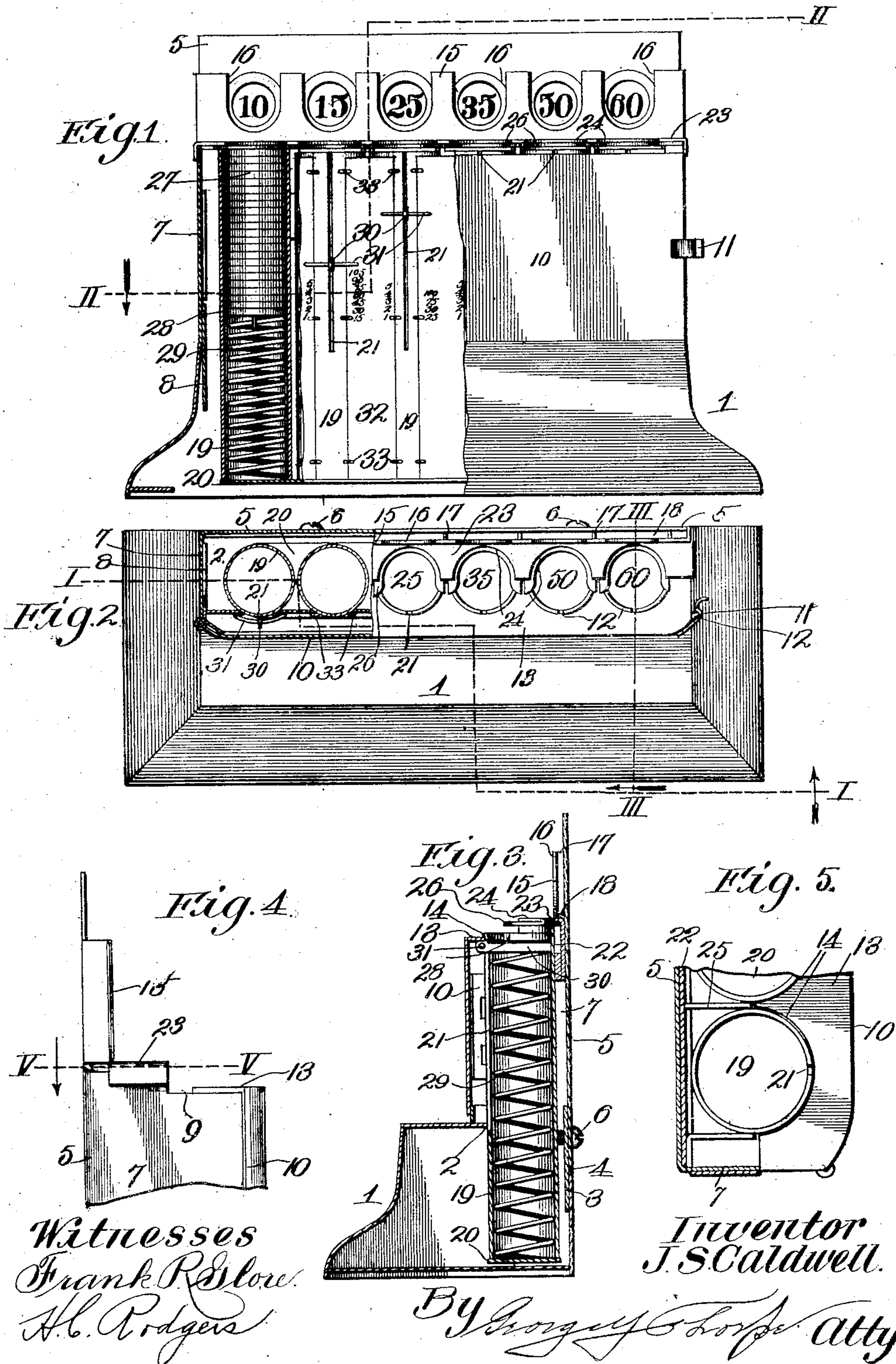


No. 854,402.

PATENTED MAY 21, 1907.

