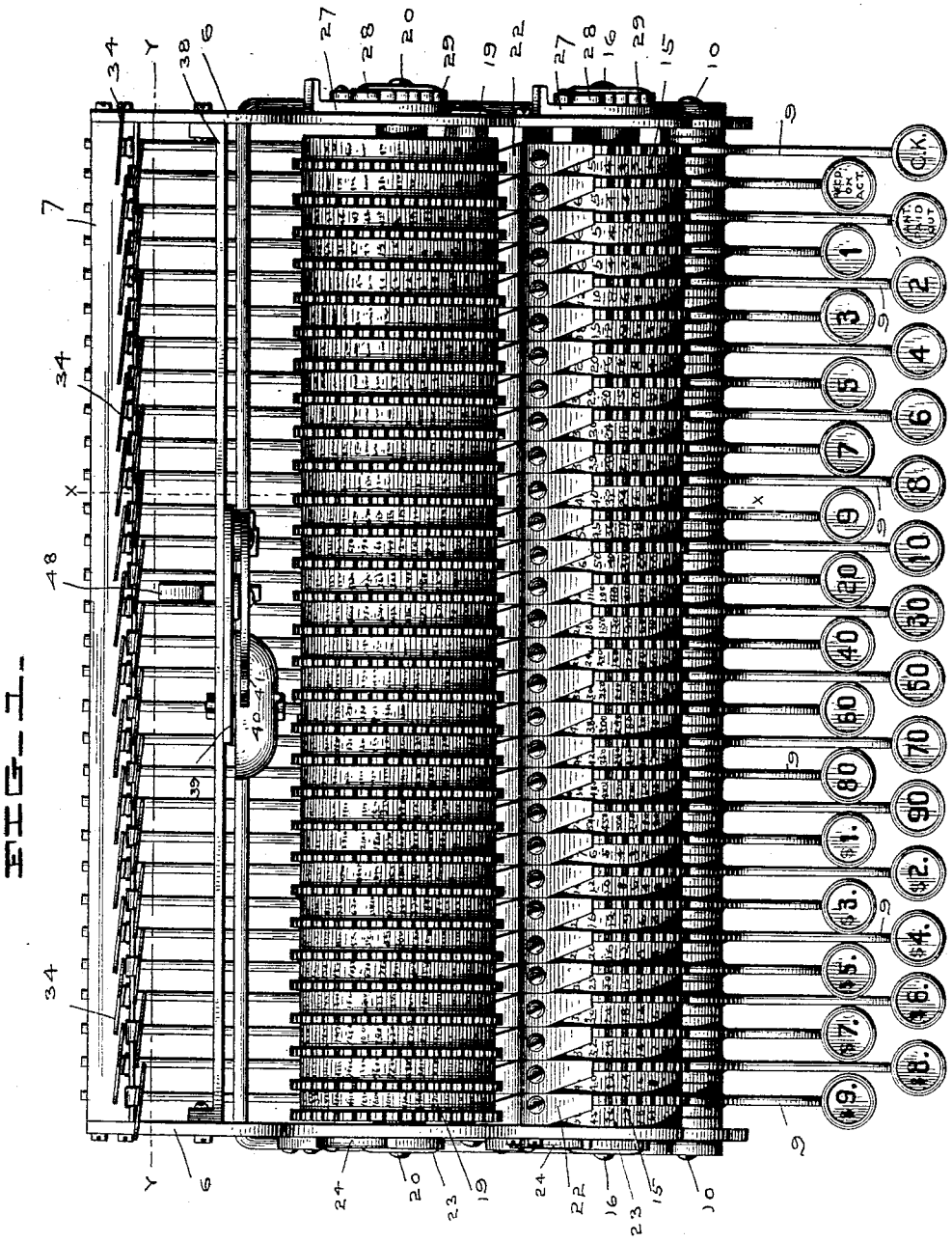
(No Model.) 6 Sheets—Sheet 1.

F. L. BAILEY.

CASH REGISTER AND INDICATOR.

No. 493,571. Patented Mar. 14, 1893.



Witnesses

H. D. Healy.

H. C. Bailey

Inventor

Fortune L. Bailey.

By his Attorney

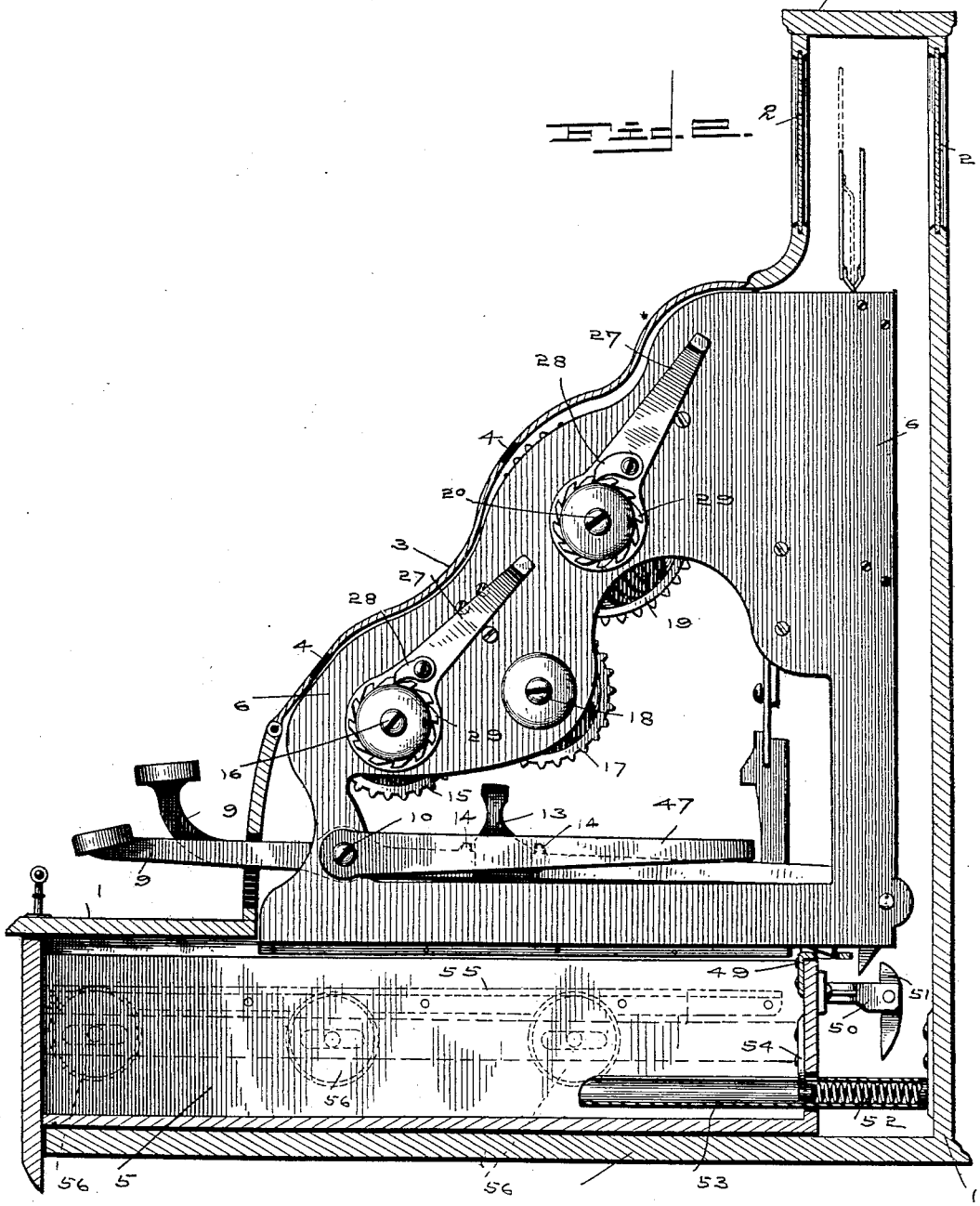
C. P. Jacobs.

