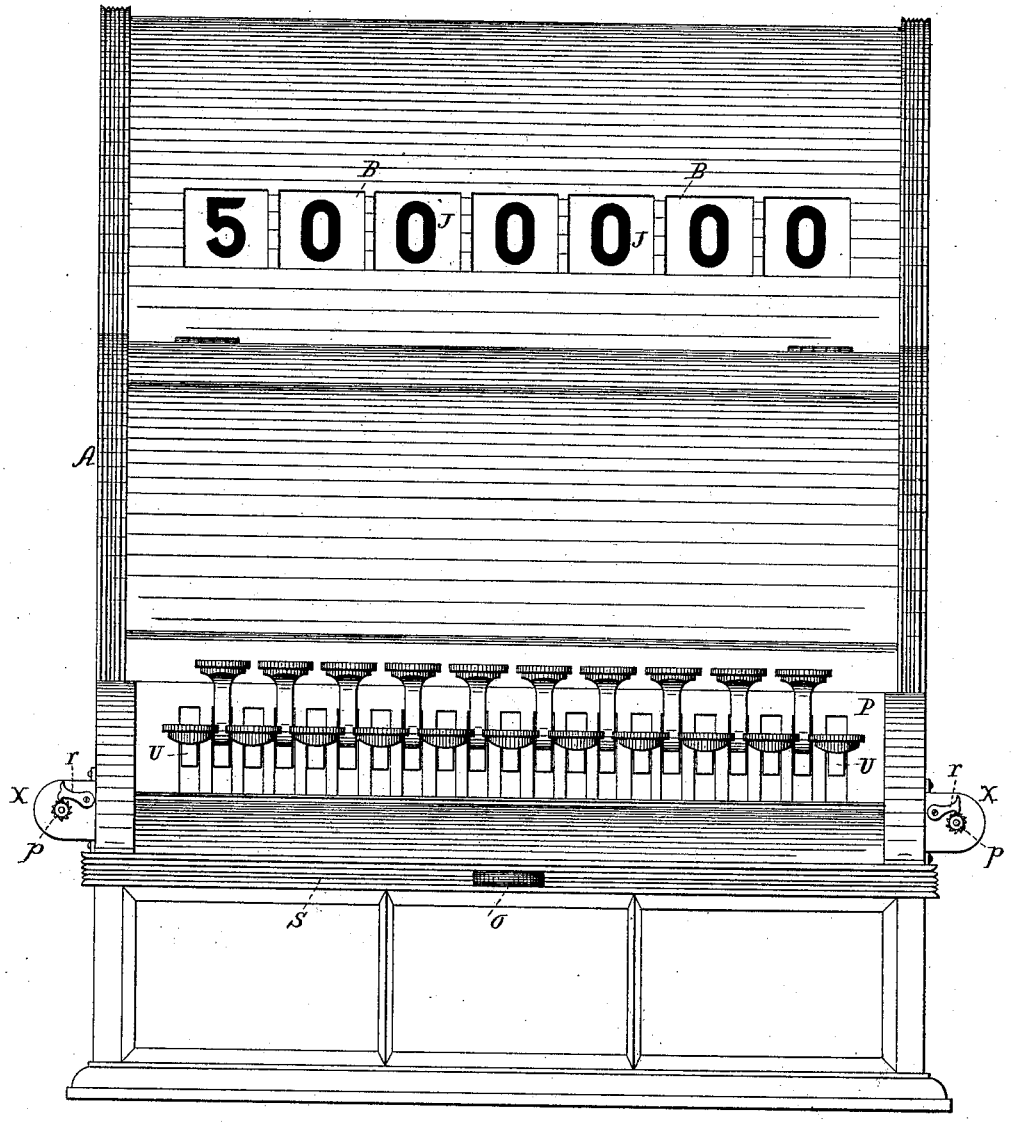
(No Model.) 4 Sheets—Sheet 1.

J. H. PATTERSON.

CASH INDICATOR AND REGISTER.

No. 383,006. Patented May 15, 1888.

Fig. 1.



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(No Model.) 4 Sheets—Sheet 2.