J. S. CALDWELL.
ACCOUNTING APPARATUS.
APPLICATION FILED MAY 19, 1906.

2 SHEETS—SHEET 1.

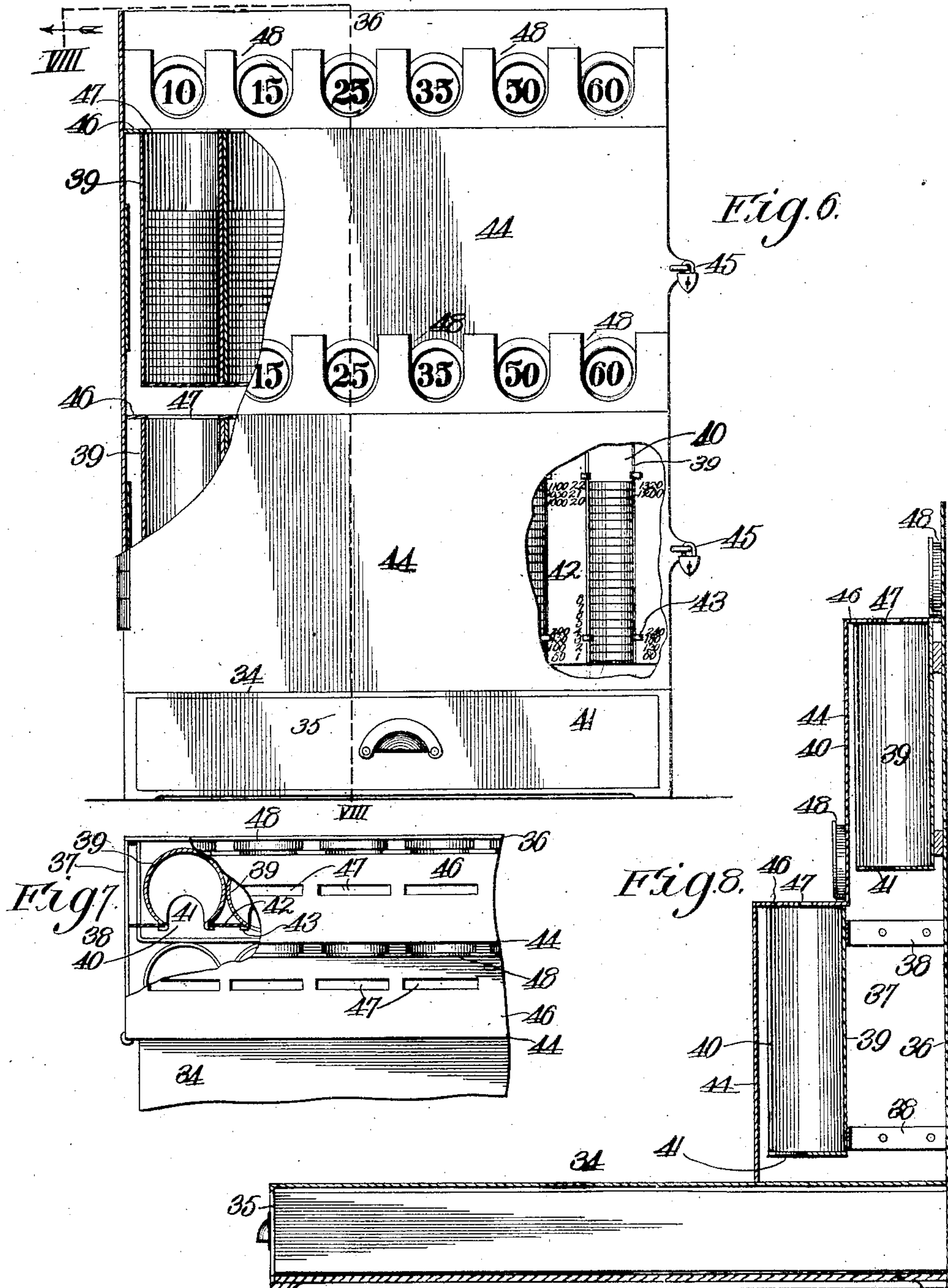


No. 854,402.

PATENTED MAY 21, 1907.

J. S. CALDWELL.
ACCOUNTING APPARATUS.
APPLICATION FILED MAY 19, 1906.

2 SHEETS—SHEET 2.



Witnesses
Frank P. Glou.
H. Rodgers.

Inventor
J. S. Caldwell
By George P. Thompson Atty.

UNITED STATES PATENT OFFICE.

JAMES S. CALDWELL, OF KANSAS CITY, MISSOURI.

ACCOUNTING APPARATUS.

No. 854,402.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed May 19, 1906. Serial No. 317,731.

To all whom it may concern:

Be it known that I, JAMES S. CALDWELL, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Accounting Apparatus, of which the following is a specification.

This invention relates to accounting apparatus, and more particularly to devices for use in restaurants, barber-shops, drug stores, etc., where customers are given checks representative of the amounts due, to hand with their money to the cashier, and my object is to produce apparatus of this character which at all times discloses the number of checks given out by the waiter, barber or clerk, and the money value of each denomination of such checks, such disclosure being made in two separate devices, one under the control of the clerk, and the other under the control of the cashier, each of said devices thus acting as a check on the other.