(No Model.) 6 Sheets—Sheet 2.

F. L. BAILEY.

CASH REGISTER AND INDICATOR.

No. 493,571. Patented Mar. 14, 1893.



Witnesses

H. D. Healy.

H. C. Bailey

Inventor

Fortune L. Bailey.

By his Attorney

C. P. Jacobs.

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F. L. BAILEY.

CASH REGISTER AND INDICATOR.

No. 493,571. Patented Mar. 14, 1893.

FIG. 3.

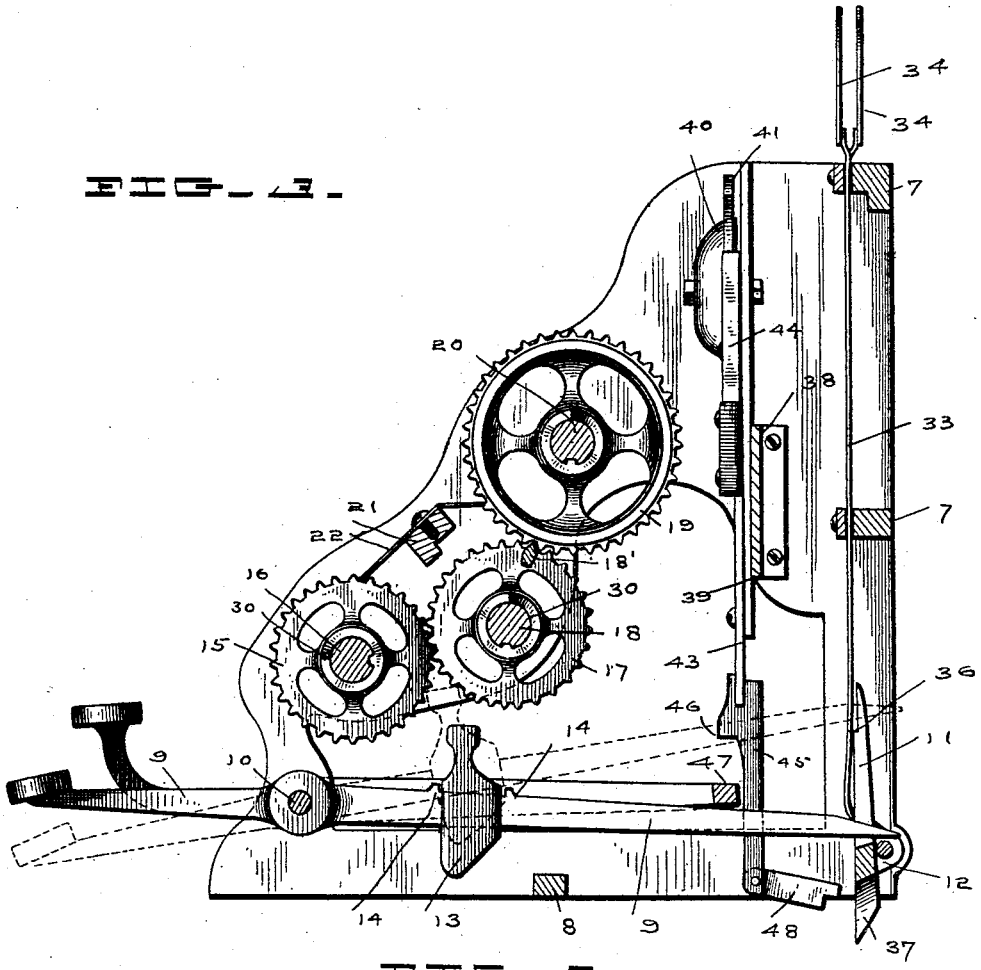
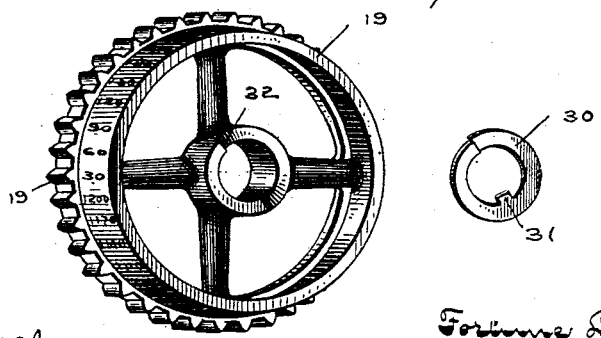


FIG. 7.



Witnesses

H. D. Healy.

H. C. Bailey

Inventor

Fortune L. Bailey

By his Attorney

C. F. Jacobs.

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F. L. BAILEY.

CASH REGISTER AND INDICATOR.

