

J. P. CLEAL & A. MACAULEY.

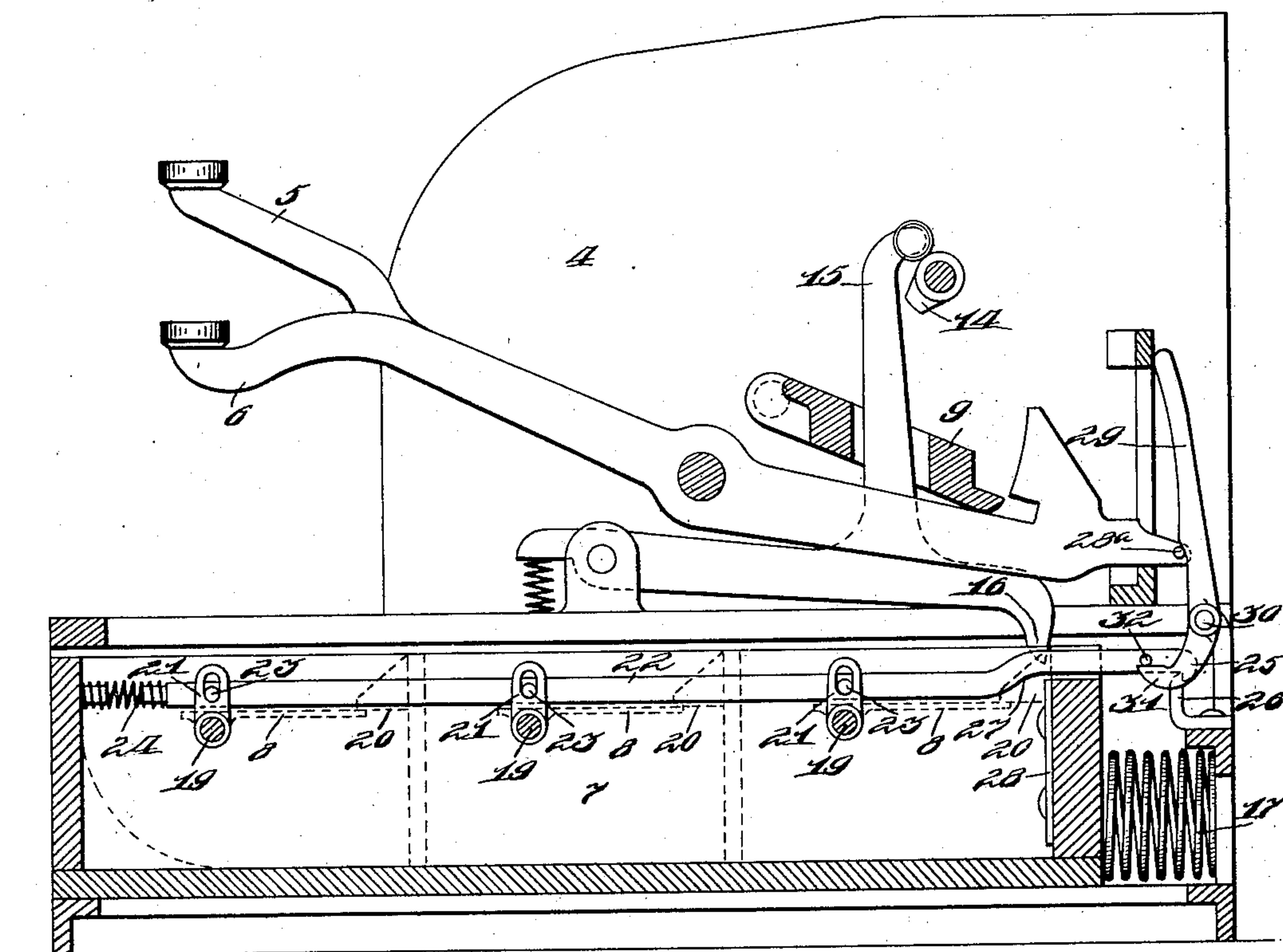
CASH REGISTER.