With these and other objects in view as hereinafter appear, the invention consists in certain novel and peculiar features of construction and organization as hereinafter claimed; and in order that it may be fully understood reference is to be had to the accompanying drawings, in which Sheet 1 represents the device under the control of the waiter, barber or clerk, and Sheet 2 the device under the control of the cashier.

Figure 1, is a vertical section on the line I—I of Fig. 2. Fig. 2, is a horizontal section taken on the line II—II of Fig. 1. Fig. 3, is a vertical section taken on the line III—III of Fig. 2. Fig. 4, is an enlarged view of part of the device. Fig. 5, is a horizontal section on line V—V of Fig. 4. Fig. 6, is a front view, partly broken away, of the device under the control of the cashier. Fig. 7, is a top plan view, partly in section, of a part of said device, and Fig. 8, a vertical section on the line VIII—VIII of Fig. 6.

1 indicates a hollow base frame provided with an opening 2 in its top, extending substantially the full length of the frame and having its rear wall 3 offset to provide the upwardly disposed external shoulder 4. A removable frame is constructed as follows; 5 indicates a back wall to engage the rear side of wall 3 and rest upon shoulder 4 and be secured thereto by screw bolts 6.

7 indicate end walls projecting forward from back wall 5 and adapted to rest upon the end walls of the base as shown in Fig. 1,

end walls 7 having depending portions 8 to extend down through opening 2 and bear against the inner sides of the end walls of the base. The end walls 7 are provided with step-notches 9 at their upper front corners, and hinged to one of said end walls is a door 10, provided at its opposite end with a spring catch 11 engaging a lug 12, projecting from the other end wall 7. The door is provided at its upper edge with a rearwardly projecting flange 13 having its inner edge formed with a series of segmental notches 14.

15 indicates a plate secured parallel to and a slight distance forward from wall 5 above the door 10 and provided in the vertical plane of notches 14 of the door with notches 16, said notches being separated by preference, by partitions 17, so as to provide pockets closed at the bottom by a strip 18, which pockets are adapted to receive checks of different denominations, the notches exposing the numbers on the checks to the view of the person in charge of the device.

19 indicates a series of tubes closed at their lower ends by and secured to a bar 20, and provided in their front sides with vertical slots 21, extending from a suitable point up to and through the upper edges of the tubes.

22 indicates a cross bar secured to the rear sides of the upper ends of the tubes and provided at its upper margin with a forwardly projecting flange 23 having segmental notches 24 in its edge, said flange being spaced above the rear halves of the tubes, which halves project above the front halves a distance slightly exceeding the thickness of a check.

25 indicate partitions secured to and between the tubes and engaging the underside of flange 23 at opposite sides of the tubes said partitions, flange, upwardly projecting portions of the tubes and the bar 22 forming pockets to receive the removable plates 26, having segmental notches in their front edges of smaller diameter than the tubes and the checks 27 adapted to fit therein in order that said checks shall not be pushed upwardly out of the tubes by the follower plates 28 in the tubes, said follower plates being pressed yieldingly upward by expansive coil springs 29 and attached to the ends of the latter. The follower plates are furthermore provided with arms 30, projecting forwardly through the slots 21 of their respective tubes and secured to said arms and projecting laterally in both directions therefrom are indicator fingers 31, one of said indicator

fingers being adapted to successively register with a series of numbers 1, 2, 3, 4 etc., up to and including the number of checks which a tube is adapted to receive, and the other to register successively with a column of numbers, the lowest number of said column representing the value in money of one check of that particular tube, the second number double the value, the third treble the value and so on, so that the topmost number shall represent, if the tube receives fifteen cent checks, and there are twenty two checks, three dollars and thirty cents, (3.30) in other words the topmost number will represent the money value of all of the checks contained in any particular tube; the denomination of the checks in any particular tube being instantly found by reference to the check exposed in the pocket above said tube.

In the morning the cashier or other person in charge is supposed to charge each tube with its full complement of checks as shown in the left-hand tube in Fig. 1, removing the slide plates 26 to permit a column or bunch of the checks to be slipped down in the tubes at one time to facilitate the loading of the tubes and then replacing said slide plates to hold the checks in place, the insertion of the checks of course forcing the spring-actuated followers 28 down to the position shown in Fig. 1. Each waiter, barber, or clerk will preferably be provided with checks of different colors or the different sets of checks may be otherwise identified.