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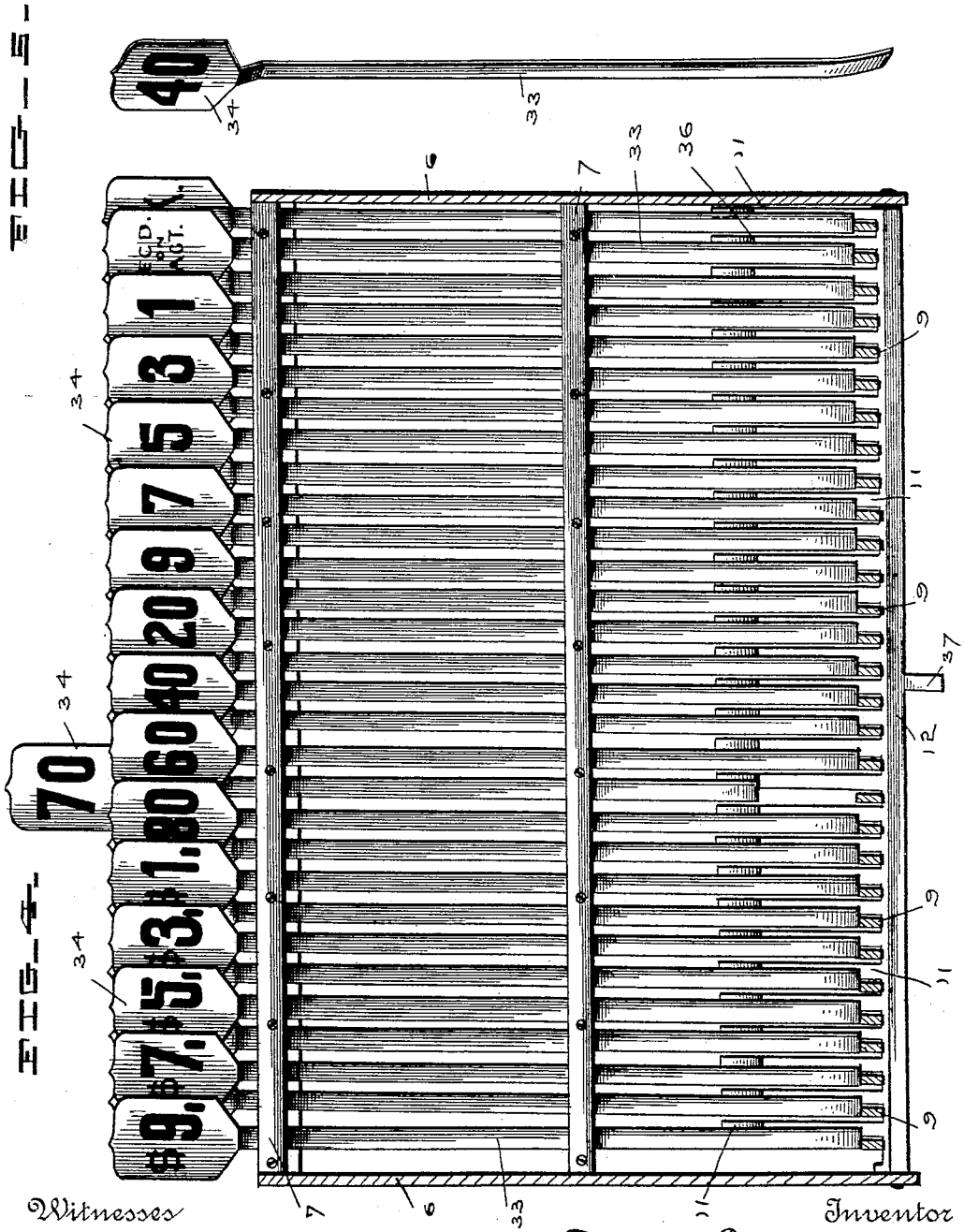


Witnesses

H. D. Healy.

H. L. Bailey

Inventor

Fortune L. Bailey

By his Attorney

C. P. Jacobs.

(No Model.) 6 Sheets—Sheet 5.

F. L. BAILEY.

CASH REGISTER AND INDICATOR.

No. 493,571. Patented Mar. 14, 1893.

FIG. 5.

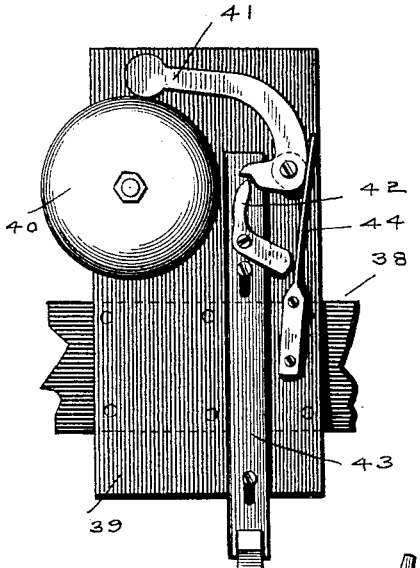


FIG. 8.

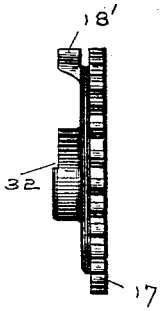


FIG. 9.

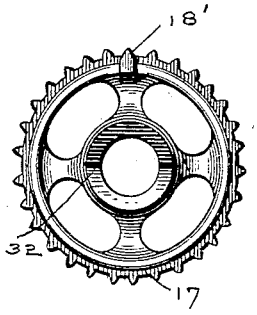


FIG. 10.

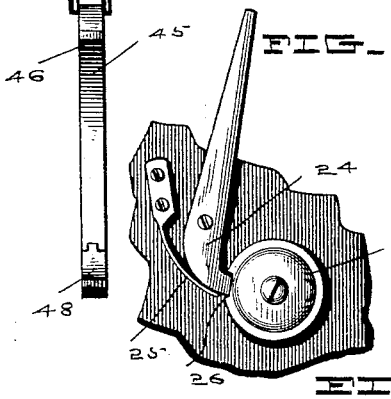


FIG. 11.

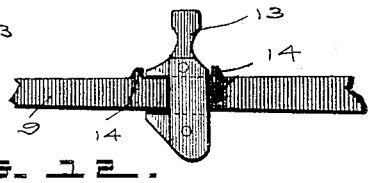
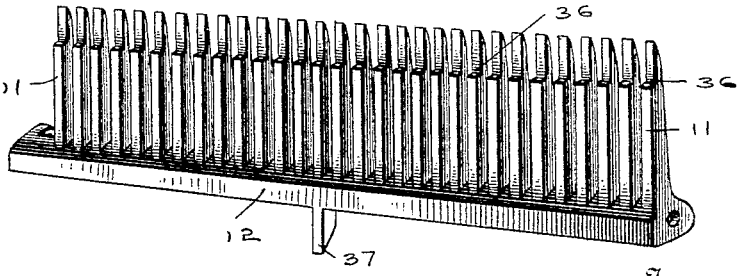


FIG. 12.



Witnesses

F. D. Healy.

H. C. Bailey

Inventor

Fortune L. Bailey

By his Attorney

C. P. Jacobs.

(No Model.) 6 Sheets—Sheet 6.

F. L. BAILEY.

CASH REGISTER AND INDICATOR.

No. 493,571. Patented Mar. 14, 1893.

FIG. 13.