APPLICATION FILED NOV. 8, 1901.

NO MODEL.

3 SHEETS—SHEET 1.

FIG. 1.



Witnesses
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No. 735,066.

PATENTED AUG. 4, 1903.

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CASH REGISTER.

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3 SHEETS—SHEET 2.

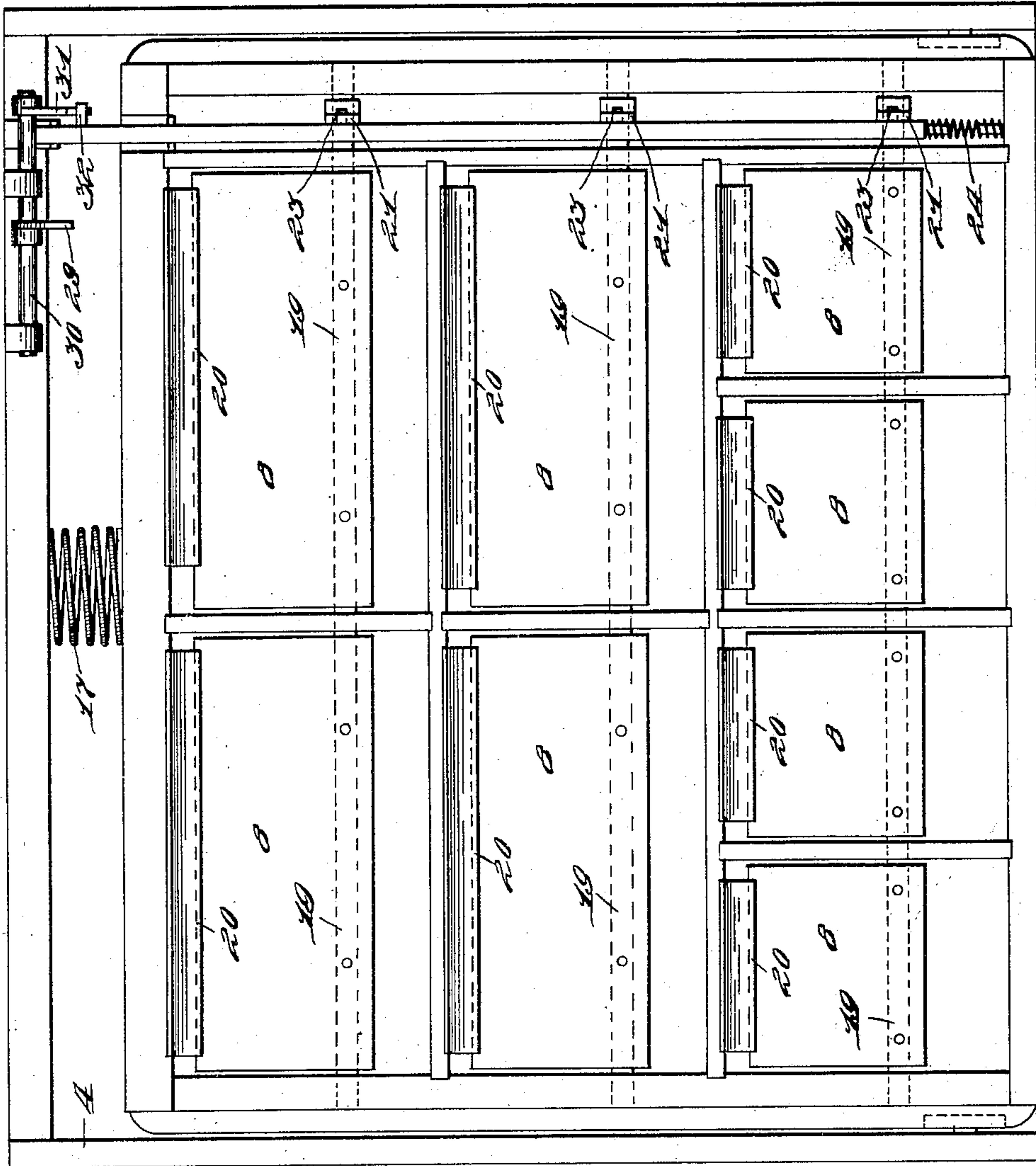


FIG. 2.

