

No. 627,224.

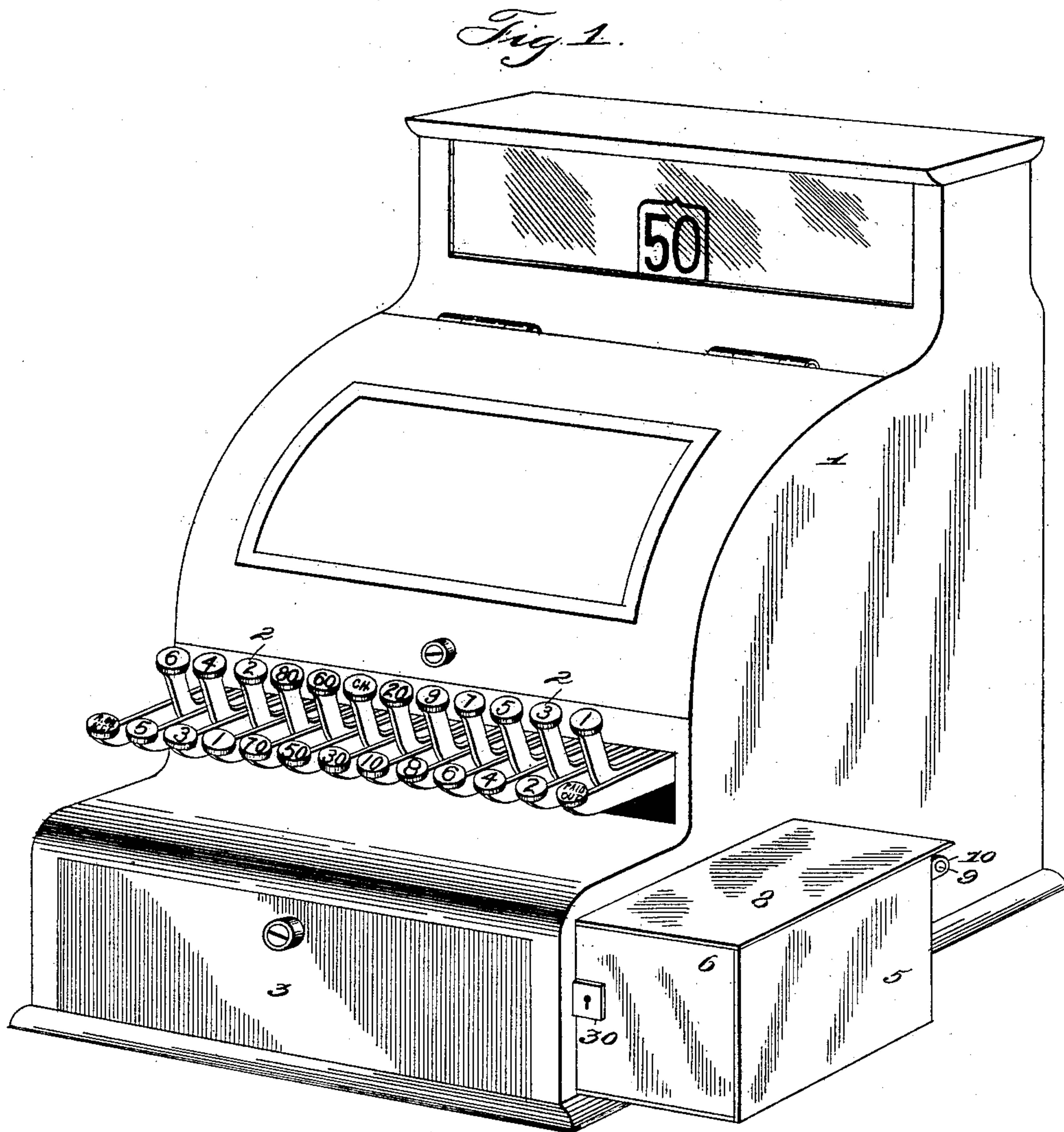
Patented June 20, 1899.

J. S. CRANE.
CASH REGISTER.

(Application filed July 30, 1898.)

