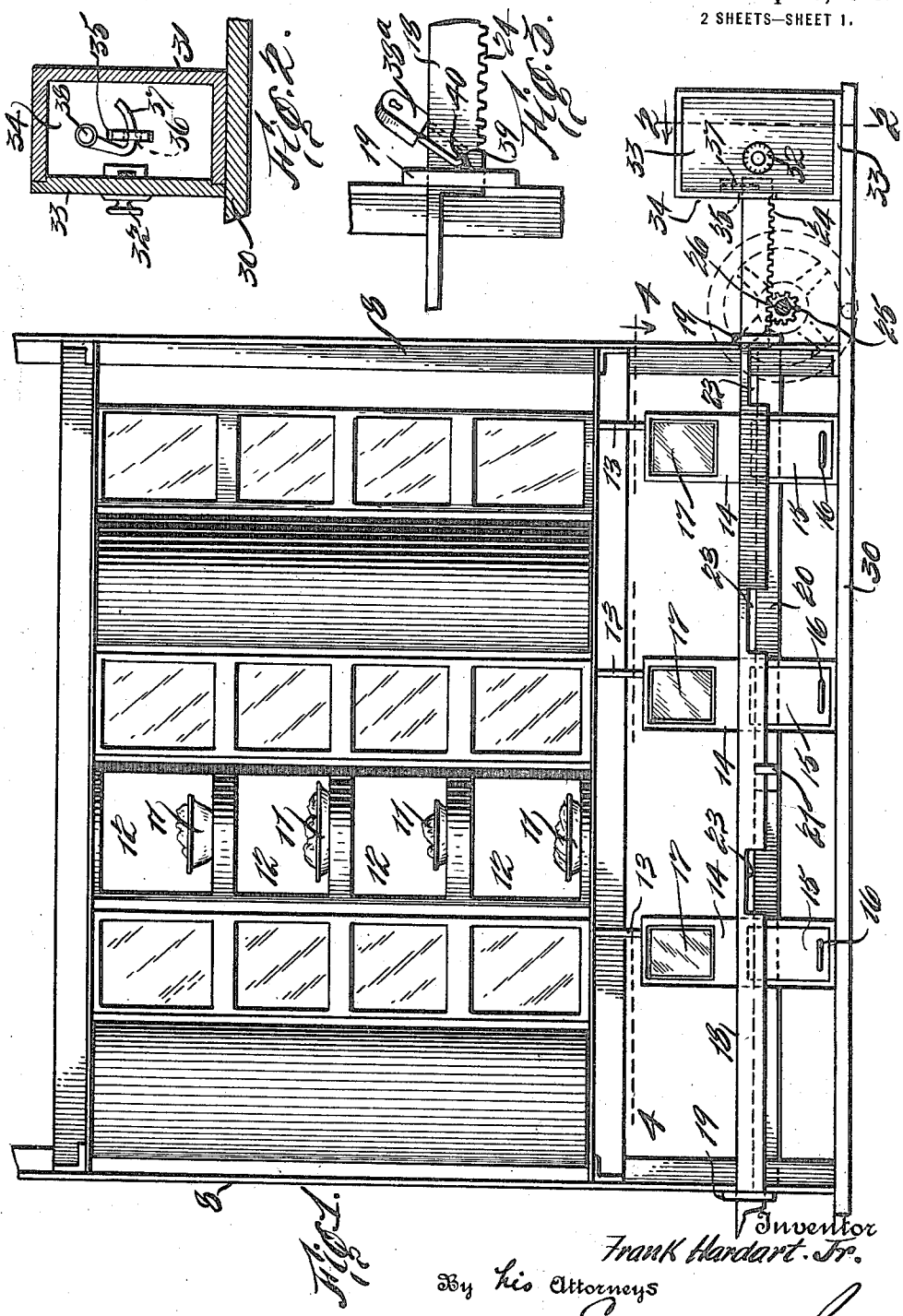


Fig. 2.

Fig. 3.

Fig. 4.

Fig. 1.