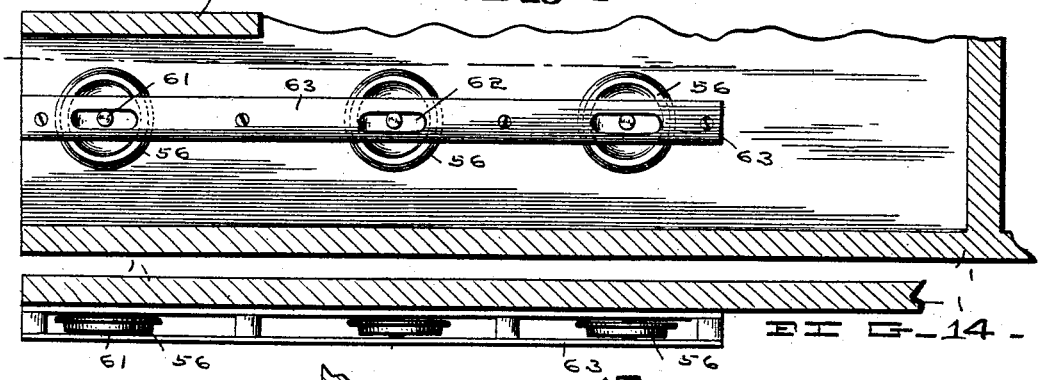


FIG. 14.

FIG. 15.

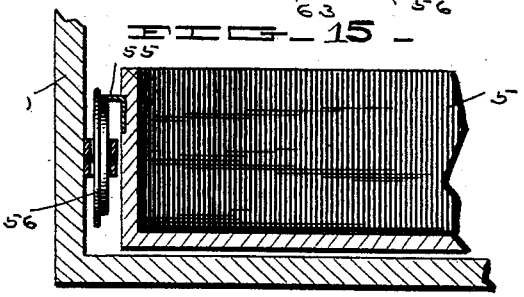


FIG. 16.

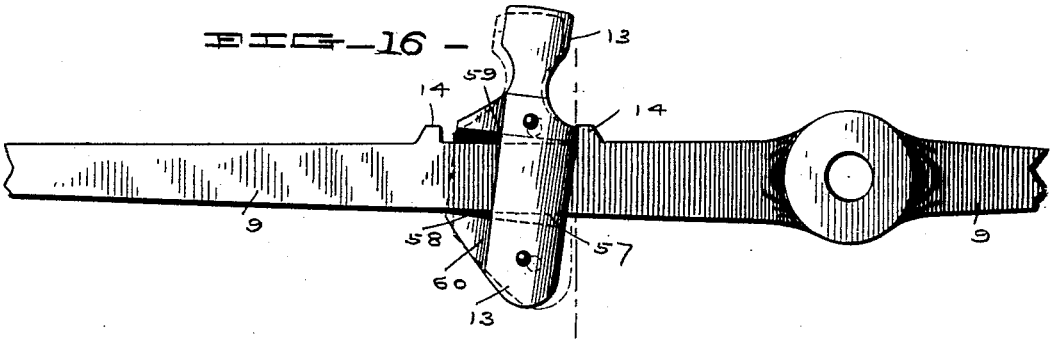


FIG. 17.

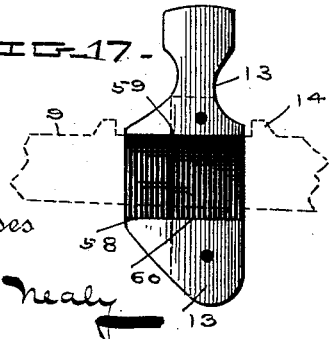
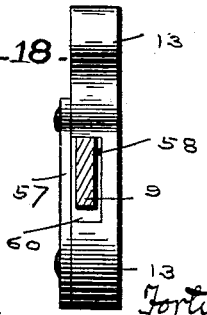


FIG. 18.



Witnesses

H. D. Neal

E. B. Griffith

Inventor

Fortune L. Bailey.

By his Attorney

V. H. Lockwood.

UNITED STATES PATENT OFFICE.

FORTUNE L. BAILEY, OF FREEPORT, INDIANA, ASSIGNOR TO THE BOSTON CASH REGISTER COMPANY, OF NORTHAMPTON, MASSACHUSETTS.

CASH REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 493,571, dated March 14, 1893.

Application filed March 31, 1892. Serial No. 427,171. (No model.)

To all whom it may concern:

Be it known that I, FORTUNE L. BAILEY, of Freeport, county of Shelby, and State of Indiana, have invented certain new and useful Improvements in Cash Registers and Indicators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like figures refer to like parts.

My invention relates to new and useful improvements in the construction of cash registers and indicators, and more especially to that class wherein the registering and indicating mechanism are actuated by a series of numbered keys, and register the amounts indicated by such keys, and at the same time expose to view on suitable indicating tablets the amount registered, and will be understood from the following description.

Referring to the drawings, Figure 1 is a top plan view of my machine with its case removed. Fig. 2 is an end view, showing the machine supported within a suitable cabinet or casing, with a drawer beneath. Fig. 3 is a cross section through the machine on the line *x*—*x*, Fig. 1. Fig. 4 is a sectional view on the line *y*—*y*, Fig. 1. Fig. 5 is a detached view of one of the tablets. Fig. 6 is a detail view of the bell and its operating parts. Fig. 7 is a detached perspective view of one of the upper registering wheels and its washer. Fig. 8 is an edge view of one of the intermediate toothed wheels. Fig. 9 is a plan view of the same. Fig. 10 is a detached view, showing the stop mechanism of the registering shafts. Fig. 11 is a detail view of part of one of the key levers, showing the connection of its dog. Fig. 12 is a detail perspective view of the pivoted rack for supporting the tablets when raised. Fig. 13 is a side view of the inside of the casing, which incloses the drawer, showing the manner of mounting the wheels on which the drawer moves. Fig. 14 is a top view of the same. Fig. 15 is the cross section of the same, on a line with one of the supporting wheels. Fig. 16 is an inside view of the dog mounted on the lever, the dog being tipped. Fig. 17 is an inside view of the main part of the dog, showing the recess in which the lever fits. Fig. 18 is an edge view of the dog.

In detail, 1 represents a cabinet or casing of any suitable shape, and ornamented in any way that may be desired, and near its top it is provided with apertures (2), covered with glass, through which the indicating tablets may be viewed when raised. The casing has also a hinged lid or cover (3), provided with slots or apertures (4), and 5 is a drawer or till in the lower part of the same.

6 represents the framework of the machine, which is supported within the cabinet or casing, and consists of two side pieces connected by suitable cross bars (7 and 8).

9 represents a series of parallel key levers, which are pivoted on a transverse rod or shaft (10), extending across the front of the machine, the buttons on the ends of the keys being preferably arranged in two banks, the levers extending through the framework to the back of the machine, where their ends rest between the vertical arms (11) of the pivoted rack (12), each lever having loosely mounted thereon near its center a dog (13) and having lugs (14) on each side of such dog, far enough apart to permit the dog to slip somewhat on the lever, but not to slip too far. The dog (13) consists of a main piece in which is a recess (58), leaving shoulders or projections (59 and 60) above and below. The lever (9) fits and operates in such recess (58) with one shoulder (59) above and one (60) below the lever, and a strap (57) connects such shoulders to retain the dog (13) on the lever. The recess (58) is large enough, and the shoulders (59 and 60) are far enough from each other to allow the upper end of the dog to be tipped a certain distance and then to check the further movement or tipping of the dog.