J. H. PATTERSON.

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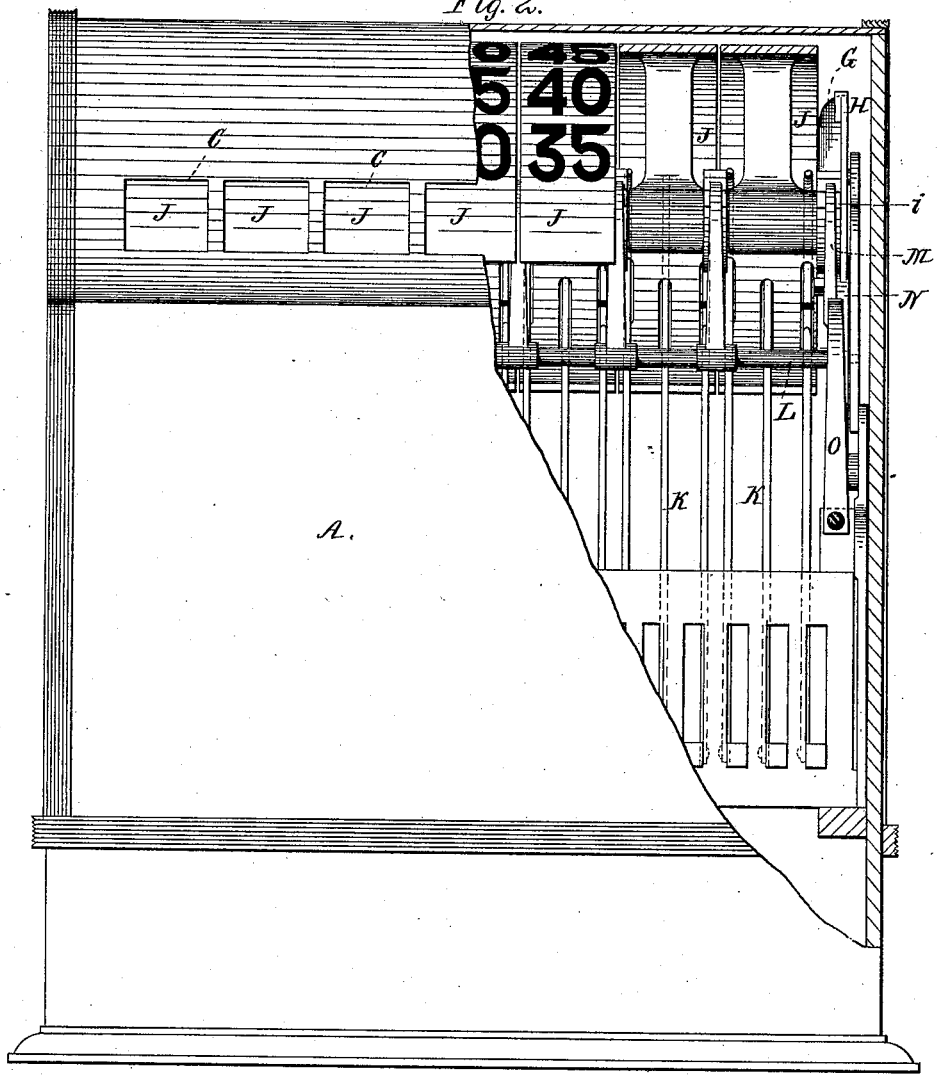
Fig. 2.



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(No Model.) 4 Sheets—Sheet 3.

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CASH INDICATOR AND REGISTER.

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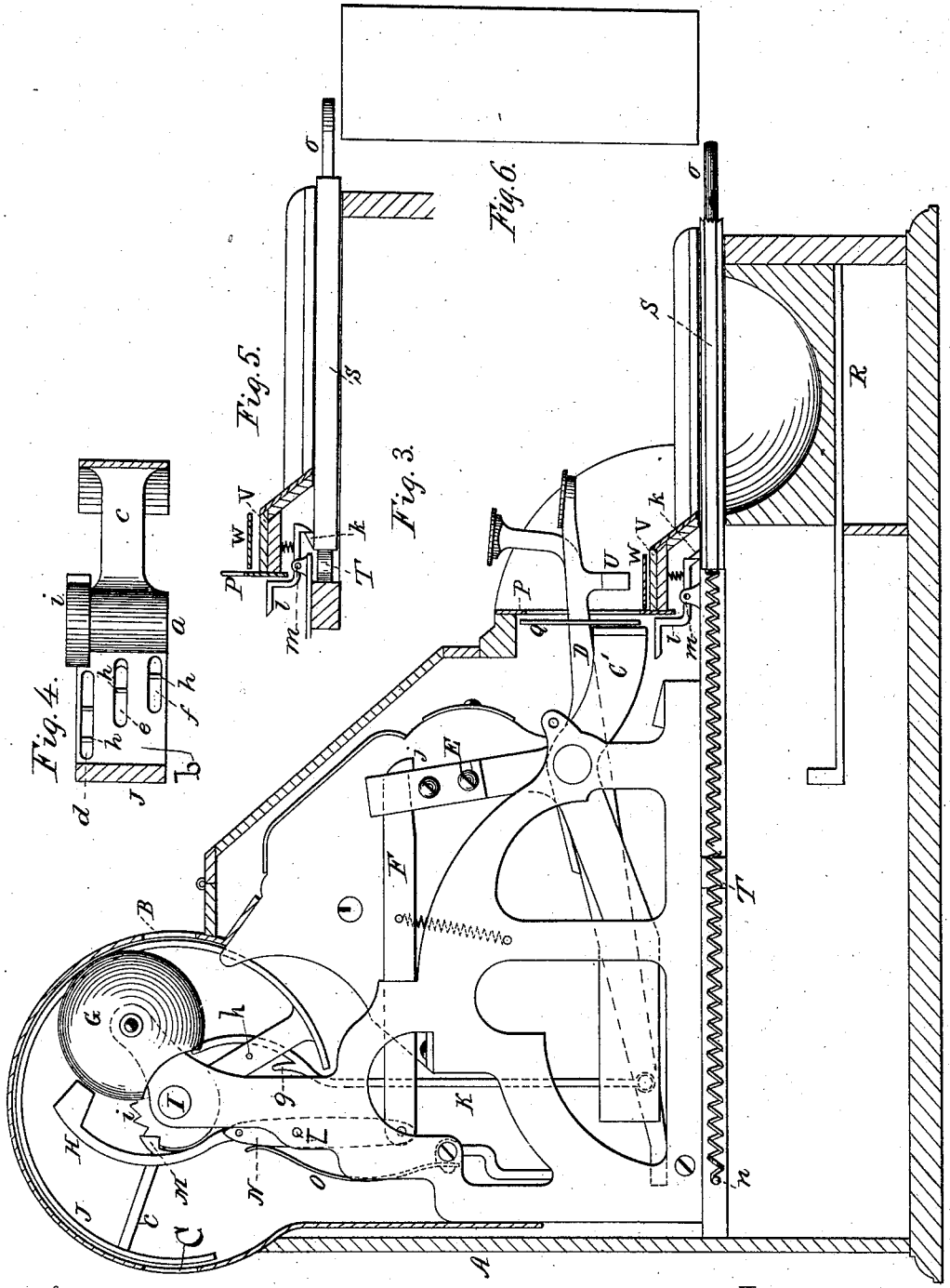

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(No Model.) 4 Sheets—Sheet 4.

