

No. 765,602.

PATENTED JULY 19, 1904.

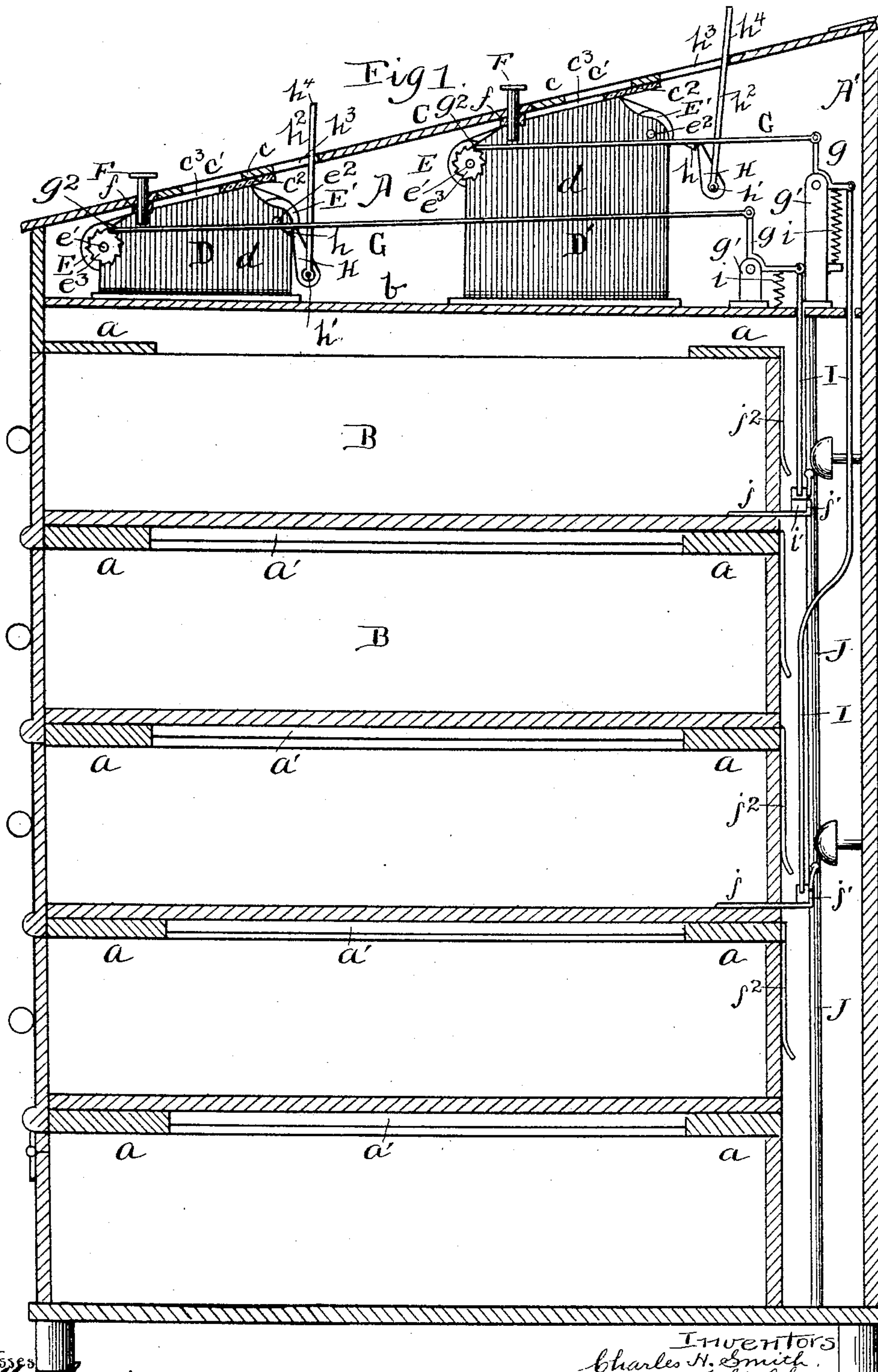
C. H. SMITH & W. F. ST. CLAIR.

CASH REGISTER.

APPLICATION FILED DEC. 15, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
Walker Banning
Oscar W. Bond

Inventors
Charles H. Smith
William F. St. Clair
By Banning & Banning
Attys

No. 765,602.

PATENTED JULY 19, 1904.