(No Model.)

4 Sheets—Sheet 1.



WITNESSES:

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Ira Berkstresser

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James S. Crane
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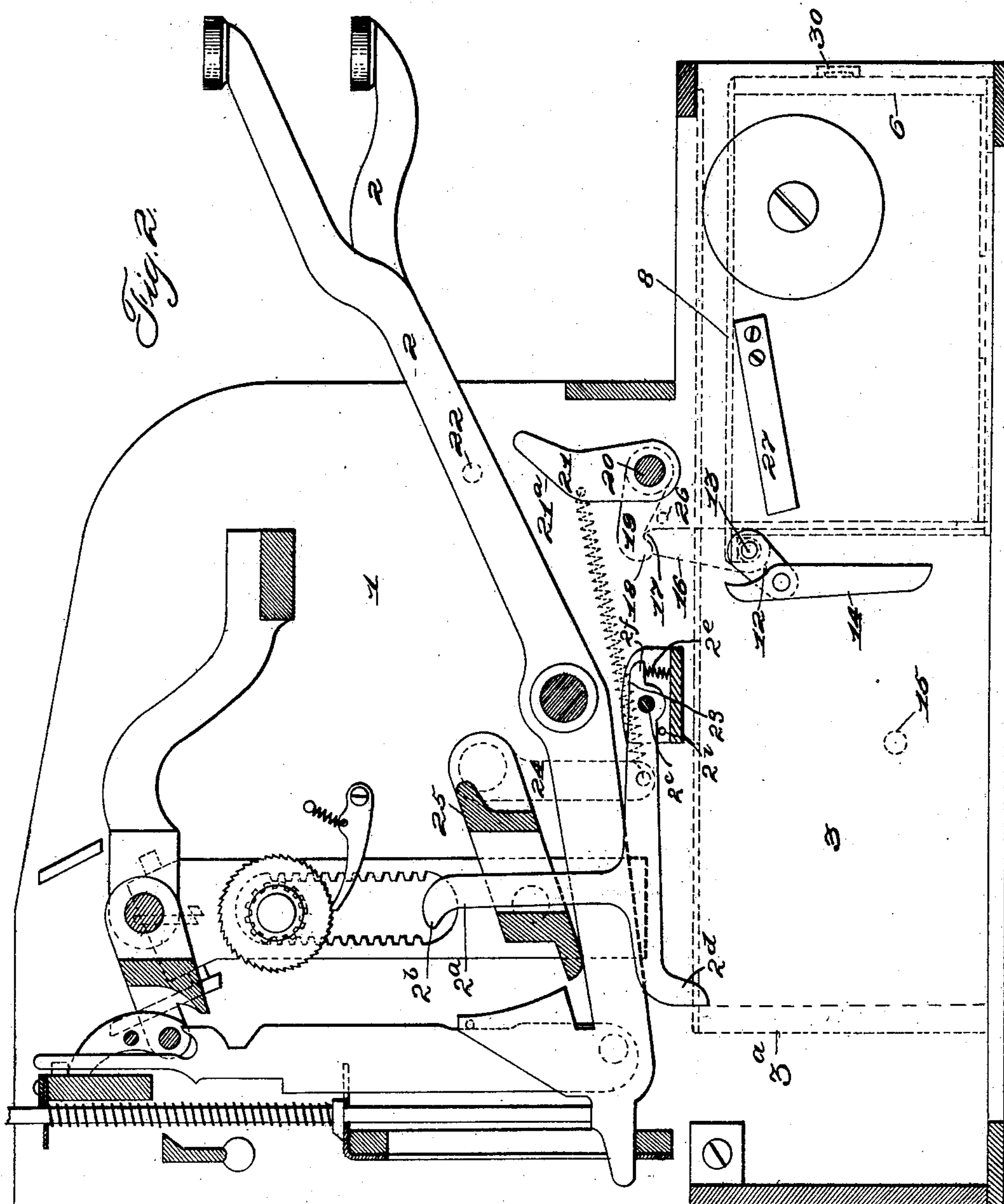
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4 Sheets—Sheet 2.