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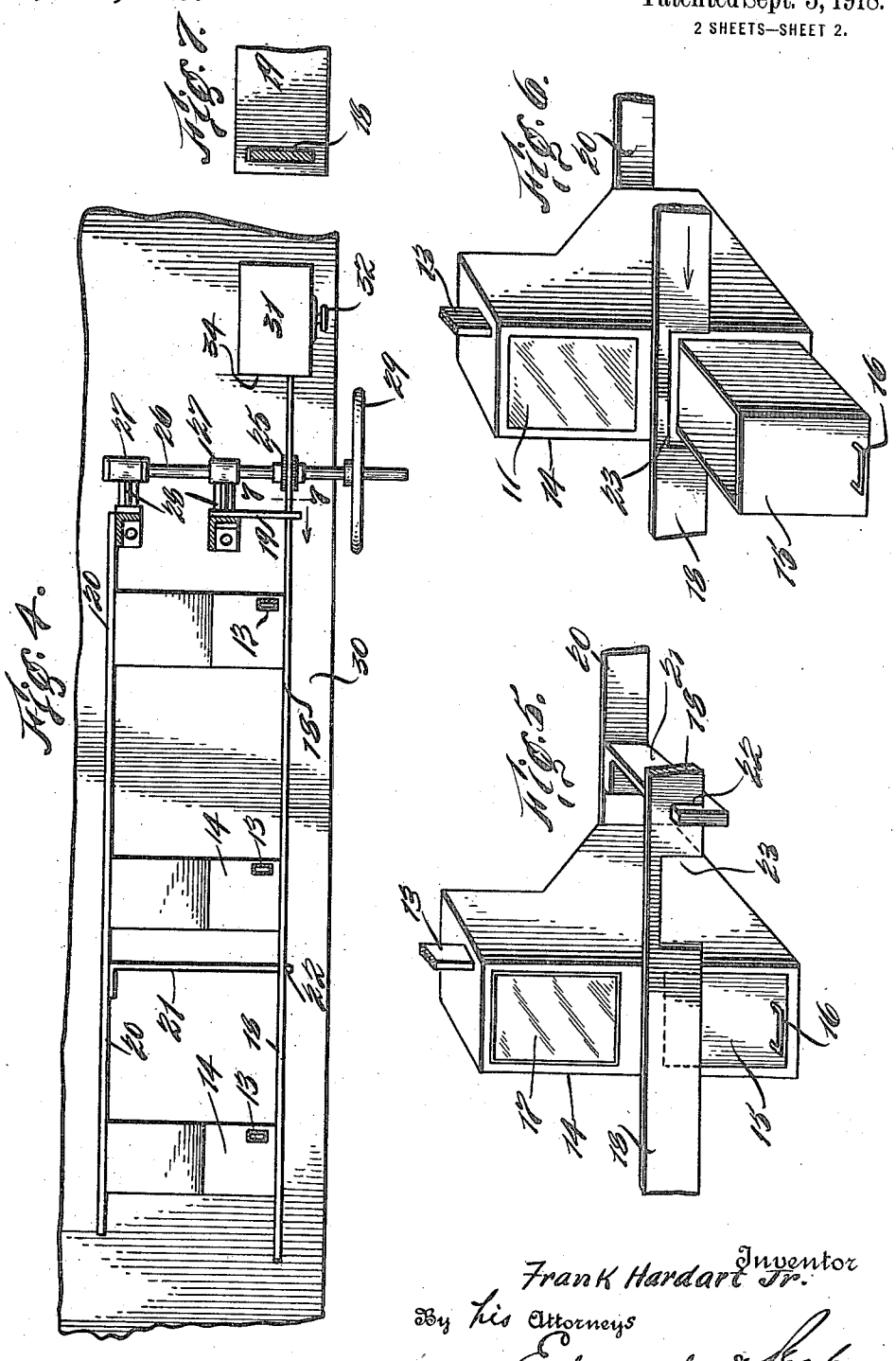


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

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UNITED STATES PATENT OFFICE.

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BAR-LOCK.

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To all whom it may concern:

Be it known that I, FRANK HARDART, JR., a citizen of the United States, and a resident of Forest Hills, in the county of Queens and State of New York, have invented certain new and useful Improvements in Bar-Locks, of which the following is a specification, reference being made to the accompanying drawings, forming a part thereof.

My invention relates to bar-locks used more particularly in connection with a plurality of coin-receiving receptacles attached to a plurality of coin-actuated vending devices, and the object of my invention, among other things, is to provide a simple and efficient form of bar-lock for the coin receptacles which shall maintain in closed condition the various coin receptacles provided for the apparatus as a whole, and holding the locking bar in position at either end of the machine, so that the individual coin receptacles may not be tampered with. My invention also comprises means for actuating the locking bar so that by a single movement the various receptacles may be opened to admit the coins assembled therein to be removed therefrom.