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CASH INDICATOR AND REGISTER.

No. 383,006. Patented May 15, 1888.

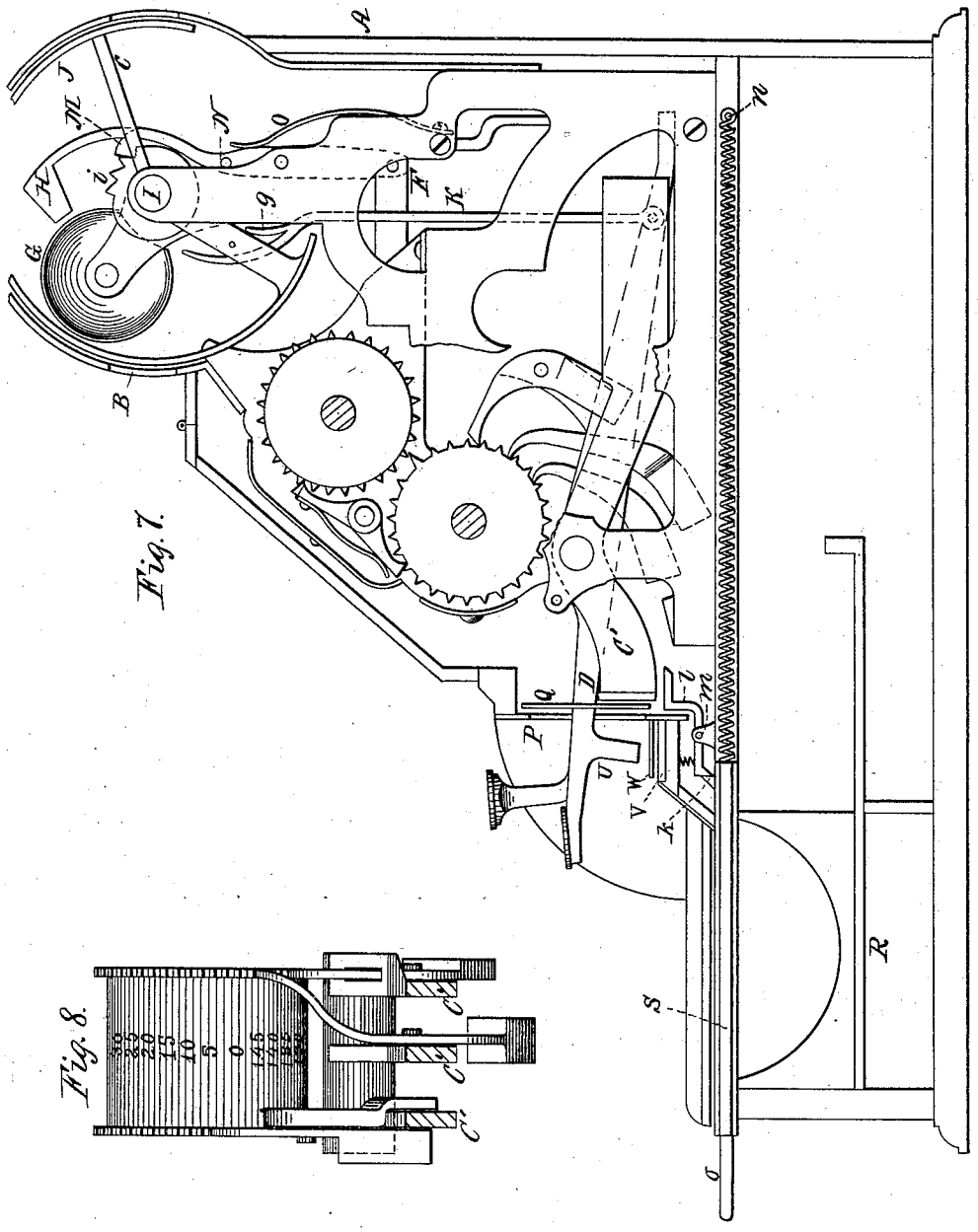

Fig. 7.

Fig. 8.

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UNITED STATES PATENT OFFICE.

JOHN H. PATTERSON, OF DAYTON, OHIO.

CASH INDICATOR AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 383,006, dated May 15, 1888.

Application filed January 19, 1887. Serial No. 224,768. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. PATTERSON, 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 and Indicators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to improvements in cash registers and indicators designed for the use of store-keepers and others as a means of accurately registering the total receipts for any given period of time and for indicating to the customers that the amounts paid have been registered by disclosing to their view such amounts on figured tablets.

It has for its object an improvement in this class of machines whereby their construction is simplified and their efficiency rendered more nearly perfect.

The novelty of my invention will be herein set forth, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1, Sheet 1, is a front elevation of a machine embodying my present invention. Fig. 2, Sheet 2, is a rear elevation of the same with a portion of the case broken away. Fig. 3, Sheet 3, is a side elevation of the same with the end of the case removed. Fig. 4, Sheet 3, is a sectional plan view of one of the rocking tablets. Fig. 5, Sheet 3, is a sectional detail representing a modification of the sliding till-cover. Fig. 6, Sheet 3, is a plan view of one of the checks. Fig. 7, Sheet 4, is a side elevation of the machine with the end of the case removed and portions broken away to show the registering mechanism. Fig. 8, Sheet 4, is an enlarged rear elevation of one of the registering-wheels and its three operating-keys in section.