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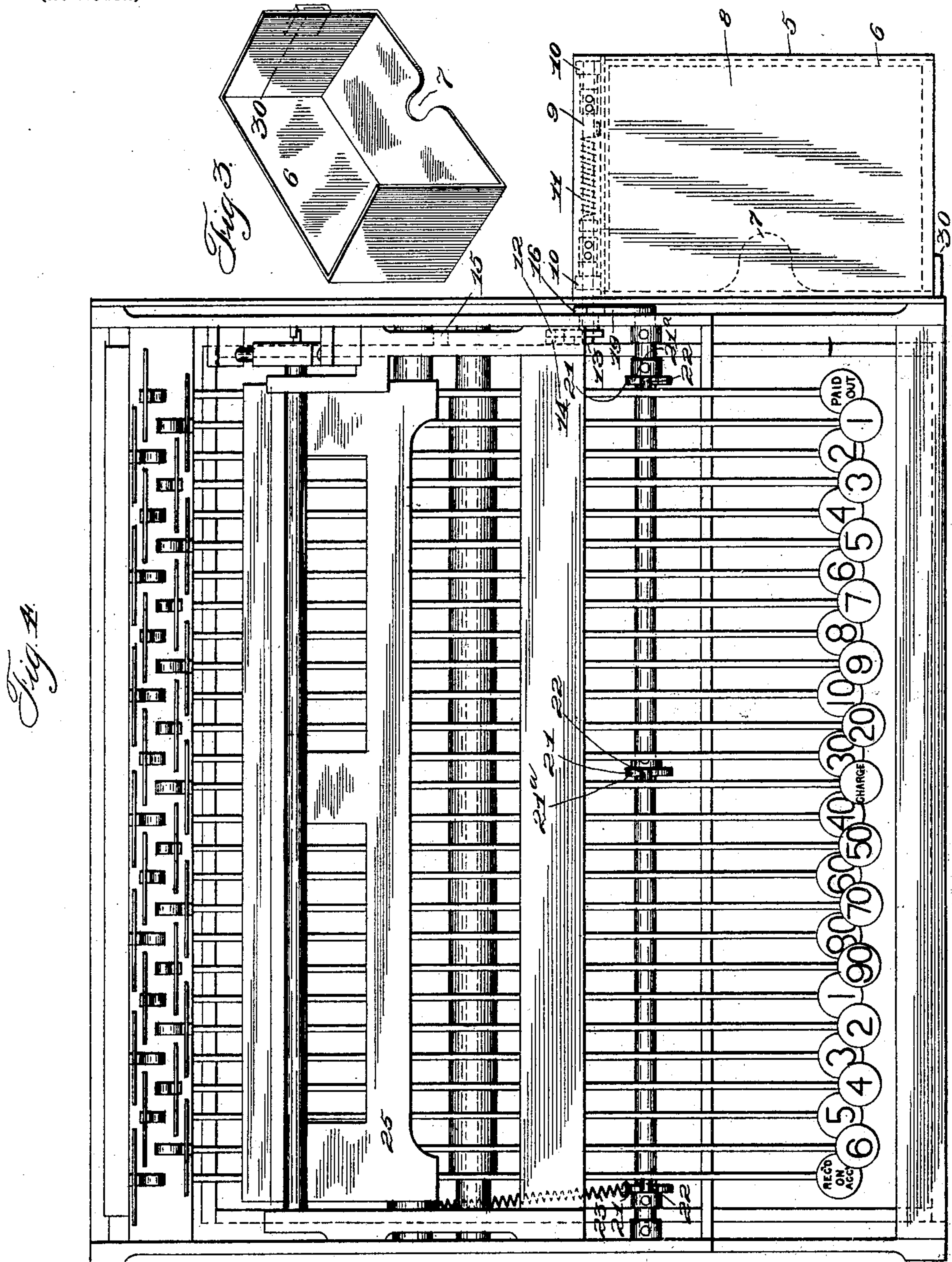
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4 Sheets—Sheet 3.