15 represents a series of registering wheels, loosely mounted on a shaft (16), having bearings in the framework, each wheel being toothed around its periphery, and also having indicating numbers thereon.

17 represents a series of toothed wheels loosely mounted on the shaft (18), a little in the rear of the first series, the teeth of the two engaging, and on one side of each of the wheels (17) which are practically idlers, is a single

projecting tooth (18'), which is in line with and adapted to engage with the toothed registering wheels (19) mounted on the shaft (20) above and a little in the rear of the first.

21 is a cross-bar between the two series of registering wheels, and 22 are flat metal springs attached thereto, and if desired may be formed in a continuous strip, their ends engaging with the teeth of the two registering wheels, preventing them from being turned backward.

On the outer ends of each of the shafts (16 and 20), carrying the registering wheels, a small wheel (23) is rigidly attached, having a notch (26) in its periphery, and 24 is a pivoted dog, one end held in contact with the periphery of the wheel by a spring (25) or by gravity, and adapted to drop in the notch (26), when brought in line with it, as shown in Fig. 10. On the opposite ends of these shafts are loosely mounted the arms (27) for resetting the registering wheels, each of these arms carrying a pawl (28) which, by its weight, engages with the teeth of the ratchet wheel (29), rigidly secured to the ends of the registering shafts.

The shafts (16 and 20), carrying the two series of registering wheels are each grooved on their peripheries, and 30 are spring washers mounted on the shafts between each wheel, each washer having a projection (31) which fits into the groove in the shafts, one side of the washers being cut, and the end being slightly bent for engaging with the notched or cut-out portion (32) formed on the side of the hub of the wheels, and when the registering wheels are to be reset to zero, the ends of the springs formed by the cut washers engage with the notches (32) on the side of the hub of the wheels, as their shafts are revolved by either of the arms (27) operating through its pawl the ratchet on the outer end of the shaft.

The cross pieces (7) connecting the rear of the framework are provided with openings at suitable distances apart, to receive the flat shanks (33) of the indicating tablets (34), the lower ends of the shanks being slightly bent and each rests on the outer end of its corresponding key lever, in front of and also in line with the vertical arms (11) of the pivoted rack (12), the prongs having notches (36) near their upper ends. Such cross pieces (7) are so arranged in relation to each other that the lower end of the shanks (33) will be slightly sprung backward when they are lifted up to the notches (36), in the arms (11) of the rack bar (12), so that the shanks will be readily lodged in such notches. The rack is also provided with a downwardly projecting arm or lug (37) below.

38 is a cross piece secured to the sides of the framework, and to this piece is attached a flat plate (39) with a bell or gong (40).

41 is the bell hammer pivoted to the plate (39) on one side of the bell, and has a projecting finger adapted to come in contact with the pivoted trigger (42) on the vertical moving bar (43), also secured to the plate (39) by means of screws set in open slots, 44 being a spring which bears against the bell hammer and holds it in contact with the bell. On the lower end of the bar (43) is secured a block (45), having on the inside a projection (46) adapted to come in contact with the metal cross-bar (47) when raised, this cross-bar normally lying on top of the key levers (9) and is lifted by the movement of any of them, the outer ends of such cross-bar being bent and pivoted outside of the framework to the ends of the pivotal shaft of the key levers.

48 is an arm or dog pivoted to the lower end of the block (45) and engages with an opening in the plate (49), secured to the back of the cash drawer (5), supported in the casing below. 50 is a bracket also attached to the back of the drawer, and carries a pivoted trigger (51), its upper end adapted to contact with the projecting lug (37) of the pivoted rack (12), as the drawer is forced out by the tension of the coiled spring (52), carried in the barrel (53), secured to the back of the casing (1), the outer end of such cylinder passing through the back of the drawer, and its upper end slotted, a small arm (54) with a rounded head being connected to the inside of the drawer and working through such slot, and normally bearing against the end of the spring.

To facilitate the movement of the drawer, I have provided on either of its sides a flange or track (55), which rests on the top of flanged wheels (56), having stub axles which work in grooved bearings (62) formed in the brackets (63) attached to the inside of the casing (1), thus reducing the friction to a minimum.

The registering wheels (15) of the first or lower series, are so numbered as to indicate the amount that has been put in the cash drawer of the register, the wheels being observed through the aperture (4) in the cover. Take, for example, the key representing ten cents. Should this be struck once, the corresponding wheel (15) will revolve one notch and present in line with the aperture (4) the figure 10, the second time the second tooth with its corresponding number 20 will appear, and so on until all the teeth of the wheel have come in view, thirty teeth being the number preferably employed. The toothed wheel (17), also having thirty teeth, will rotate with the wheel (15) and, when it has made one revolution, its projecting tooth (18'), which is in line with the teeth of the upper registering wheels (19), will engage with one of them, revolving it one notch, and thus indicate on the upper wheel at the first tooth and in line with the upper aperture (4) the number 30, which stands for three hundred or three dollars, the amount registered by the wheel (15), the first cipher in all the numbers in the upper series of wheels being dropped to economize space. Upon the second turn of the upper wheel, 60 will appear

in view, and on the third turn, 90, it always being remembered that a cipher is dropped, so these would represent respectively, three hundred, six hundred, nine hundred, or three dollars, six dollars and nine dollars, and it is so with the other keys and their registering wheels, both the operation and result being the same, the amounts only being different.

The operation of the machine itself is as follows: Upon receiving the amount which is to be deposited in the cash drawer of the register, the key corresponding to such amount is struck, the outer end being depressed, and the inner raised. When the lever is thus operated, the dog (13) is elevated and the top of it engages with the periphery of the wheel (17) at one side of the vertical diameter of such wheel and thus turns the wheel. After the dog has engaged the wheel, and while it is turning the same, it will slip on the lever against the lug (14) and the top of the dog will be tipped in a direction away from the wheel (17) and will continue to tip until it is stopped by contacting with the wheel (15) and the binding of the shoulders (59 and 60) on the lever (9). After the dog is thus locked, the angle of pressure of the dog on the wheel (17) is such that it cannot be moved farther until the dog is dropped and the lever again operated. As the outer end of the key is depressed, the inner end is lifted upward, raising the corresponding indicating tablet to view, as shown in Fig. 4, the lower bent ends of the shanks (33) on which the tablets are mounted dropping and being sprung into the notch (36) on one of the arms of the pivoted rack (12), and it is thereby retained in a raised position. The key lever in its upward movement also raises the cross-bar (47) which engages the projection (46) on the block (45) connected with the vertical bar, carrying the trigger (42) and through it operating on the finger of the bell hammer, lifting the same until the end of the trigger (42) passes the end of the finger whereby the finger is suddenly released, allowing the hammer to strike the bell. The rear end of the bell hammer, near its pivot, is so flattened and shaped that the spring (44) bearing on such flattened surface, causes the hammer, when it has struck the bell, instantly to rebound slightly from the bell, thus giving it a clear ring. As the block (45) is lifted by the cross-bar (47), the pivoted arm (48) on its lower end is lifted out of the opening in the plate (49), where it contacts with the drawer, and the tension of the coiled spring (52) forces the drawer outward, the movement of the drawer taking place before the key lever has raised the shank of the indicating tablet to a line with its engaging notch, and the amount received is then put in the drawer, and upon its being pushed back in place, the trigger (5) trips over the finger or lug (37) without operating the same, the dog (48) drops into its notch in the plate (49) and the drawer is held in place until the next operation of any one of the keys, when the drawer on springing out will trip the lug (37) on the pivoted rack moving it and the vertical arms outward, releasing the tablet which has been exposed, it falling back into its normal position, the rack returning to its first position by gravity, and is ready to catch and support the next tablet which is raised.