Witnesses

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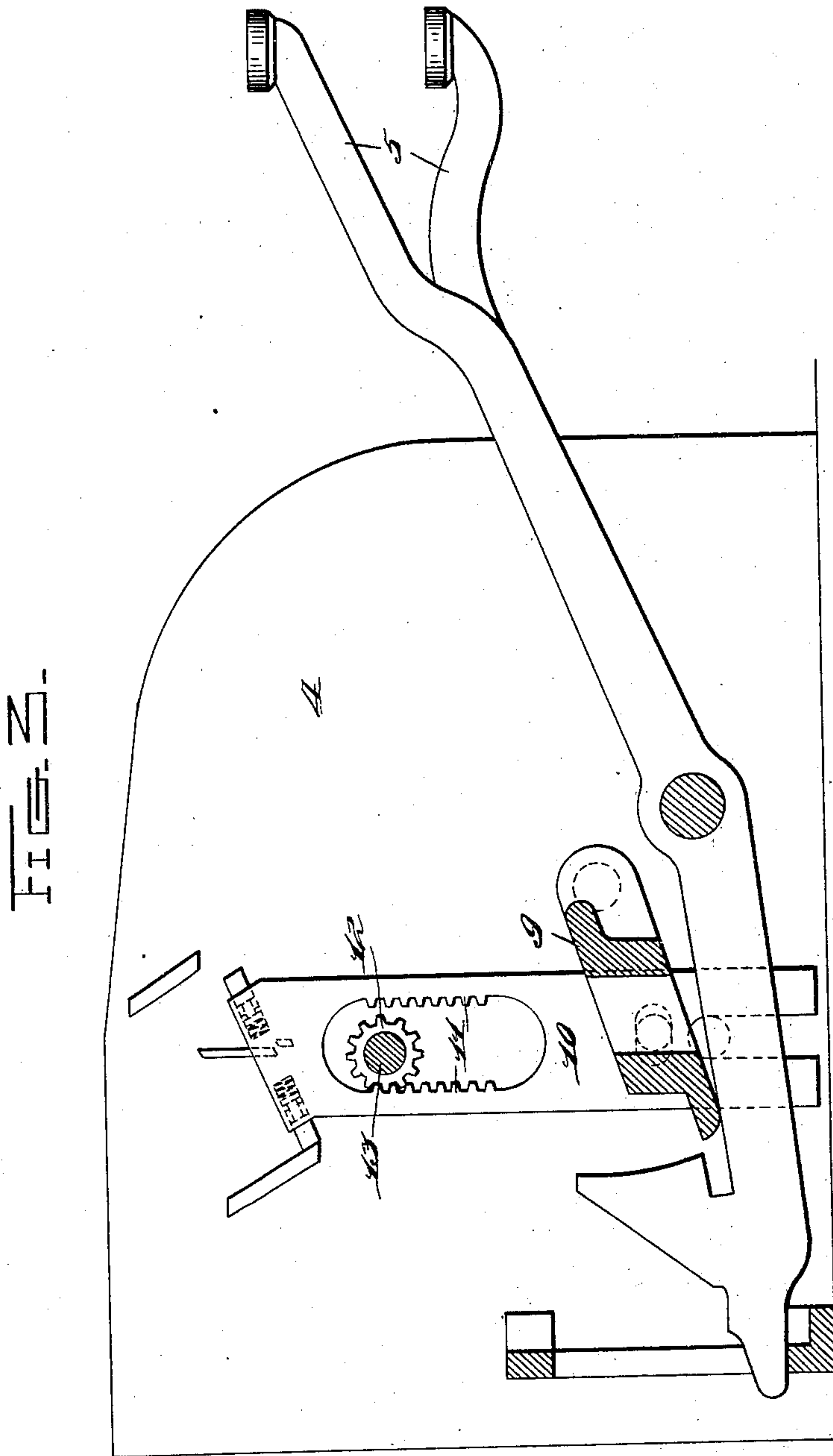
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CASH REGISTER.