If the bill of a person served amounts to ten cents, the person in control of a particular device and to whom such sale is credited places a finger down in the proper notch of the removable plate 26 and upon the topmost check representing the amount named and draws the same forward to extract it from the tube and hands such check to the person served who delivers it to the cashier with an amount sufficient to cover the same. These operations are repeated for each customer served and as the topmost check is extracted the spring follower raises the column of checks until the next one presses against the slide plate, the indicator finger of said follower at the same time pointing to the number 1, at one side and to the number representing the money value of one check at the opposite side. It will thus be seen that the person in charge can at any time swing open the door 10 and see just how many checks he has given out and the money value of each of said checks and thus know how much credit he should have with the cashier.

The cashier is provided with a device for receiving the checks said device containing a set of tubes for each of the devices under the charge of the waiter, barber, clerk, etc., the device shown on Sheet 2 being equipped with only two sets of said tubes. In practice

there will be sets equal to the number of the devices shown in Sheet 1 used in an establishment, though of course if the latter is a very large establishment there may be more than one cashier and each cashier will have a machine capable of handling the business of a certain number of waiters, barbers, or clerks. To make the device adaptable for use with checks of different denominations, the columns of figures referred to will preferably appear on vertical plates 32 arranged to slide between guides 33 secured to or stamped out of and bent back from the tubes, the column of figures containing 1, 2, 3, etc., representative of the number of the checks and the columns of figures representing the money values of the checks appearing on the right and left hand sides respectively of said plates except the front one to the left of the first tube which will be equipped only with the column of figures 1, 2, 3, 4, etc., and the last one to the right of the last tube which will be equipped only with the columns of figures representing the money values. This construction permits of the use in the same machine for checks of different denominations, slides containing the proper money value columns being substituted for those shown, it being also necessary to replace the checks shown by other checks of denominations corresponding to those to be placed in the different tubes.

Referring now to the cashier's device, 34 indicates a suitable base frame provided with a cash drawer 35, a back wall 36 and end walls consisting of step-shaped portions 37. 38 represents brackets rigid with the frame and supporting a series of tubes 39 corresponding in number to the series of tubes of Fig. 1, and of sufficient depth to more than contain all of the checks of any of said tubes, and said tubes 39 are provided with comparatively wide slots 40, extending their full length and registering with notches 41 in their bottom, said notches being of sufficient size to permit the cashier to slip a finger through to raise the whole series of checks in any particular tube. The device is also provided with a set of similar tubes correspondingly numbered which by preference are set above and back of the tubes already described, and each tube of each set is flanked by numbered slides 42 corresponding to slides 32 and held in place by preference by guide arms 43 stamped out of and bent back from the slotted edges of the tubes. The lower set of tubes with its slides are hidden from view by a hinged door 44 secured to the front edge of one end wall and locked as at 45 or otherwise to the opposite edge, the locking device being under the control of the cashier, and said door is provided with a horizontal rearwardly projecting flange 46 to cover the upper end of the tubes, said cover flange having a slot 47 over each tube through which the

checks delivered to the cashier by the customer are adapted to be dropped, the ten-cent checks in the 10c tube, and so on, so that said checks will lay one upon the other as shown in Fig. 6 and show at a glance to the cashier when the door is open, how many checks of a particular denomination should be credited to a particular waiter, barber or salesman, and also show by reference to the companion column the money value of such checks. A similar door correspondingly numbered and provided with a correspondingly slotted flange covers the second set of tubes, which tubes are of course also provided with the numbered slides, and as a guide for the cashier the door of the second set of tubes is preferably provided with a series of pockets 48, corresponding to the pockets on Sheet 1, hereinbefore described, for containing sample checks of the denomination in use with the tubes below, the topmost series of pockets 48 being preferably secured to the back wall 36 above said series of tubes.

From the above description it will be apparent that the person in charge of the device of Sheet 1 can tell at a glance, the money value of the checks of each series which he has given out and can find the total by simply adding said amounts. The cashier by reference to his device can verify the figures of the waiter, barber or clerk, as the sets of tubes of the cashier's device should show corresponding amounts, if not, a discrepancy will appear which must be rectified. It will thus be seen that the two devices cooperate together, the device of Sheet 2 disclosing in any particular tube the number of checks corresponding to the number extracted from the corresponding tube of the device of Sheet 1, and also showing opposite the topmost of said series of checks the money value number corresponding to the money value number indicated by the index finger of the corresponding tube of the device shown on Sheet 1. The device thus obviates the necessity of counting the checks and leaves to the persons in charge of the two devices the work of counting up the money value numbers disclosed by the two devices.