When at any time it is desired to set the registering wheels of either the upper or lower series, or both, back to zero, this is accomplished by operating one of the arms (27) on the right hand side of the machine, and by the engagement of its pawl with the ratchet wheel (29), the registering shaft is rotated forward, and in this movement the spring projections formed by the cut of the washers (30), which are keyed on the shaft between each of the wheels, will engage with the notches (32) on the side of the hubs of the same, rotating them within the shaft, which may be turned until all of the wheels have been turned to the zero mark, and the machine will then be ready for work again. It will thus be seen that what I have accomplished in my improved register and indicator is to make a simple and compact device and, at the same time, have all the co-acting parts connected directly with each other, the key levers through their dogs operating directly the registering wheels. The construction of the dogs with shoulders (59 and 60) and the lugs (14) and their manner of contacting with the wheels are such that it is impossible in any case, no matter how hard the pressure may be, to turn the registering wheels more than one notch at a time, as is often the case with some of the present machines. The bell mechanism is operated on, from any of the operating levers through the cross-bar (47) and the moving bar (43) and its block (46). At the same time, the action of the indicating tablets is simple and perfect. The movements of the drawer, both in the manner of its working and through its connections with other parts of the machine, completed a cash register and indicator that is both simple and compact in construction, and at the same time perfect in its operation.

It is obvious that changes might be made in the various parts of the machine without departing from the principle of my invention. It is possible to omit the wheels (15) and substitute therefor some other form of stop, the wheels (17) being marked for registering wheels. Or the tipping movement of the dog can be limited solely by the construction of the dog and lever as described, to lock the dog on the lever by means of the lugs and shoulders, after the dog has been tipped, and thus limit the further movement of the wheel (17) and dispense entirely with the wheels 15.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a registering machine, the combination of a wheel, an actuating lever, a dog mounted on such lever, such dog and lever so

constructed that the dog when such lever is operated will engage and move such wheel a certain distance, and then be stopped by such lever, substantially as shown and described.

2. In a registering machine, a wheel, an actuating lever, a gravitating dog riding loosely on such lever and adapted, when such lever is operated, to engage and move such wheel, and a stop adapted to limit the movement of such dog while actuating such wheel, substantially as shown and described.

3. In a registering machine, a wheel, an actuating lever, and a gravitating dog riding loosely on such lever and adapted, when such lever is operated, to engage and move such wheel a certain distance, and then lock on such lever, so that it cannot move such wheel farther until the lever is lowered and again operated, substantially as shown and described.

4. In a registering machine, a wheel, an actuating lever, a gravitating dog mounted loosely on such lever, and lugs on such lever on each side of such dog to prevent such dog from slipping too far backward and forward on such lever, such dog adapted to engage and move such wheel a certain distance and then lock on such lever, so that such wheel cannot be moved farther until such lever is lowered and again operated, substantially as shown and described.

5. In a registering machine, a wheel, an actuating lever, a gravitating dog loosely mounted on such lever, lugs on the lever on each side of such dog to prevent the same from sliding too far backward and forward upon such lever, and shoulders or projections on the side of such dog, above and below such lever, to prevent the upper end of such dog from tipping too far, such dog adapted to engage and move such wheel a certain distance and then lock on such lever, so that such wheel cannot be moved farther by such lever until the dog is lowered and the lever again operated, substantially as shown and described.

6. In a registering machine, a wheel, an actuating lever, a gravitating dog mounted loosely thereon, a lug on such lever on each side of such dog to prevent the same from sliding to far backward and forward, such dog having a recess in its side for the lever to fit and operate in loosely, and a shoulder on each end of such dog adapted to bear against the upper and under sides of such lever, such dog adapted to engage and move such wheel a certain distance and then be locked on such lever by such shoulders and lugs, so that it cannot move such wheel farther until the lever is again operated, substantially as shown and described.

7. In a registering machine, two series of toothed registering wheels, the wheels of the lower series provided with a lug or tooth adapted at each revolution of such wheels to contact with the corresponding wheels in the second series and move the same one notch, a series of levers pivoted on a shaft in the machine, a dog loosely mounted on each of such levers, lugs on such levers to prevent the dog from moving too far backward and forward, and shoulders on such dog above and below the lever, whereby such dog will contact with the lower registering wheel and move the same one notch and then lock on the lever, substantially as shown and described.

8. In a registering machine, two wheels, an actuating lever, a gravitating dog mounted loosely on such lever, and lugs on such lever to prevent the dog from slipping too far backward and forward on such lever, such dog adapted to engage one of such wheels and move it a certain distance and then contact with the other wheel and lock, so that such wheel cannot be moved farther by such dog until it is dropped and the lever again operated, substantially as shown and described.

9. In a cash register, a double series of registering wheels loosely mounted on independent shafts within the framework, an intermediate series of wheels adapted to operate the lower registering wheels, and, at a certain point, to move the upper ones, a series of independent levers pivoted on the shaft within the framework, and dogs carried thereon and adapted to engage with and turn one of the intermediate wheels, substantially as shown and described.

10. In a cash register, a double series of toothed registering wheels loosely mounted on independent shafts within the framework, an intermediate series of toothed wheels adapted to operate the lower registering wheels, and, at a certain point, to move the upper ones, a series of independent levers pivoted on a shaft within the framework, and dogs carried loosely thereon and adapted to engage with and turn one of the intermediate wheels one notch, and at the same time to lock between such intermediate wheels and lower registering wheels, substantially as shown and described.

11. In a cash register, a framework, two series of toothed registering wheels mounted on independent shafts therein, a series of intermediate wheels engaging with the lower registering wheels, such intermediate wheels having on one side a single tooth whereby, when they have made a single revolution, they engage with and move the upper registering wheels one notch, and a series of independent key levers with dogs mounted thereon adapted to engage with and operate the intermediate wheels, substantially as shown and described.