APPLICATION FILED NOV. 8, 1901.

NO MODEL.

3 SHEETS—SHEET 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH P. CLEAL AND ALVAN MACAULEY, OF DAYTON, OHIO, ASSIGNORS TO
NATIONAL CASH REGISTER COMPANY, OF JERSEY CITY, NEW JERSEY,
A CORPORATION OF NEW JERSEY.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 735,066, dated August 4, 1903.

Application filed November 8, 1901. Serial No. 81,559. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH P. CLEAL and ALVAN MACAULEY, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Cash-Registers, of which we declare the following to be a full, clear, and exact description.

This invention relates to improvements in cash-registers, and has more particular relation to improvements in coin-displayer attachments for the same.

The object of the invention is to provide an improved coin-displayer upon which coins or bills may be placed before being finally deposited in the cash-drawer.

In the accompanying drawings, forming part of this specification, Figure 1 represents a central vertical section through a machine of the type patented to Thos. Carney, No. 497,860, May 23, 1893, with our improvements applied thereto, the cabinet of the same being removed. Fig. 2 represents a top plan view of the same with the keys, key-coupler, and drawer-latch removed; and Fig. 3 represents a vertical transverse section through a machine of the type mentioned, the cash-drawer being omitted.

In the aforesaid drawings, 4 represents the frame of the machine; 5, the regular keys; 6, the special key; 7, the cash-drawer, and 8 the coin-supporting shutters mounted on the cash-drawer.

As the general operation of the machine is substantially identical with that of the aforesaid patented construction, reference is made to the same for the detail description of said construction. Described generally, however, the keys 5 and 6 are pivotally mounted and cooperate at their rear ends with a pivoted key-coupler 9, which in turn operates a vertical rack-slide 10, having oppositely-facing racks 11, which coact alternately with a pinion 12 on a rotation-shaft 13 in a manner well known in the art. By this means the operation of the keys rotate the shaft to effect the several operations dependent upon the same.

One of these operations is the unlatching of the cash-drawer, which occurs upon the return

stroke of the key and is effected by a cam 14, mounted on the shaft and cooperating with a pivoted bell-crank latch-lever 15 to turn the same on its fulcrum and disengage a nose 16, formed thereon, from the cash-drawer. When thus released, the cash-drawer is forced open in the usual manner by a coil-spring 17, mounted back of the same.

The cash-drawer is divided into suitable compartments for coins and bills, and each of said compartments is provided with one of the coin or bill supporting tables 8. These tables are fast to transverse rock-shafts 19, which are suitably journaled in the drawer-partitions, so as to support the tables in the rear portions of the different receptacles and leave the front portions clear for the removal of bills or coins. The rear edges of the tables project under rigid flanges 20 on the drawer-partitions to arrest the tables in their horizontal positions. When the shafts 19 are rocked, as hereinafter described, the tables are tilted downward sufficiently to deposit any coins or bills resting thereon into the compartments beneath them. Each shaft is provided near its right-hand end with a rigid vertical slotted arm 21. A reciprocating bar or rod 22 is provided with a series of laterally-projecting pins 23, which enter the slots of the aforesaid arms 21, whereby all of the shafts may be rocked simultaneously and to an equal degree. This bar is held in its normal position (shown in Fig. 1) by a coil-spring 24, which connects it to the forward wall of the cash-drawer. The bar passes through suitable slots cut in the drawer-partitions and projects to the rear of the drawer, where it is formed with a hook end 25, which normally engages a rigid hook 26, mounted on the frame of the machine. When the drawer is released and forced forward, the bar is retained by this hook, so that the arms 21 are rocked rearward and the tables tilted to deposit the coins or bills into the receptacles. As the cash-drawer passes out the under incline edge 27 of the bar 22 is struck by a plate 28, mounted upon the rear wall of the drawer, and the rear part of the bar thus elevated to disengage the hook 25 from the hook 26, and thus permit the bar to assume its normal position. When