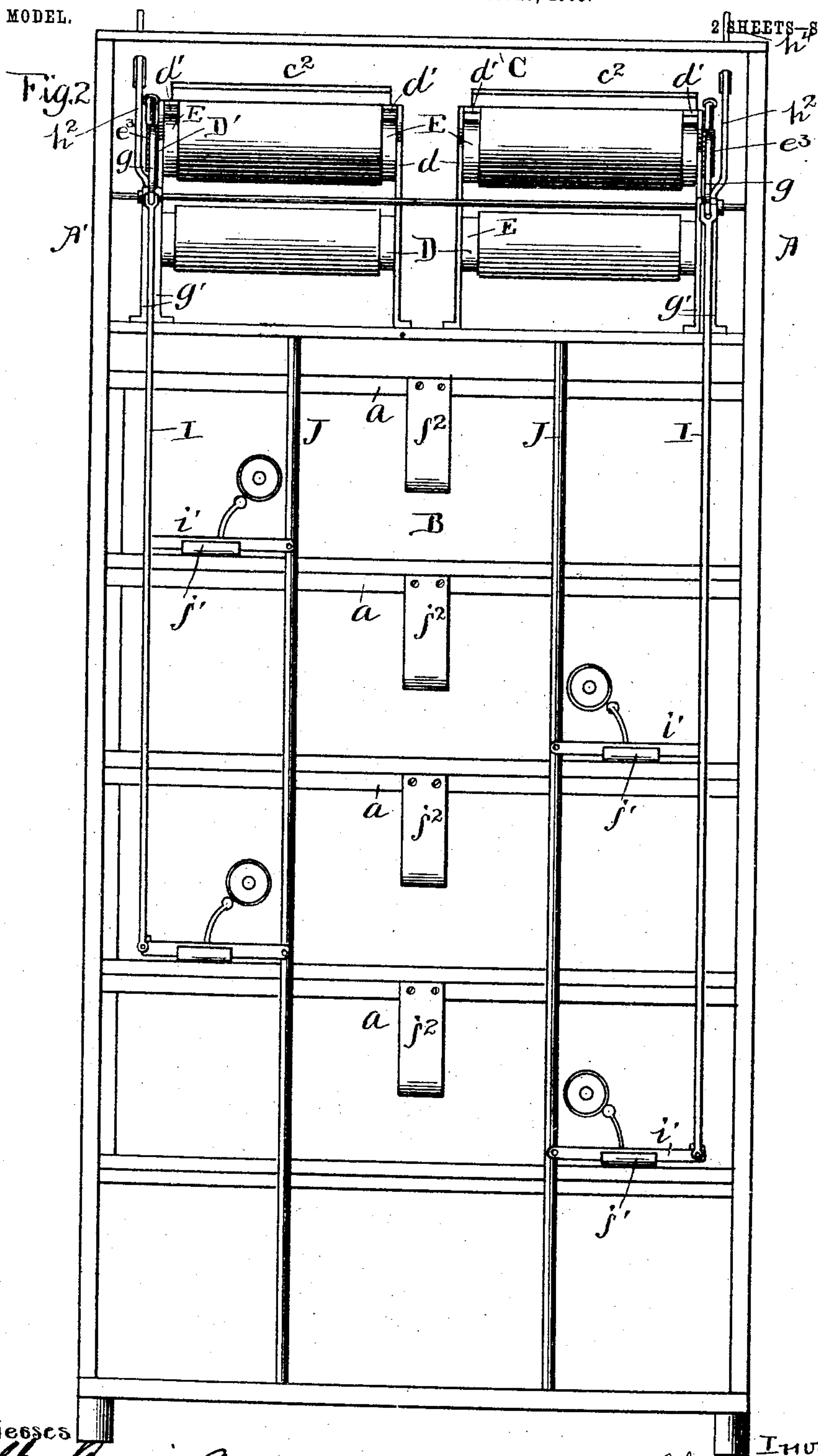
G. H. SMITH & W. F. ST. CLAIR.

CASH REGISTER.

APPLICATION FILED DEC. 15, 1903.

NO MODEL.

2 SHEETS SHEET 2.



Witnesses

Walker Banning.
Oscar W. Bond

Inventors

Charles H. Smith.
William F. St. Clair
By Banning Banning
Attys

UNITED STATES PATENT OFFICE.

CHARLES H. SMITH, OF ROCKFORD, ILLINOIS, AND WILLIAM F. ST. CLAIR,
OF OWATONNA, MINNESOTA; SAID SMITH ASSIGNOR TO SAID ST.
CLAIR.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 765,602, dated July 19, 1904.

Application filed December 15, 1903. Serial No. 185,249. (No model.)

To all whom it may concern:

Be it known that we, CHARLES H. SMITH, residing at Rockford, in the county of Winnebago and State of Illinois, and WILLIAM F. ST. CLAIR, residing at Owatonna, in the county of Steele and State of Minnesota, citizens of the United States, have invented certain new and useful Improvements in Cash-Registers, of which the following is a specification.