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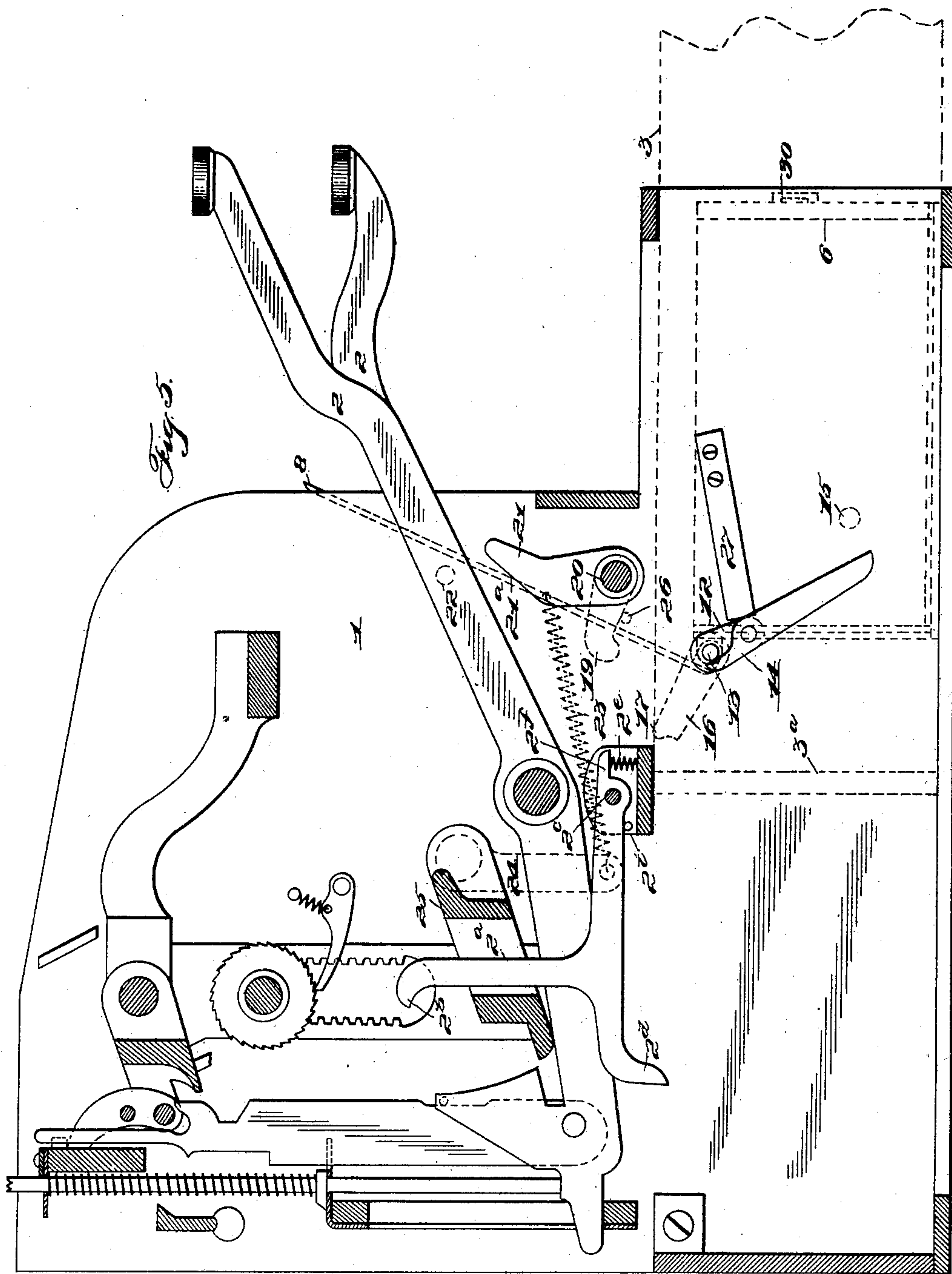
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(Application filed July 30, 1898.)

(No Model.)