the drawer is open, the coins or bills last received are placed upon the proper tables according to their denominations and the drawer then closed. The tables are not tilted to deposit these coins or bills until the succeeding opening movement of the drawer. Should any question arise between the clerk and the customer as to the bill or the coin which was last tendered, the clerk presses the special key 6, and thus releases the cash-drawer. The rear end of this key is provided with a laterally-projecting pin 28^a, which when the key is operated contacts with and operates a cam-lever 29, fast to a transverse shaft 30, journaled in the main frame. The shaft 30 further carries a hook-arm 31, which when the shaft is rocked by the arm 29, as aforesaid, engages a pin 32 on the bar 22 and raises the hook 25 out of engagement with the hook 26. When the drawer is now opened, the bar 22 will not be retarded, and consequently the tables will not be tipped and will retain the coins or bills previously placed upon them. The customer can thus be assured of the amount of money he previously tendered. When the drawer is again closed, the parts automatically return to their operative positions.

It will be observed from the above that it is only when the special key is operated that the money remains upon the tables, and at all other times it is automatically deposited in the proper receptacle of the cash-drawer upon the opening of the drawer.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a drawer, of movable coin or bill supporting devices mounted in the same, means for operating the supporting devices upon the movement of the drawer to cause them to deposit the coins or bills in the drawer, and devices for preventing this operation upon the movement of the drawer at will.

2. The combination with a cash-drawer, of movable coin or bill supporting tables mounted in the same, means for tilting said tables upon the movement of the drawer, and devices for rendering said tilting means inoperative at will.

3. The combination with a cash-drawer, of pivoted coin or bill supporting tables mounted in the same, means for simultaneously tilting said tables upon the movement of the drawer, and devices for rendering said tilting means inoperative at will.

4. In a cash-register the combination with an operating mechanism, of a cash-drawer released by the same, movable tables in said cash-drawer, means for tilting said tables upon the opening of the drawer, and devices for preventing the tilting of said tables at will.

5. In a cash-register, the combination with an operating mechanism, of a cash-drawer released by the same, movable coin or bill sup-

porting devices in said cash-drawer, means for operating said devices upon the opening of the drawer, and devices for preventing such operation at will.

6. In a cash-register, the combination with a series of regular keys and a special key, of a cash-drawer, means operated by the keys for releasing said drawer, coin or bill supporting tables in said drawer, means for operating the tables upon the movement of the drawer, and devices operated by the special key for rendering the table-operating means inoperative.

7. In a cash-register, the combination with a series of regular keys and a special key, of a cash-drawer, a latch for said drawer, a spring for opening said drawer, means for raising the latch upon the operation of any key, a series of pivoted tables mounted in the cash-drawer, means for tilting said tables when the cash-drawer is opened; and devices operated by the special key for rendering said tilting means inoperative.

8. In a cash-register, the combination with a series of regular keys and a special key, of a cash-drawer controlled by the keys and divided into coin and bill compartments, a pivoted table in each compartment, means connecting said tables so that they may be all moved together upon the opening of the drawer, and devices controlled by the special key only for rendering the table-moving means inoperative.

9. In a cash-register, the combination with a cash-drawer divided into a series of compartments, of a tilting table for each compartment, means connecting all the tables so that they move simultaneously upon the opening of the drawer, and devices for preventing the movement of the tables upon the opening of the drawer, at will.

10. The combination with a cash-drawer divided into a series of compartments of coin or bill supporting tables pivoted over said compartments, so as to cover only a portion of the tops of the same, means for tilting said tables upon a movement of the drawer and devices for rendering said means inoperative at will.

11. The combination with a cash-drawer divided into a series of compartments, of pivoted tables mounted over said compartments, means for normally holding said tables in horizontal positions and arranged to tilt said tables upon the opening of the drawer and devices for rendering said tilting means inoperative at will.