10 The cash-register of this invention is intended for use in stores or offices employing a number of operators, and the device of this invention is so constructed that each operator will be enabled to keep a perfect record of all
15 his own business transactions and at the same time have a separate private drawer for the reception of the cash, checks, business memoranda, or similar articles which pass through his hands. The register is so constructed that
20 the proper cash-drawer will be opened automatically after the business transaction has been recorded, so that a complete record of the business of each of the operators, together with all receipts and business-papers, will be
25 kept, enabling the proprietor to have a personal knowledge of the operations of each of his employees and enabling the easy detection of fraud and enabling the efficiency of employees to be more readily determined.

30 The invention consists in the features of construction and combinations of parts hereinafter described and claimed.

In the drawings illustrating the invention, Figure 1 is a sectional elevation of the entire
35 cash-register, and Fig. 2 a back view with the rear wall removed.

The cash-register of this invention is constructed in the form of a cabinet, preferably of hardwood or metal and handsomely finished, and is provided with side walls A and
40 a rear wall A', and between the side walls, as shown, are cross-rails a , uniting the side walls and forming a framework for the cabinet, and along the side walls are strips a' , which
45 form runways or slides for a series of drawers B, four in number, as shown, although the cabinet may contain any desired number of

drawers, depending upon the number of operators for which the cabinet is intended, and it will be understood that the number here- 50
with given serves merely for purposes of illustration and that two, four, six, or any other number of drawers may be employed. Above the top drawer is a false top or partition b , which extends from front to rear of the cabi- 55
net and serves as a base or support for the operative mechanism, and above the false top is a sloping top C, hinged to the rear wall of the cabinet and adapted to be opened to obtain access to the operative mechanism 60
thereunder. Within the top are a series of metal plates c , one for each operator, having therein slots or openings c' , and beneath the metal plates are glass plates c^2 , projecting into the slots or openings therein, which glass 65
plates being transparent permit a view of the apparatus thereunder, and since the glass plates but partially fill the openings in the metal plates a space c^3 is left for the purpose of permitting the operator to write upon the 70
paper strip upon which the business transactions are recorded. Directly beneath the slots or openings are metallic platforms D D' of similar construction, except that the platforms D' are higher than the platforms D by reason 75
of the fact that they are located toward the rear of the supporting-partition b and are required to bridge a greater space on that account. Each of the platforms is constructed to have side walls d , adapted to be attached 80
to the supporting-partition, and a flat top d' , which latter is sloped to conform to the sloping of the top of the cabinet and is slightly out of contact with the glass plate beneath which it is located, allowing a strip of paper 85
to travel across the top and form a smooth rigid surface upon which to note the business transactions. In the space between the side walls are located drums or rollers E and E', upon which is carried a strip of paper or simi- 90
lar material adapted to have business transactions noted thereon, and the drums or rollers are mounted upon shafts e' e^2 , the former mounting the forward roller and the latter the

rear roller, and upon the front shaft exterior of the platform is a ratchet-wheel e^3 , adapted to impart rotation to the roller.

At the front of each of the openings and in line with the ratchet-wheel is located a push-button F, which, as shown, passes through a collar f , and each of said push-buttons is adapted to contact with a rod or lever G, terminating in a bell-crank lever g , pivoted at its bend between uprights g' and adapted to have its forward end g^2 depressed by contact with the end of the push-button with which it co-operates. The forward end of each of the rods G is adapted to engage the teeth of the ratchet-wheel, and on the under face of each of the rods is located a tooth h , adapted to engage with a dog H, mounted upon a transversely-extending rod h' , (best shown in Fig. 2,) which rod extends across the entire width of the cabinet and is secured to the side walls thereof, forming a rigid support for two or more dogs, depending upon the number of operators for which the register is intended. Each of the dogs H has connected therewith an operating-lever h^2 , which projects upwardly through a slot h^3 in the top of the cabinet and terminates in a handle h^4 , adapted to be forwardly moved to cause the dog to engage with the tooth in the rod and cause the end of the rod to engage with the ratchet-wheel, allowing the ratchet-wheel and drum or roller connected therewith to be moved to advance the strip beneath the slot e^3 , so that when one business transaction has been recorded thereon the strip may be advanced a sufficient distance to bring a blank portion of the strip beneath the slot preparatory to the recording of the next business transaction.

To the free end of the bell-crank portion g of the lever is attached a spring i , which exerts a downward pull upon the end of the lever and causes the forward end of the rod G to be normally raised out of contact with the ratchet-wheel and allows the forward end to be depressed under tension from the spring by means of the teeth of the ratchet-wheel preparatory to the advancement of the paper strip by means of the dog H and the lever connected therewith.