The same letters of reference are used to indicate identical parts in all the figures.

The machine proper is inclosed in a case or cabinet, A, of the usual or any suitable construction, and provided in this instance with a rounded or cylindrical top, with glass-covered reading-openings B C at its front and back, respectively, through which the numbers on the rocking tablets are exposed to view.

The frame-work of the machine is substantially like that shown and described in Patents Nos. 318,485, of May 26, 1885, and 321,988, of July 14, 1885, and it is only necessary to say here that C is the vibrating frame; D, the operating-keys; E, the tripping-arms; G, the gong, and H the hammers.

The registering mechanism (illustrated in Figs. 7 and 8) is preferably that shown and described in Patent No. 351,460, of October 26, 1886, though any other suitable registering mechanism adapted to be operated by the keys to register the value of each key might be substituted.

Instead of a tablet-rod and tablet for each key, I provide the following mechanism: Upon a shaft, I, extending across the top of the frame-work, are strung a number of rocking tablets, J, which in this instance are composed of a hub, *a*, Fig. 4, two spokes or arms, *b c*, and a cylindrical periphery the outer side of which bears the figures to be exposed through the openings B C. These rocking tablets are each free to turn independently of the other and are operated by rods or arms K, pivoted at their lower ends, one to each of the keys D, and to avoid the necessity of having as many rocking tablets as there are keys I have in the present instance grouped three keys and their rods K to each tablet in the following manner: Slots *d e f* are cut through the arm *b* of the tablet, through which the upper ends of the three rods K pass, respectively, and each of the rods K is provided with a finger, *g*, to form a catch or projection that engages with a pin, *h*, in each of the slots whenever its key is operated.

It will be observed that the pins *h* in the slots *d e f* are at a gradually-decreasing distance from the axis of the tablet in the order named, for the following purpose and reasons: Beginning with the first tablet to the left, to which are connected by their rods K the first three keys, and supposing that these keys have a fixed value of five, ten, and fifteen cents, respectively, and inasmuch as the keys have an equal extent of travel and vibration, it will be seen that when the five-cent key is operated its catch or projection on the rod K, which passes through the slot *d*, would engage with the pin *h* at a point farthest from the axis of the tablet and would move it just sufficiently to expose the number 5 upon the tablet through the reading-openings B and C. The catch or

projection on the rod K of the ten-cent key by engaging the pin *h* of the slot *e*, which is nearer the axis, would move the tablet still farther to expose the number 10 through the reading-openings, while the rod K of the fifteen-cent key by engaging the pin *h* of the slot *f*, which is still nearer the axis, would move the tablet still farther to expose the number 15 through the reading-openings. The next rocking tablet would bear on each of its two opposite sides the numbers 20, 25, and 30 and be operated by the twenty, twenty-five, and thirty cent keys, in the manner above described. The next rocking tablet would bear on each of its two opposite sides the numbers 35, 40, and 45, as shown in Fig. 2, and be operated by the thirty-five, forty, and forty-five cent keys, in the same manner, and so on throughout the series.

Instead of placing the pins *h* at varying distances from the axis, they might be at an equal distance from it and the same result be accomplished by varying the distance of the fingers *g* from the keys D. Thus the finger *g* on the rod of the five-cent key might be located at a point nearer the keys than the fingers on the rods of the ten and fifteen cent keys, the finger on the rod of the ten-cent key being the next nearest and that on the rod of the fifteen-cent key the farthest, so that were the five-cent key to be operated the finger *g* upon its rod K would not engage the pin *h* of the slot *d* until the rear end of the key had been elevated to almost its farthest limit, and thus the tablet would be moved only sufficiently to expose the number 5 through the reading-opening. When the ten-cent key was operated, the finger *g* on its rod K would engage with the pin *h* in the slot *e* at an earlier point in the operation of the key and would move the tablet still farther to expose the number 10 through the reading-openings. When the fifteen-cent key was operated, the finger *g* on its rod K would engage with the pin *h* in the slot *f* as soon as the front of the key had been slightly depressed, and when the key was depressed to its farthest limit would move the tablet far enough to expose the number 15 through the reading-openings, and so on through the series. In this instance the arm *b* is made sufficiently large to constitute a weight for automatically returning the tablet to its normal position, though any form of weight or even a spring might be employed for this purpose.

To hold the tablet with its number exposed after any key has been operated, I provide a series of ratchet-teeth or retaining-points, *i*, upon the hub of each of the tablets, and a shaft, L, Fig. 2, which extends across the frame and carries a series of dogs, M, one for each of the tablets, and engaging with its ratchet-teeth *i*. At one end of said shaft, and secured thereon, is an arm, N, whose lower end is pivoted to the draw-bar F, and whose upper end is provided with the gong-hammer H.