12. The combination with a cash-drawer divided into a series of compartments, of tilting tables mounted in said compartments, means connecting said tables for tilting them upon the opening of the drawer, said means comprising a movable member connected with the tables and adapted to engage a stationary projection, and thus by being held stationary during the operation of the drawer, tilt the tables and means for automatically disen-

gaging said member from the stationary projection by the movement of the drawer.

13. The combination with a cash-drawer divided into a series of compartments, of pivoted tables mounted in said compartments, means for simultaneously rocking all of said tables, said means comprising a longitudinally-movable bar, a stationary projection for retaining said bar upon a movement of the drawer, and means, independent of the cash-drawer, for disengaging said bar from the stationary projection.

14. In a cash-register, the combination with a series of regular keys and a special key, of a cash-drawer, a series of coin or bill supporting tables, mounted in the cash-drawer, a longitudinally-movable bar for moving said tables, a stationary projection for moving said bar upon the movement of the drawer, means controlled by a special key for raising said bar out of connection with the stationary projection and a device controlled by all the keys for releasing the drawer.

15. In a cash-register, the combination with a series of regular keys and a special key, of a cash-drawer, a latch for said drawer arranged to be operated by any of the keys, a series of coin or bill supporting tables mounted in the drawer, a longitudinally-movable bar for simultaneously tipping all of said tables, a spring for holding said bar in its normal position, stationary means engaged by said bar for retaining the same upon a movement of the drawer and means operating by a special key for raising the bar out of connection with the stationary projection.

16. In a cash-register the combination with a cash-drawer, of a series of tilting tables mounted therein, means for tilting said tables arranged to engage a stationary projection and be thereby retained upon a movement of the drawer, a special key and a cam-lever engaged by said key and adapted to lift the table-tilting means out of engagement with the stationary projection.

17. The combination with a cash-drawer, of a series of tilting tables, mounted therein, a longitudinally-movable bar connected with said tables, a spring for holding said bar in its normal position, means for retaining said bar upon the opening of the drawer, the construction of said bar being such that the bar, after a partial movement will be automatically disengaged from such retaining means, and allowed to move with the drawer.

18. The combination with a cash-drawer divided into a series of compartments, of pivoted tables mounted in said compartments,

flanges against which the edges of the tables contact and springs for holding said tables in yielding contact with said flanges.

19. The combination with a movable cash-receptacle, of movable coin or bill supporting devices, means for operating the supporting devices upon the movement of the receptacle to cause them to deposit the coins or bills in the receptacle and devices for preventing this operation upon the movement of the receptacle, at will.

20. The combination with a cash-receptacle, of movable coin or bill supporting devices mounted on the same, means for tilting said supports upon the movement of the receptacle and devices for rendering said tilting means inoperative at will.

21. The combination with a movable cash-receptacle, of movable coin or bill supporting tables mounted over the same, means for tilting the tables upon the movement of the receptacle and devices for rendering said tilting means inoperative at will.

22. The combination with a cash-receptacle, of a coin or bill displayer operated by the cash-receptacle and means for rendering the displayer inoperative in connection with the receptacle, at will.

23. The combination with a cash-receptacle of a coin or bill displayer arranged to discharge into the receptacle, means for operating the displayer upon the opening of the receptacle and devices for rendering the displayer inoperative in connection with the receptacle at will.

24. The combination with a cash-receptacle divided into compartments, of a coin or bill displayer arranged to discharge the coins or bills into their proper compartments, means for operating the displayer by the movement of the cash-receptacle and devices for rendering said means inoperative at will.

25. The combination with a cash-receptacle divided into compartments, of a coin-displayer including a coin or bill support for each compartment arranged to discharge into the compartment, means for operating the coin-displays upon the opening of the cash-receptacle and devices for rendering said means inoperative at will.

In testimony whereof we affix our signatures in the presence of two witnesses.

JOSEPH P. CLEAL.
ALVAN MACAULEY.

Witnesses:

JOHN A. WERNER,
WM. H. MUZZY.