I attain this result by the mechanism shown in the accompanying drawings, in which Figure 1 is a rear elevation of one section of a series of food cabinets which are opened by depositing coins in suitable slots attached to the opening doors of the individual compartments, and also showing the coin receptacles or boxes arranged underneath; Fig. 2 is an enlarged section of the detail of Fig. 1 taken on the line 2—2 of Fig. 1, showing the interior of the safe containing the latch for the slidable bar lock; Fig. 3 is a modified form of means for latching the bar lock; Fig. 4 is a plan view taken on the line 4—4 of Fig. 1 looking in the direction of the arrow; Figs. 5 and 6 are enlarged perspective views of the bar lock in latched and released positions respectively, the Fig. 5 view showing the position of the bar which prevents the opening of the coin receptacles, Fig. 6 showing the position of the bar allowing the opening of the drawer of the coin-receptacles; Fig. 7 is an enlarged section taken on the line 7—7 of Fig. 4, looking in the direction of the arrow, showing a support for the sliding bar. Similar numerals refer to similar parts throughout the several figures.

Referring to Fig. 1, 8 designates a section of food cabinets adapted to be opened by the purchaser upon depositing the proper coins in slots (not shown) in the front of the cabinets, whereupon the front door (not shown) of each of the separate compartments may be opened by the purchaser to remove articles of food in dishes 11 therefrom theretofore deposited in the separate compartments 12. The coins, having been dropped in the slot corresponding to the compartment desired, immediately actuate certain mechanism whereby the door of that particular compartment may be opened, so that this form of apparatus automatically dispenses food and receives payment therefor, all under the control of the purchaser. The coin having passed through the slot in the front of the cabinet after actuating the dispensing mechanism, passes through passage 13 into the coin receptacles 14, having at the bottom the sliding drawers 15 provided with handles 16. Preferably the upper portion of the receptacle 14 is fitted with glass windows 17 to enable the owner to determine when the drawers 15 are more or less completely filled with coins. The foregoing construction is common and well known, and, in itself, forms no part of my invention.

Horizontally disposed in front of the several coin boxes 14, and supported so as to extend substantially half-way across the front of the drawer 15 and the line of division of the top of the drawer 15 is a transverse sliding bar 18, suitably supported on brackets 19 at either end of the particular section, as shown in Fig. 1. Preferably, there is also horizontally disposed to the rear of the coin receptacles 14 a supporting bar 20, which, preferably, is disposed in substantial parallelism with the bar 18. Preferably, as shown in Figs. 1 and 4, a supporting rod 21 extends forwardly from the bar 20, having an upwardly extending groove 22 in its forward end, within which the bar 18 rests and is slidably reciprocated through such groove. The bar 18 has suitably spaced-apart cut-out openings 23 of slightly greater width than the width of the drawer 15, arranged so that when the bar 18, for example, in Fig. 1, is moved to the left, the cut-outs 23 will aline themselves in front of their corresponding drawers 15, so that the same may be suitably

removed from the coin receptacles 14, as shown in Fig. 6. One end of the bar 18 outside the section 8 extends outwardly with its under side carrying a rack 24, adapted to engage the pinion 25, secured to the shaft 26, rotatably mounted in the bearings 27, secured on the brackets 28 to the frame 8, as shown in Fig. 4. The shaft 26 carries the operating wheel 29, secured at one end thereof, as shown in Fig. 4, whereby by rotating the wheel 29 the bar 18 may be reciprocated to the right or to the left in order to lock, or unlock, the respective drawers 15, as will be readily understood, Fig. 5 showing the bar 18 maintaining the drawers 15 in locked position, while Fig. 6 shows the bar moved to the left in order to unlock the respective drawers 15 to enable the coins collected therein to be removed. In order to maintain the locking bar 18 in its right-hand, locked, position, I have secured to the floor 30 of the section 8 a safe compartment 31 having the locking combination 32 of any usual construction, adapted to hold the door 33 in its closed position. The side 34 of the safe 31 adjacent the section has a suitable aperture 35 cut therein through which the extreme end of the bar 18 projects, as shown in Figs. 1 and 2, such extreme end of the bar 18 having a hole 36 cut therein. Mounted on the inner surface of the side 34 within the safe is a hasp 37 pivoted to the pin 38, secured to the side 34, as shown in Fig. 2, which hasp 37 is adapted to project through the hole 36, as shown in Fig. 2, whereby the end of the bar is held against transverse movement.