12. In a cash register, a framework, a double series of toothed registering wheels loosely mounted on independent shafts within such framework, a series of toothed wheels mounted on an intermediate shaft, such wheels engaging with the lower series of registering wheels, and each provided with a supplemental tooth in line with and adapted to engage

with the upper series of registering wheels, flat springs secured to a cross-bar within the framework, their ends engaging with the teeth of the two sets of registering wheels, a series of operating levers pivoted on a shaft within the framework, dogs loosely mounted on such levers, their heads adapted to engage with the lower registering and intermediate toothed wheels, moving the same and locking them together until the lever drops to its normal position, substantially as shown and described.

13. In a cash register, two series of registering wheels loosely mounted on shafts within the framework, a series of toothed registering wheels mounted on an intermediate shaft, such wheels engaging with the lower registering wheels, and, at certain points, with the upper ones, spring washers keyed on the shafts between the registering wheels, such washers cut on one side, an end thereof slightly sprung to one side to form a projection for engaging with a notch on the side of such wheels, a series of operating levers pivoted on a shaft having bearings in the framework, and dogs loosely mounted on such levers adapted to engage with and rotate the intermediate wheels and lock the same with the lower registering wheels, substantially as shown and described.

14. In a cash register and indicator, a framework, a pair of shafts having bearings therein, each carrying a series of toothed registering wheels, a series of toothed wheels mounted on an intermediate shaft, such wheels engaging with the lower registering wheels, and, at certain points, with the upper ones, a series of independent levers pivoted on a shaft within the framework, dogs loosely mounted thereon adapted to engage with and move the intermediate wheels a single notch, and lock the same with the lower registering wheels until the lever returns to its normal position, in combination with suitable indicating tablets operated through such key levers, substantially as shown and described.

15. In a cash register and indicator, a double series of toothed registering wheels loosely mounted on independent shafts within the framework, a series of toothed wheels loosely mounted on an intermediate shaft, such wheels engaging with the lower registering wheels, and, at a certain point, with the upper ones, flat springs secured to a cross-bar within the framework, their ends engaging with the teeth of two registering wheels, spring washers keyed to the shafts between the registering wheels, such washers cut on one side, an end thereof sprung to one side so as to form a catch to engage with a notch on the sides of the wheels, a pawl and ratchet mechanism attached to the outer ends of the two registering shafts for rotating the same, a stop mechanism attached to the opposite end of such shafts, a series of independent operating levers pivoted to a shaft within the framework, and dogs loosely mounted on such levers and adapted to engage with the intermediate wheels, whereby they are rotated and locked with the lower registering wheels, substantially as shown and described.

16. In a cash register and indicator, a framework, two series of toothed registering wheels mounted upon shafts, a series of toothed wheels mounted upon an intermediate shaft, such wheels engaging with the lower series of registering wheels, and, at a certain point, with the upper ones, cut washers keyed to the several shafts between each of the wheels, one end of such washers being sprung to one side so as to form a catch adapted to engage with a notch in its wheel, ratchet wheels rigidly mounted on one end of each of the registering shafts, an arm carrying a pawl loosely mounted within the same and adapted to revolve them, a notched wheel mounted on the opposite ends of the registering shafts, and a pivoted dog bearing on the periphery thereof, whereby it will engage with such notch when in line with the same, substantially as shown and described.

17. In a cash register and indicator, a framework supported within an inclosing casing, a double series of toothed registering wheels loosely mounted on independent shafts therein, a series of toothed wheels mounted on an intermediate shaft, such wheels engaging with the lower registering wheels, and, at certain points, with the upper ones, a series of independent levers pivoted on a shaft, and adapted to operate the registering mechanism, a series of indicating tablets mounted upon shanks which are supported on the inner ends of such levers, and adapted to be raised by them, the lower end of such shanks when raised engaging with notches on the arms of a pivoted rack, a pivoted cross bar lying across the tops of and adapted to be raised by the movement of any of such levers and to contact with a projection on a vertical moving bar, such bar carrying a pivoted trigger engaging with a bell hammer operating on a suitable bell, a dog pivoted on the lower end of such vertical moving bar, a spring controlled drawer in the lower part of the casing, its rear end engaging with such dog, whereby it is retained within the casing, a pivoted trigger on the back of such drawer engaging with a lug on the bottom of the pivoted rack as the drawer is forced out, tripping the same and thereby releasing any tablet shanks that may be raised, substantially as shown and described.

18. In a cash register, the combination of a shaft with a series of registering wheels mounted thereon, means for rotating the same, a groove in such shaft, spring washers riding loosely on such shaft between such wheels, such washers having a lug on the inner side of the same adapted to fit in the groove in such shaft to hold such washers in place, such washers cut on one side, one end thereof sprung to one side so as to engage with notches on the side of the wheel when the shaft is

turned for the purpose of resetting such registering wheels, substantially as shown and described.

19. In a cash register, the combination of a shaft with a series of registering wheels mounted thereon, means for rotating the same, a groove in such shaft, spring washers riding loosely on such shaft between such wheels, such washers having a lug on the inner side of the same adapted to fit in the groove in such shaft to hold such washers in place, such washers cut on one side, an end thereof sprung to one side so as to engage with notches on the side of the wheel, a pawl and ratchet mechanism mounted on one end of such shaft, and a ratchet wheel on the opposite end adapted to engage with a pivoted dog bearing on the periphery of such wheel, substantially as shown and described.

20. In a cash register, the combination of a shaft with a series of registering wheels mounted thereon, means for rotating the same, spring washers mounted on such shaft between such wheels so as to rotate with such shaft when the shaft rotates, such washers cut on one side, an end thereof sprung to one side so as to engage with notches on the side of the wheel when the shaft is turned for the purpose of re-setting such registering wheels, substantially as shown and described.

21. In a cash register and indicator, a framework, a registering mechanism therein, independent levers pivoted on a shaft within such framework and carrying dogs for operating such registering mechanism, the rear end of such levers resting between the arms of a pivoted rack, and a series of indicating tablets mounted upon shanks supported above such levers and resting thereon, the shanks of such tablets adapted to engage with notches formed in the arms of such rack, when raised by the levers, substantially as shown and described.

22. In a cash register and indicator, a casing with a registering mechanism therein, operating levers pivoted on a shaft within the framework of such register, the rear end of such levers resting between the arms of a pivoted rack-bar, a series of indicating tablets mounted upon shanks, such shanks supported upon the levers and adapted to engage with notches in the arms of such rack when raised, and a lug formed on the lower part of such rack, whereby it may be tripped, and the raised tablet released, the rack-bar returning to its normal position by gravity, substantially as shown and described.