O is any suitable retracting-spring, applied to the arm N for throwing the same back and causing the hammer to strike the gong whenever any key has been operated to its fullest extent. It results from this construction that whenever any key D, the series of which rest and are supported at their forward ends upon the frame C′, is operated the frame C′, in being depressed through the medium of the arm E, secured to or integral with said frame, draws forward the bar F and swings back the arm N, thereby oscillating the shaft L and throwing back the dogs M out of engagement with the ratchet-teeth *i* of all the tablets. As soon as the key has reached its limit of depression and the catch *j* of the bar F has been released from the arm E, the tablet moved by said key is caught and held by the re-engagement of its dog M with one of the ratchet-teeth *i*. In this instance, where there are three keys arranged to each tablet, there are four notches forming the ratchet-teeth *i*. The lowest of these, when engaged by its dog, as seen in Fig. 3, holds the tablet in its normal position of rest, with a blank or 0 exposed through the reading-openings. The operation of any key of a set of the lowest value moves the tablet into such a position that the dog in its re-engagement enters the first notch above and holds the tablet with the number corresponding to that key exposed. The operation of the next higher key of the same set so moves the tablet that the dog in re engaging enters the second notch above the lowest, and so on. It also results from this construction that whenever any key is operated the exposed tablet or tablets of previously-operated keys are, by the operation of the first-mentioned key, immediately released and dropped back to their normal position above referred to.

It is of course obvious that there may be as many rocking tablets as there are keys, and it is likewise obvious that two or more keys may be connected to the same tablet instead of three keys, as I have shown and described. It is also evident that one of the reading-openings I have shown and described might be dispensed with, as well as that part of the tablet containing the numbers to be exposed through such opening.

That part of my invention above described which relates to the connection of a group of two or more keys to a single tablet is applicable to other forms of tablets than the one shown and described in this specification.

The construction of the arm E, draw-bar F, and its latch *j* is shown and described in Patent No. 321,988, of July 14, 1885. It will thus be seen that, as in previous machines of this class, the operation of any key to its farthest limit sounds the gong, operates the registering mechanism, and exposes to view the number on the tablet corresponding to the value of the key operated.

The next feature of my invention is shown more particularly in Fig. 3, where each key is provided, just within the slotted front plate, P, of the machine, with a flat guard-plate, Q, extending above and below the key and of a

width greater than that of the slot through which the key projects, this guard being attached to and moving with the key, whereby the insertion of any instrument adapted to hook over the top of the vibrating frame and depress the same is prevented. Without this guard it is apparent that an instrument might be inserted to hook over the top of the vibrating frame, and, supposing the immediately-preceding purchase had been of the same amount as the present one and a tablet therefore already exposed which corresponds to the amount of the present purchase, the operator, by pressing down the vibrating frame, might sound the gong without registering the amount of the purchase, and thus deceive the customer.

The next feature of my invention relates to the till and the mechanism for automatically removing the lid to expose the same whenever any key is operated, and is illustrated in Figs. 3 and 5, where the till R is an extension of the front of the case and is provided with a sliding lid, S, having at its rear, preferably near the middle and on its upper side, a stop, *k*, with which a spring-latch, *l*, pivoted, as at *m*, engages to hold the lid closed over the till. The latch is so constructed that a portion of it extends under the frame C′ in such manner that the depression of the frame by the operation of the keys vibrates the latch, so as to release the stop *k*. Springs T on each side, attached to the lid at its rear end and to stops *n* at the back of the case or till-compartment, draw in the lid by their retraction whenever the stop *k* is released, and thus uncover the till. By drawing the lid out by means of a ring, *o*, the stop *k* becomes automatically engaged with the latch *l* to relock the lid, as will be readily understood.

If desired, the construction in Fig. 5 may be employed, where the lid, instead of being drawn in by the springs, is thrown out to uncover the till whenever a key is operated.

The remaining feature of my invention is illustrated in Figs. 1, 3, and 6, where each key is provided (in this instance on its under side and just outside of the front plate, P,) with a type, U, bearing a number corresponding to the value of the key. Just under these types and extending across the front of the machine and over a rubber bed-strip, V, is an inking-ribbon, W, whose ends are wound upon spools secured within cases X at each side, as shown in Fig. 1. Each spool spindle is provided on the outside of the case with a ratchet, *p*, with which a pivoted dog, *r*, engages to hold the ribbon taut and enable it to be shifted sidewise to expose fresh inking surface.

In addition to the dogs just referred to for holding the ribbon taut, any sort of weight devices may be applied to it above the rubber bed-strip V, as will be readily understood. The purpose of this mechanism is as follows: It is intended that each machine be provided with blocks of paper checks having printed thereon the proprietor's name or any other desired matter, which checks are consecutively numbered, so that whenever the machine is to be operated to register and indicate a purchase the operator, tearing off the top one, inserts it beneath the ribbon W, under the key to be operated, in such manner that the depression of the key causes the number borne by said key to be printed upon the check. One of these checks is represented in Fig. 6, and they are intended to be used in cases where a cashier other than the operator of the machine takes in the money. In such event the clerks, waiters, bartenders, or other operators have convenient access to the machine, and they print a check for each customer, while the same operation registers the amount. The customer gives this check to the cashier, together with the amount of money indicated by it. At the close of business for a day or other given period, when the cash is counted, the total amount received must correspond with the amount registered in the machine, and also, of course, with the amount of the checks received by the cashier.

The purpose of consecutively numbering the checks is to provide an additional safeguard against dishonesty on the part of the cashier by preventing his destroying any of the checks without detection.

It is of course apparent that the inking-ribbon might be dispensed with and the types be figured dies, in which event corresponding dies or matrices would be employed in place of the rubber strip V in such manner as to stamp or emboss the number upon the checks.