In Fig. 3 I have shown a modified form of lock, comprising the pad-lock 38^a removably secured to the bar 18 by having its locking loop 39 pass through the hole 40, cut in the bar 18 adjacent the contiguous bracket 19 to prevent any movement to the left of the bar 18, as will be readily understood.

The operation of my improved locking bar is substantially as follows: When the bar 18 is in the position shown in Figs. 1 and 5 the several drawers 15 in the coin receptacles 14 are held securely within their coin receptacles, and the end of the bar 18 is either locked within the safe 31 or held against lateral movement to the left by the pad-lock 38^a, shown in Fig. 3. When the owner desires to remove the coins that have collected in the respective drawers, he rotates the wheel 29 in a counter-clockwise direction, which, through the rack and pinion engagement moves the bar 18 to the left until the several openings 23 aline themselves each with its respective drawers 15, as shown in Fig. 6, when the drawers may be suitably removed and emptied of the coins which have collected therein. Upon the drawers 15 being replaced in their several compartments in their coin receptacles 14, the wheel 29 is then rotated in a clockwise direction, which results in moving the bar 18 to the right until its end passes through the aperture 35 into the interior of the safe 31, whereupon the hasp 37 is inserted within the hole 36 to prevent any movement of the bar 18 to the left; or, in the modified form shown in Fig. 3, the bar 18 is moved through the rack and pinion engagement until the hole 40 extends to the right of the support 19, when the locking ring 39 of the pad-lock 38^a passes through the hole 40 and the lock 38^a is secured thereto, which will prevent any lateral movement to the left of the bar 18.

The foregoing comprises an embodiment of my invention as applied to a coin-actuated food-dispensing apparatus, but I do not wish to be limited to its application to such a device for it is obviously applicable to other forms of machines in which a plurality of coin receptacles are arranged in transverse alinement suitably spaced-apart to be locked or released by a movement in either direction of a transverse locking bar.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is the following, viz:

1. A bar locking device comprising in combination with a plurality of equally spaced-apart receptacles, each having removable covers, of a bar slidably secured across said receptacles and covers, provided with spaced-apart cut-outs of slightly greater width than the width of their coacting covers, said bar preventing outward movement of said covers when said cut-outs are out of register with said covers, and permitting said covers to be removed only when the oppositely-disposed edges of said cut-outs are respectively outside the planes of the opposite sides of said covers, means arranged at one end of said bar, comprising an immovable safe compartment provided with suitable locking devices within which compartment said bar is held, for securing said bar against transverse movement only when the respective cut-outs are wholly out of register with their respective covers, and means interposed between said receptacle covers and said locking means for directly actuating said bar in either direction transversely with respect to said receptacles.

2. A bar-locking device comprising in combination with a plurality of equally spaced-apart receptacles, each having removable covers, of a bar slidably secured across said receptacles and covers, provided with a like plurality of spaced-apart cut-outs of slightly greater width than the width of their co-acting covers, said bar preventing outward movement of said covers when said cut-outs are out of register with said covers, and permitting said covers to be re-

moved only when the oppositely-disposed edges of said cut-outs are respectively outside the planes of the opposite sides of said covers, means arranged at one end of said bar, comprising an immovable safe compartment provided with suitable locking devices within which compartment said bar is held, for securing said bar against transverse movement only when the respective cut-outs are wholly out of register with their respective covers, and means interposed between said receptacle covers and said locking means for directly actuating said bar in either direction transversely with respect to said receptacles.

3. A bar-locking device comprising in combination with a plurality of equally spaced-apart receptacles, each having removable covers, of a bar slidably secured across said receptacles and covers, provided with spaced-apart cut-outs of slightly greater width than the width of their co-acting covers, said bar simultaneously preventing outward movement of said covers when said cut-outs are out of register with said covers, and simultaneously permitting said covers to be removed only when the oppositely-disposed edges of said cut-outs are respectively outside the planes of the opposite sides of said covers, means arranged at one end of said bar, comprising an immovable safe compartment provided with suitable locking devices within which compartment said bar is held, for securing said bar against transverse movement only when the respective cut-outs are wholly out of register with their respective covers, and means interposed between said receptacle covers and said locking means for directly actuating said bar in either direction transversely with respect to said receptacles.

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Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."