23. In a cash register and indicator, a framework, a suitable registering mechanism therein, a series of independent levers pivoted on a shaft within such framework for operating such registering mechanism, the rear ends of such levers supported between the vertical arms of a pivoted rack, a series of indicating tablets mounted upon shanks, such shanks supported above and by such levers, the shanks of such tablets adapted to engage with notches in the arms of such rack when raised by the levers, and a lug on the under side of such rack adapted to be tripped by a trigger pivoted to a drawer below, in its outward movement, thereby releasing the raised tablet or tablets, substantially as shown and described.

24. In a cash register and indicator, independent levers pivoted on a shaft and adapted to operate a registering mechanism, the rear end of such levers supporting shanks upon which suitable indicating tablets are mounted, and the lower end of such shanks bent backward so as to engage in the notches in the arms of a pivoted rack-bar when the shanks are raised by the levers, substantially as shown and described.

25. In a cash register and indicator, independent levers pivoted on a shaft and adapted to operate a registering mechanism, the rear end of such levers operating between the arms of a pivoted rack-bar, and supporting shanks upon which indicating tablets are mounted, the lower end of such shanks bent backward so as to engage in the notches in the arms of the pivoted rack-bar, when the shanks are raised by the levers, substantially as shown and described.

26. In a cash register and indicator, independent levers pivoted on a shaft and adapted to operate a registering mechanism, the rear end of such levers operating between the arms of a pivoted rack-bar and supporting shanks upon which indicating tablets are mounted, the lower end of such shanks resting partially upon such levers, the remaining portion of the lower end of such shanks projecting sufficiently from such levers laterally as to enable any of them when raised by such levers to engage with and rest in a notch in an arm of the rack-bar beside such lever, substantially as shown and described.

27. In a cash register and indicator, independent levers pivoted on a shaft and adapted to operate a registering mechanism, the rear end of such levers operating between the arms of a pivoted rack-bar and supporting shanks upon which indicating tablets are mounted, the lower end of such shanks bent backward and resting partially upon such levers, the remaining portion of the lower end of such shanks projecting sufficiently from such levers laterally as to enable any one of them when raised by such levers to engage with and spring into a notch in an arm of the rack-bar beside such lever, substantially as shown and described.

28. In a cash register and indicator, independent levers pivoted on a shaft, and adapted to operate a registering mechanism, the rear end of such levers resting between the arms of a pivoted rack, and supporting shanks upon which suitable indicating tablets are mounted, such shanks movable vertically, and so held in place at the upper end and middle of them as to spring the lower end of the shanks backward, whereby they will spring into notches

in the arms of such pivoted rack when the shanks are raised by the levers, substantially as shown and described.

29. In a cash register and indicator, independent levers pivoted on a shaft, and adapted to operate registering mechanism, the rear end of such levers resting between the arms of a pivoted rack, and supporting shanks upon which suitable indicating tablets are mounted, the lower end of such shanks resting partially upon such levers, the remaining portion of the lower ends of such shanks projecting sufficiently from such levers laterally as when raised to engage with notches in the arms of the rack-bar, such shanks movable vertically, and so held in place at the upper end and middle of them as to spring the lower end of the shanks backward, whereby they will spring into notches in the arms of such pivoted rack when the shanks are raised by the levers, substantially as shown and described.

30. In a cash register and indicator, independent levers pivoted on a shaft and adapted to operate registering mechanism, the rear end of such levers resting between the vertical arms of a pivoted rack-bar, such arms having a notch near their upper end, shanks upon which suitable indicating tablets are mounted, such shanks supported below by such levers, and so held in place at the upper end and middle of them and so bent at their lower end as to spring the lower end into the notch in the arm of such rack-bar, when such shanks are raised by such levers, substantially as shown and described.

31. In a cash register and indicator, independent levers pivoted on a shaft and adapted to operate a registering mechanism, the rear end of such levers resting between the vertical arms of a pivoted rack-bar, such arms having a notch near their upper end, shanks upon which suitable indicating tablets are mounted, the lower end of such shanks resting partially upon such levers, the remaining portion of the lower ends of such shanks projecting sufficiently from such levers laterally as when raised to engage with notches in the arms of the rack-bar, and so held in place at the upper end and middle of them and so bent at the lower end as to spring the lower end into the notch in the arm of such rack-bar when such shanks are raised by such levers, substantially as shown and described.

32. In a cash register, actuating levers pivoted on a shaft, a cross-bar resting on such levers, a bell and suitable connecting parts supported on a plate within the machine, and a bar adapted to move vertically on the face of such plate, such bar having a projection at its lower end with which the cross-bar, after being raised by the key levers, is adapted to contact, whereby the vertical moving bar is raised and through its connections the bell is rung, substantially as shown and described.

33. In a cash register and indicator, actuating levers pivoted on a shaft, a cross-bar resting on such levers, its ends bent and pivoted to such lever shaft, a bell and suitable connecting parts supported on a plate within the machine, a bar adapted to move vertically on the face of such plate, a lug attached to such bar near the middle thereof, with which the cross-bar after being raised by the key levers is adapted to contact and through its connections ring the bell, a drawer, and a dog pivoted to the lower end of such vertical moving bar adapted to release such drawer when such bar is raised, substantially as shown and described.

34. In a cash register and indicator, a drawer in the lower part of the same, a pivoted trigger attached to such drawer, a pivoted rack having notched arms to support tablet shanks when raised, and such rack having at its lower end a lug, such pivoted trigger adapted to move the lug forward as the drawer is drawn out, whereby the arms of the rack-bar are thrown backward and the tablet shanks are dislodged so that they drop, substantially as shown and described.

35. In a cash register and indicator, a pivoted rack bar with notched arms above to support the tablet shanks when raised, and with a lug below adapted to be thrown forward by a trigger attached to such drawer when the drawer is drawn out, whereby the arms of the rack-bar are thrown back and the raised tablets dropped, such rack-bar being so pivoted that the arms extend upward inclined slightly forward when the rack-bar is released, substantially as shown and described.

36. In a cash register and indicator, a drawer in the lower part of the same and wheels provided with stub axles working in grooved or slotted bearings in the sides of the casing of the machine, such drawer supported by and operating on such wheels, substantially as shown and described.

37. In a cash register and indicator, a suitable inclosing casing, a drawer in the lower part of the same, flanged wheels provided with stub axles working in grooved or slotted bearings in the sides of the casing, and flanged tracks formed on the sides of such drawer and adapted to be supported by and move longitudinally on such wheels, in combination with a spring for throwing the drawer outward, and a pivoted dog actuated by the key levers engaging such drawer and normally retaining it within the casing, the drawer being released when such dog is operated, substantially as shown and described.

In witness whereof I have hereunto set my hand this 26th day of March, 1892.

FORTUNE L. BAILEY.

Witnesses:
H. D. NEALY,
H. C. BAILEY.