4 Sheets—Sheet 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES S. CRANE, OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO THE NATIONAL CASH REGISTER COMPANY, OF JERSEY CITY, NEW
JERSEY.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 627,224, dated June 20, 1899.

Application filed July 30, 1898. Serial No. 687,260. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. CRANE, a citizen 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 I 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 that class of machines which are operated by the keys, although I do not care to limit myself to the application of my invention to such types of machines, as the same may with equal facility be applied to machines of different constructions.

In the present instance I have shown my invention applied to the type of machine shown and described in the patent to Thomas Carney, No. 536,015, dated March 19, 1895.

The primary object of the invention is to provide a cash-register with an improved receptacle having a movable cover which is so connected to the movable parts of the registers as to be opened and closed upon the operation of the same.

In the appended drawings, forming part of this specification, Figure 1 represents a perspective view of the cash-register and attachment complete. Fig. 2 represents a vertical transverse section through the same. Fig. 3 represents an enlarged detail perspective view of the removable drawer. Fig. 4 represents a top plan view of a well-known type of cash-register with my invention applied thereto, and Fig. 5 represents a view similar to Fig. 2 with the drawer shown in broken lines and open and the drawer-latch in place.

In the aforesaid drawings, 1 represents the frame of the register, 2 2 the keys, and 3 the cash-drawer.

The register proper, with its keys, money-drawer, and other parts, may be of any desired construction and operation, but for convenience I have illustrated a type well known in the art as disclosed in the above-mentioned patent and applied my improvement thereto. Each of the keys coöperates with a key-cou-

pler 25, substantially as described in the above-mentioned patent, and the said coupler in turn is adapted to engage and lift a vertical arm 2^a, formed with a lifting-nose 2^b. This arm is of angular formation and is pivoted upon the main frame, as at 2^c. A locking-nose 2^d is formed on said arm and is arranged to act as a drawer-latch by normally projecting in front of the rear wall 3^a of said drawer, so that when it is raised, as above described, the drawer will be released. The arm is held down in its normal locking position by a coil-spring 2^e, which is interposed between a nose 2^f, formed on said arm, and the frame, the movement of the arm being limited by a stop-pin 2^g.

My improved attachment, which is suitably secured to the exterior of the frame 1, is intended for the reception of "Charge," "Paid out," "Received on account," and other special slips which are employed in the systems used in connection with this class of registers and which are usually placed in the cash-drawer with the cash. This attachment comprises a rectangular casing 5, having an open top and front and mounted in a convenient position for the reception of the aforesaid slips, and a drawer 6, arranged to be slipped into said casing. This drawer is provided with but three sides and is formed in the free edge of its bottom with a thumb-notch 7, by means of which the slips may be grasped and readily removed from the drawer when so desired. The open top of the casing is normally closed by a cover or hinged lid 8, which is mounted upon a rod 9, pivoted in lugs upon said casing and provided with a coil-spring 11, which is secured at one end to the casing and at the other end to said rod, whereby the latter is normally so held as to tend to force the cover into an open position. The inner end of the rod projects through the frame and is provided inside of the same with a crank-arm 12, by means of which said rod is operated, the end of the rod projecting through the crank-arm to form a stop 13 for a pawl 14, pivoted on said arm, so that its lower end normally hangs suspended in the path of

a stud 15, mounted on the outside of the drawer 3. It will be seen that by this structure when the drawer is opened the stud 15 will simply force the pawl 14 out of its path without moving the crank-arm 12; but when the drawer is given a reverse movement upon being closed the pawl will engage the stud 15, and thus move the crank arm and rod and close the cover 8. The cover is held in this closed position against the tension of its spring by a latch-arm 16, fast upon the rod 9, and formed at its free end with a nose 17, which is arranged to catch under a nose 18, formed on a crank-arm 19. This crank-arm is fast upon a transverse rock-shaft 20, which extends under the keys and is provided with a plurality of tripping-arms 21, lying in alinement with certain special check-keys and having inclined upper edges 21^a, which are adapted to be engaged by projecting studs 22 on the said keys. The arms 21 and studs 22 are only provided for such keys as the "Charge," "Paid out," and "Received on account" keys, so that the lid of the casing 6 will only be released when it is desired to deposit a slip therein. A coil-spring 23 connects one of said arms 21 with a pendent arm 24, mounted on the key-coupler cross-bar 25, so that the shaft 20 will normally be held in such a position that all of said arms 21 will extend into their forward positions. The forward movement of the crank-arm 19 is limited by a stud 26, while that of the arm 12 is limited by a stop-plate 27.