I am aware that it has heretofore been proposed to construct a registering and indicating machine embodying a series of keys of fixed values, a stationary dial having upon its face numbers corresponding to the numbers on the several keys, a movable disk or plate arranged over the face of the said numbered dial and having a reading-opening adapted to expose one number on the dial at a time, and connecting mechanism between the keys and the said movable disk, said elements being so arranged as that when a key was struck the movable reading-plate would be rotated a distance sufficient to bring its opening opposite the number on the stationary dial corresponding to the number on the key so struck, and I therefore do not claim such construction to be of my invention. It differs from my invention in that the number corresponding to the key struck is not always exposed at the same point, but at different points on the stationary dial, thereby rendering it very awkward to read, especially where several dials are employed to respectively indicate dollars and cents, whereas in my invention a stationary reading-opening is employed and the numbers to be exposed are brought in succession thereto, and where several letters are employed their reading-openings are enabled to be located immediately adjacent to and on a line with each other, so that the numbers on all the tablets may be read together at a glance.

Having thus fully described my invention, I claim—

1. In an indicating-machine, the combination of a series of keys of fixed values, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the series of keys, a stationary reading-opening, mechanism between the keys and the tablet for actuating and controlling the extent of movement of the tablet when a key is operated, and a locking and releasing device for the movable tablet controlled by all the keys, whereby when a key is actuated the tablet will be moved to bring to the reading-opening the number on it corresponding to the number represented by said key, and when any other key of the series is actuated the tablet will be released and moved so as to expose at the reading-opening the number represented by said last-mentioned key, substantially as described.

2. In an indicating machine, the combination of a series of keys of fixed values, a rocking indicating-tablet provided with a series of numbers corresponding to those represented by the series of keys, a stationary reading-opening, mechanism between the keys and the tablet for actuating and controlling the extent of movement of the tablet when a key is operated, and a locking and releasing device for the rocking tablet controlled by all the keys, whereby when a key is actuated the tablet will be rocked to bring to the reading-opening the number on it corresponding to the number represented by said key, and when any other key of the series is actuated the tablet will be released and rocked, so as to expose at the reading-opening the number represented by said last-mentioned key, substantially as described.

3. In a registering and indicating machine, the combination of a series of keys of fixed values, a registering mechanism operated thereby, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the series of keys, a stationary reading-opening, mechanism between the keys and the tablet for actuating and controlling the extent of movement of the tablet when a key is operated, and a locking and releasing device for the tablet controlled by all the keys, whereby when a key is actuated the tablet will be moved to bring to the reading-opening the number on it corresponding to the number represented by said key, and when any other key of the series is actuated the tablet will be released and moved so as to expose at the reading-opening the number represented by said last-mentioned key, and whereby, also, the registering mechanism will be operated upon the actuation of each key, substantially as described.

4. In a registering and indicating machine, the combination of a series of keys of fixed values, a registering mechanism operated thereby, a rocking indicating-tablet provided with a series of numbers corresponding to those represented by the series of keys, a stationary reading-opening, mechanism between the keys and the tablet for actuating and controlling the extent of movement of the rocking tablet when a key is operated, and a locking and releasing device for the tablet controlled by all the keys, whereby when a key is actuated the tablet will be rocked to bring to the reading-opening the number on it corresponding to the number represented by said key, and when any other key of the series is actuated the tablet will be released and dropped, so as to expose at the reading-opening the number represented by said last-mentioned key, and whereby, also, the registering mechanism will be operated upon the actuation of each key, substantially as described.

5. In an indicating-machine, the combination of a series of movable indicating-tablets each provided with a series of numbers, a series of keys of fixed values for each movable indicating-tablet, stationary openings through which the numbers on the tablets may be read, mechanism between each series of keys and its co-operating tablet for actuating and controlling the extent of movement of the tablet when any key of the series is operated, and a locking and releasing device for each movable tablet controlled by all the keys of the particular series, whereby when two or more keys of different series are actuated the corresponding tablets will be moved so as to bring to the reading-opening the numbers on the several tablets corresponding to the keys that are actuated.

6. In an indicating-machine, the combination of a series of rocking indicating-tablets each provided with a series of numbers, a series of keys of fixed values for each rocking indicating-tablet, stationary openings through which the numbers on the rocking tablet may be read, mechanism between each series of keys and its co-operating rocking tablet for actuating and controlling the extent of movement of the tablet when any key of the series is operated, and a locking and releasing device for each rocking tablet controlled by all the keys of the particular series, whereby when two or more keys of different series are actuated the corresponding tablets will be rocked, so as to bring to the reading-opening the numbers on the several rocking tablets corresponding to the keys that are actuated, substantially as described.

7. In an indicating-machine, the combination of a series of keys of fixed values, a movable indicating-tablet provided with a series of numbers in duplicate corresponding to the numbers represented by the keys, two stationary reading-openings, and intermediate mechanism between the keys and the tablet, by which, when either of the keys is actuated, the tablet will be moved a distance sufficient to bring into view simultaneously at the two reading-openings the duplicates of the number represented by the key actuated, substantially as described.

8. In an indicating-machine, the combina-

tion of a series of keys of fixed values, a rocking indicating-tablet provided with a series of numbers in duplicate corresponding to the numbers represented by the keys, two stationary reading-openings, and intermediate mechanism between the keys and the tablet, by which, when either of the keys is actuated, the tablet will be rocked a distance to bring into view simultaneously at the two reading-openings the duplicates of the numbers represented by the key actuated, substantially as described.

9. In a cash register and indicator provided with registering mechanism and a series of keys for operating said mechanism, the combination of a series of rocking tablets arranged upon a common axis, and a series of lifting-arms connected to said keys and arranged to engage with said tablets when operated, but normally out of operative contact with them, whereby the operation of any one of said keys elevates its lifting-rod to move its tablet, substantially as and for the purpose described.