Having thus described the invention what I claim as new and desire to secure by Letters Patent; is:—

1. The combination of a device having a series of tubes, to contain checks and open at their upper ends, spring-actuated followers in said tubes and pressing said checks upwardly, means to prevent the checks being ejected from the tubes in a vertical direction, means to indicate at all times the number of checks in the tubes and the money value thereof, and a device provided with a corresponding set of tubes having full length slots and adapted to receive the checks when extracted from the first-named device, and pro-

vided with stationary notched means underlying and adapted to limit the downward movement of said checks therein means to disclose at all times the number and money value of the checks in the last-named tubes, and a door covering the means of the last-named device which discloses the number and money value of the checks and provided with a flange overlying the tubes through which the checks extracted from the first-named device may be dropped.

2. The combination of a device having a series of tubes to contain checks and open at their upper ends, spring-actuated followers in said tubes and pressing said checks upwardly means to prevent the checks being ejected from the tubes in a vertical direction, means to indicate at all times the number of the checks in the tubes and the money value thereof, and a device provided with a corresponding set of tubes having full length slots and adapted to receive the checks when extracted from the first-named device, means to disclose at all times the number and money value of the checks in the last-named tubes, a door covering the means of the last-named device which discloses the number and money value of the checks and provided with a flange overlying the tubes through which the checks extracted from the first-named device may be dropped, and pockets containing sample checks over the tubes of each device.

3. A device, comprising a base portion, a portion supported upon the base portion, tubes carried by the last-named portion and depending into the base portion and provided with vertical slots in their front sides, a spring-elevated follower in each tube, and provided with an arm projecting through its slot and with index fingers, plates at opposite sides of the tube and numbered to indicate the number of checks and the money value thereof, a plate overlying said tubes and provided with registering notches, and removable notched plates fitting between said first-named notched plate and the upper ends of the tubes to prevent the spring followers from ejecting the checks from the tubes.

4. A device comprising a base portion, a portion supported upon the base portion, tubes carried by the last-named portion and depending into the base portion and provided with vertical slots in their front sides, spring elevated followers in said tubes, and provided with arms projecting through their slots and with index fingers, plates at opposite sides of the tube and numbered to indicate the number of the checks and the money value thereof, a plate overlying said tubes and provided with registering notches, removable notched plates fitting between said first-named notched plate and the upper ends of the tubes to prevent the spring fol-

lowers ejecting the checks from the tubes, and sample check pockets above and rearward of said notched plate and in the same vertical plane as their respective tubes.

5 5. A device, comprising a base portion, a portion supported upon the base portion, tubes carried by the last-named portion and depending into the base portion and provided with vertical slots in their front sides,
 10 a spring elevated follower in each tube, and provided with an arm projecting through its slots and with index fingers, plates at opposite sides of the tube and numbered to indicate the number of the checks and the money
 15 value thereof, a plate overlying said tubes and provided with registering notches, removable notched plates fitting between said first-named notched plate and the upper ends of the tubes to prevent the spring fol-
 20 lowers ejecting the checks from the tubes, sample-check pockets above and rearward of said notched plate and in the same vertical plane as their respective tubes, and a hinged door secured to the frame and covering said
 25 numbered plates.

6. In an apparatus of the character described, an upright tube having the rear half of its upper end projecting above the front half of said end and a plate above such tube
 30 and provided with a notch of substantially the same radius as and alined with the rear half of the tube to permit checks to be fitted into and occupy a horizontal position in the tube, and a removable plate fitting between
 35 such notched plate and the tube and over-

hanging the interior of the latter to prevent a plurality of said checks from being inserted in a bunch or column into the tube while said removable plate is in position.

7. In an apparatus of the character de- 40 scribed, an upright tube having the rear half of its upper end projecting above the front half of said end and a plate above such tube and provided with a notch of substantially the same radius as and alined with the rear 45 half of the tube to permit checks to be fitted into and occupy a horizontal position in the tube, means to press the check or checks in such tube yieldingly upward so that such check or the topmost of such checks shall be 50 held in the horizontal plane of the said upwardly projecting rear half of the tube, and a removable plate fitting between such notched plate and the tube and overhanging the interior of the latter to prevent a plurality of 55 said checks from being inserted in a bunch or column into the tube while said removable plate is in position and provided with a notch in its front edge in alinement with the tube and of smaller diameter than the inte- 60 rior of the latter to permit one to insert a finger through said notch upon a check in the horizontal plane of the rear half of the tube and slide it forwardly out of the tube.

In testimony whereof I affix my signature, 65 in the presence of two witnesses.

JAMES S. CALDWELL.

Witnesses:

H. C. RODGERS,
 GEO. Y. THORPE.