To the free end of each of the bell-crank levers is pivoted a draw-rod I, adapted to operate one of the series of drawers in the cabinet, and the lower end of the draw-rod I is pivoted to a draw-arm i' , one arm for each of the drawers, which arm is pivoted at its inner end to one of a series of vertical rods J, which in the construction shown are two in number, and, as shown, the draw-arms operating alternate drawers in the cabinet are pivoted to the same vertical rod, although it is obvious that all the draw-arms might be pivoted to the same rod or in any other suitable manner. Each of the drawers has at its rear end a projecting finger j , provided with a catch end j' , adapted to be engaged by the draw-arm when

the latter is dropped and adapted to pass under the draw-arm when the latter is raised by the movement of the bell-crank and rod connected therewith, so that when the bell-crank is held down in normal position the drawer controlled thereby will be locked by the draw-arm. Each of the drawers, as shown, has at its rear end a flat spring j^2 , connected with one of the cross-partitions a and adapted to be compressed when the drawer is thrown back into closed position and held by the catch-finger, but adapted to outwardly project the drawer when the catch-finger has been released from contact with the draw-arm and initially open the drawer in order to obtain access into the interior thereof.

The construction of the operative mechanism attached to the rear platform or table D' is similar in every respect to that hitherto described, except that the rod G is of shorter length and the draw-rod I of longer length in order to accommodate the space through which the draw or pull is exerted and the position of the drawer which it is intended to pull. In use each of the operators is given a strip or roll of paper upon which to record his own transactions and a separate drawer within which to deposit money or business memoranda which pass through his hands. After the business transaction has been recorded upon the strip of paper the press-button controlling said strip is depressed and the operating-lever thrown forward, which simultaneously moves the strip of paper preparatory to the recording of a second business transaction and opens that drawer which co-operates with the business-record, thereby enabling the operator to make the deposit which is represented by the entry made upon the record. In this way each of the operators keeps a perfect record of each business transaction made by him and makes a deposit within the cash-drawer corresponding to each item. It will thus be seen that the invention is one which will be of great use to proprietors employing a number of operators, that the device is simple in construction and certain in operation, and that it is adapted for use in a class of establishments which require that there shall be a record not only of the actual amount of cash deposited within the register, but also a record identifying each transaction and enabling the same to be scrutinized by the proprietor.

Although the invention has been described with considerable particularity as to detail, it is plain that the mechanism may be somewhat changed and the method of supporting and pivoting the various parts considerably altered without departing from the spirit of the invention.

What we regard as new, and desire to secure by Letters Patent, is—

1. In a cash-register, the combination of a cabinet, a drawer within the cabinet, a top for

the cabinet, a slot or opening in the top, a platform or table over which a record-strip is adapted to travel, side supports for said platform, drums or rollers rotatably mounted between the side supports and adapted to mount a record-strip, a rod adapted to impart rotation to one of the rollers, a movable upwardly-projecting lever provided with a dog adapted to move the rod to turn the roller, a locking mechanism for the drawer, and a connection between the rod and the drawer-locking mechanism for unlocking the drawer simultaneously with the movement of the roller, substantially as described.

2. In a cash-register, the combination of a cabinet, a series of drawers within the cabinet, each one provided with a locking mechanism consisting of a catch-finger mounted on the drawer and a pivoted draw-arm adapted to engage the catch-finger, a top for the cabinet provided with a series of slots or openings, one for each drawer, a platform beneath each slot or opening over which a record-strip is adapted to travel, drums or rollers adapted to mount the record-strips, a ratchet-wheel for one of the drums or rollers, a rearwardly-extending rod adapted to engage the teeth of the ratchet-wheel, a pivoted bell-crank lever on the end of the rod, a depending draw-rod connected with the end of the bell-crank lever and adapted to raise the draw-arm of the cooperating drawer out of engagement with the catch-finger thereon and allow the drawer to be opened, substantially as described.

3. In a cash-register, the combination of a cabinet, a series of drawers within the cabinet, a top for the cabinet provided with a series of slots or openings therein, one for each drawer, a platform over which a record-strip is adapted to travel, drums or rollers adapted to mount the record-strip, a ratchet-wheel for moving the drums or rollers, a rearwardly-extending rod adapted to engage the teeth of the ratchet-wheel and terminating in a pivoted bell-crank lever, a push-button adapted to depress the end of the rod and bring the same into engagement with the ratchet-wheel, a pivoted dog adapted to engage the rod to forwardly project the same, a lever for moving the dog to move the ratchet-wheel, a spring adapted to hold down the end of the bell-crank lever, a depending draw-rod pivoted to the end of the bell-crank lever, a locking mechanism for each of the drawers consisting of a rearwardly-projecting catch-finger and a pivoted draw-arm adapted to engage therewith, one of the draw-arms being connected with each of the draw-rods for simultaneously moving the roller and opening the drawer cooperating therewith, substantially as described.

CHARLES H. SMITH.

WILLIAM F. ST. CLAIR.

Witnesses as to Smith:

EDGAR M. SWAN,

ALBERT D. EARLY.

Witnesses as to St. Clair:

HENRY LEMHOLD,

A. R. ANDREWS.