10. In a cash register and indicator provided with registering mechanism and a series of keys for operating said mechanism, the combination of a series of rocking tablets arranged upon a common axis, positively-acting retaining devices for holding said tablets in their normal and in their actuated positions, and a series of lifting-arms connected to said keys and arranged to engage with said tablets, whereby the operation of any one of said keys elevates its lifting-rod to move its tablet, and whereby said tablet when so moved is held with its number exposed to view, substantially as described.

11. In a cash register and indicator provided with registering mechanism and a series of keys for operating said mechanism, the combination of a series of weighted rocking tablets arranged upon a common axis and a series of lifting-arms connected to said keys and arranged to engage with said tablets when operated, but normally out of operative contact with them, whereby the operation of any one of said keys elevates its lifting-rod to move its tablet, substantially as and for the purpose described.

12. In a cash register and indicator provided with registering mechanism and a series of keys for operating said mechanism, the combination of a series of weighted rocking tablets arranged upon a common axis, retaining devices for holding said tablets in their vibrated positions, and a series of lifting-arms connected to said keys and arranged to engage with said tablets when operated, but normally out of operative contact with them, whereby the operation of any one of said keys elevates its lifting-rod to move its tablet, and whereby said tablet, when so moved, is held with its number exposed to view, substantially as described.

13. In a cash register and indicator provided with a series of tablets for exposing to view the amount of each purchase, a registering mechanism for registering the amount of said purchase, and a series of keys of fixed values for operating said tablets and registering mechanism simultaneously, a series of types, one secured to each key and bearing a number corresponding to the value of the key, and inking mechanism or its equivalent, whereby any one of the keys may be operated to simultaneously expose its tablet, register its value, and print its number on a check placed under said type.

14. In a cash register and indicator provided with a series of tablets for exposing to view the amount of each purchase, a registering mechanism for registering the amount of said purchase, a series of keys of fixed values for operating said tablets and registering mechanism simultaneously, and a casing inclosing all said parts, a series of types, one secured to each key outside the casing and bearing a number corresponding to the value of the key, whereby any one of the keys may be operated to simultaneously expose its tablet, register its value, and print its number on a check placed under said type, substantially as described.

15. In a cash register and indicator provided with a series of tablets for exposing to view the amount of each purchase, a registering mechanism for registering the amount of said purchase, and a series of keys of fixed values for operating said tablets and registering mechanism simultaneously, a series of types, one on the under side of the front of each key and bearing a number corresponding to the value of the key, and inking mechanism or its equivalent, whereby any one of the keys may be operated to simultaneously expose its tablet, register its value, and print its number on a check placed under said type.

16. In a cash register and indicator, the combination, with a vibrating frame and a series of operating-keys for depressing said frame, of a till, a spring-latch, a sliding till-cover engaged by said latch, and springs for operating said cover to expose the till whenever one of said keys is operated, substantially as described.

17. In a cash register and indicator, the combination, with the operating-keys D and lifting-rods K, provided with fingers *g*, of the rocking tablets J, with which said fingers are adapted to engage, substantially as and for the purpose described.

18. In a cash register and indicator, the combination, with the operating-keys D and lifting-rods K, provided with fingers *g*, of the rocking tablets J, with which said fingers are adapted to engage, the shaft L, provided with dogs M, ratchets *i* upon the hubs of the tablets, and connecting mechanism for uniting the shaft L to the vibrating frame C, substantially as and for the purpose specified.

19. The combination, with a casing having a reading opening or slot therein and a tablet having a series of figures or characters thereon adapted to be exposed at said opening, of a se-

ries of keys indicating amounts corresponding to those on the tablet and suitable projections connected to the keys for operating the tablet, arranged at varying distances from the said tablet corresponding to the distance necessary to move it to expose the particular character represented by the key, substantially as described.

20. In a cash register and indicator, the combination, with a casing having a reading opening or slot therein and a tablet having a series of amounts indicated thereon adapted to be exposed at said opening, of a series of keys indicating amounts corresponding to those on the tablet, a registering mechanism for each key, and suitable projections connected to the keys for operating the tablet, arranged at varying distances from said tablet corresponding to the distance necessary to move the latter to expose the particular amount represented by the key, substantially as described.

21. In a cash register and indicator, the combination, with the casing having the reading-opening, and the pivoted segmental tablet having a series of amounts indicated thereon adapted to be exposed at said opening, of a series of keys representing various amounts, a registering mechanism for each key, and projections connected to the keys for operating the tablet and arranged at varying distances from it corresponding to the distance necessary to move it to expose the particular amount represented by the key, substantially as described.

22. The combination, with the casing having reading-openings at front and rear, and a pivoted segmental tablet having two corresponding series of amounts indicated thereon, of a series of keys corresponding to the amounts on the tablet and having projections for operating the latter at various distances from said tablet corresponding to the distance necessary to move it to expose the particular amount represented by the key, substantially as described.

23. The combination, with a gravitating tablet pivoted upon a horizontal axis or shaft and provided with a face substantially parallel with said axis, and having characters indicated thereon, of a series of keys pivoted upon an axis parallel with said tablet-axis, a stationary reading-opening, mechanism between the keys and the tablet for actuating and controlling the extent of movement of the tablet when the keys are actuated, and a locking and releasing device for the movable tablet controlled by all the keys, substantially as and for the purpose described.