If so desired, the arms 21 need not be limited to the special keys, but may be applied to cooperate with any or all of the keys, as occasion may require. When any one of the keys provided with the studs 22 is depressed, the shaft 20 is rocked, as before described, and thus lifts the crank-arm 19 and allows the arm 16 to escape and the cover 8 to open under the impulse of its spring. The action of the keys simultaneously releases the drawer, and as the same passes forward its stud 15 presses the pawl 14 to one side, as before explained, without moving the rod 9; but when the reverse movement of the drawer takes place the pawl engages the stud 13 and turns said rod until the cover 8 is closed and the arm 16 has again caught under the arm 19.

It will be observed from the foregoing description that my device when used in connection with a check or slip system of charges and other special transactions obviates the necessity of placing said slips in the compartments of the cash-drawer and provides a secure receptacle for the same, in which they are smoothly held and from which they may be instantly removed by drawing out the drawer 6. The open side of said drawer, together with the thumb-notch 7, provides a ready means of access to the slips, so that the same may be examined, counted, or removed at will. The drawer is preferably provided

with a suitable lock 30, so that it may be locked and its contents protected against unauthorized examination without the operation of the machine.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is--

1. The combination in a cash-register, of a series of keys, a receptacle, a lid for said receptacle, a latch for said lid, special keys for controlling said latch, a cash-drawer for resetting the latch, and means for releasing the cash-drawer when any key is operated.

2. In a cash-register, the combination with a cash-drawer and a receptacle, of a series of cash-keys arranged when operated to release the cash-drawer, and a series of special keys arranged when operated to release both the cash-drawer and the receptacle, substantially as described.

3. The combination in a cash-register, of a series of keys, a spring-actuated rod, a receptacle which is accessible from the outside of the cash-register, a lid for said receptacle mounted on said rod, special keys for releasing said lid, a cash-drawer, and means for closing the lid upon the closing of the drawer.

4. In a cash-register, the combination with a series of cash-keys and a series of special keys, of a cash-drawer, connecting mechanism by which the cash-drawer is released by the operation of either a cash-key or a special key, a receptacle having a movable member, and connecting mechanism between the special keys and said movable member whereby when one of said special keys is pressed the receptacle is opened; said receptacle being accessible from the outside of the cash-register.

5. The combination in a cash-register, having a cash-drawer, of a receptacle, a movable lid for said receptacle, a spring-actuated rod tending to normally hold the lid open, a pawl connected to said rod and arranged for free movement in one direction but to move said rod when moved in an opposite direction, by the closing of the cash-drawer.

6. The combination in a cash-register, of a receptacle, a movable lid for said receptacle, a spring-actuated device tending to normally hold the lid open, a latch for holding the lid closed, special keys for operating said latch, a cash-drawer, and means connected to said spring device and arranged to be operated upon the movement of the drawer in one direction but to remain inoperative when said drawer is moved in an opposite direction.

7. The combination with a cash-register, of a receptacle, a movable lid for said receptacle, a spring-actuated rod tending to normally hold the lid open, a crank-arm on said rod, a pivoted pawl on said crank-arm arranged for free movement in one direction but to move said crank-arm when moved in an opposite direction, means for moving said pawl upon

the operation of the machine, and means for holding the lid closed.

8. In a cash-register the combination with a cash-drawer and a receptacle, of a series of
5 keys arranged when operated to release the cash-drawer, a series of special keys arranged when operated to release both the cash-drawer and the receptacle and means for au-

tomatically closing the receptacle upon the closure of the drawer.

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

JAMES S. CRANE.

Witnesses:

IRA BERKSTRESSER,
WILLIAM MUZZY.

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