24. The combination, with a gravitating rocking tablet pivoted upon an axis or shaft and provided with a face substantially parallel with said axis, and having characters indicated thereon, of a series of keys pivoted upon an axis parallel with said tablet-axis, a stationary reading-opening, mechanism between the keys and tablet for actuating and controlling the extent of movement of the tablet when the keys are operated, and a locking and releasing device for the movable tablet controlled by all of the keys, substantially as and for the purpose described.

25. In a registering and indicating machine, the combination of a series of keys of fixed values, registering mechanism operated by said keys for registering the amount of each key operated, and a series of pivoted rocking tablets having faces substantially parallel with their pivotal centers, upon which a character or characters are indicated, and connections between said keys and tablets, whereby the operation of any of the keys registers the value of the key and moves the tablet to expose to view a number corresponding to the value of the key operated, substantially as described.

26. In a registering and indicating machine, the combination of a series of keys of fixed values, registering mechanism operated by said keys for registering the amount of each key operated, and a series of pivoted rocking tablets each having a face substantially parallel with its axis, each of said tablets being connected to a group of two or more keys and provided with a series of numbers upon the face mentioned corresponding to the value of one of the keys, whereby the operation of any one of the keys of a group registers the value of said key and moves the tablet to expose to view the number corresponding to the value of the said key.

27. In a registering and indicating machine, the combination of a series of keys of fixed values, registering mechanism operated by said keys for registering the amount of each key operated, and a series of pivoted rocking tablets each having a face substantially parallel with its axis, with connecting mechanism and a series of retaining devices for releasing and locking said tablets, whereby the operation of any one of the keys registers the value of the key operated and holds the tablet with said number exposed to view, and whereby the operation of another key releases the exposed tablet.

28. In a cash-indicator, the combination of a series of keys of fixed values, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the keys, a stationary reading-opening, connecting mechanism between said keys and movable tablet for actuating and controlling the extent of movement of said tablet when a key is operated, a ratchet on said tablet, and a locking-dog engaging therewith, a vibrating bar actuated by each of the keys, and tripping mechanism actuated by said vibrating bar and operating said locking-dog, substantially as and for the purpose described.

29. In a cash-indicator, the combination of a series of keys of fixed values, a rocking indicating-tablet provided with a series of numbers corresponding to those represented by the keys, a stationary reading-opening, connecting mechanism between said keys and rocking tablet for actuating and controlling the extent of movement of said tablet when a

key is operated, a ratchet secured to the hub of said rocking tablet, a locking-dog engaging with said ratchet, a vibrating bar actuated by each of the keys, and tripping mechanism actuated by said vibrating bar and operating said locking-dog, substantially as and for the purpose described.

30. In a cash-indicator, the combination of a series of keys of fixed values, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the keys, a stationary reading-opening, connecting mechanism between said keys and movable tablet for actuating and controlling the extent of movement of said tablet when a key is operated, a ratchet on said tablet, and a locking-dog engaging therewith, a gong and gong-hammer, a vibrating bar actuated by each of the keys, and tripping mechanism actuated by said vibrating bar and operating said locking-dog and gong-hammer, substantially as described.

31. In a cash-indicator, the combination of a series of keys of fixed values, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the keys, a stationary reading-opening, suitable projections actuated by the keys for operating the tablet and arranged at varying distances from said tablet corresponding to the distance necessary to move it to expose the particular number represented by the key operated, a ratchet on said tablet, and a locking-dog engaging therewith, a vibrating bar actuated by each of the keys, and tripping mechanism actuated by said vibrating bar and operating said locking-dog, substantially as and for the purpose described.

32. In a cash register and indicator, the combination of a series of keys of fixed values, registering mechanism actuated by said keys, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the keys, a stationary reading-opening, connecting mechanism between said keys and movable tablet for actuating and controlling the extent of movement of said tablet, a ratchet on said tablet, and a locking-dog engaging therewith, a vibrating bar actuated by each of the keys, and the tripping mechanism actuated by said vibrating bar and operating said locking-dog, substantially as and for the purpose described.

33. In a cash register and indicator, the combination of a series of keys of fixed values, registering mechanism operated by said keys, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the keys, a stationary reading-opening, suitable projections actuated by the keys for operating the tablet and arranged at varying distances from said tablet corresponding to the distance necessary to move it to expose the particular number represented by the key operated, a ratchet on said tablet, and a locking-dog engaging therewith, a vibrating bar actuated by each of the keys, and tripping mechanism actuated by said vibrating bar and operating said locking-dog, substantially as and for the purpose described.

34. In a cash register and indicator, the combination of a series of keys of fixed values, registering mechanism operated by said keys, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the keys, a series of lifting-arms actuated by said keys and arranged to engage with said tablet, a ratchet on said tablet, and a locking-dog engaging therewith, a vibrating bar actuated by each of the keys, and tripping mechanism actuated by said vibrating bar and operating said locking-dog, substantially as and for the purpose described.

35. In a cash register and indicator, the combination of a series of keys of fixed values, registering mechanism operated by said keys, a movable indicating-tablet provided with a series of numbers corresponding to those represented by the keys, a series of lifting-arms actuated by said keys and provided with projections at varying distances from said tablet, and arranged to engage therewith, a ratchet on said tablet and a locking-dog engaging therewith, a vibrating bar actuated by each of the keys, and tripping mechanism actuated by said vibrating bar and operating said locking-dog, substantially as and for the purpose described.

JNO. H. PATTERSON.

Witnesses:
WILLIAM B. SULLIVAN,
H. J. PATTERSON.