(No Model.) 2 Sheets—Sheet 1.

G. D. STRAYER.

CASH DRAWER AND MANUAL SALES RECORDER.

No. 497,141. Patented May 9, 1893.

Fig. 1.

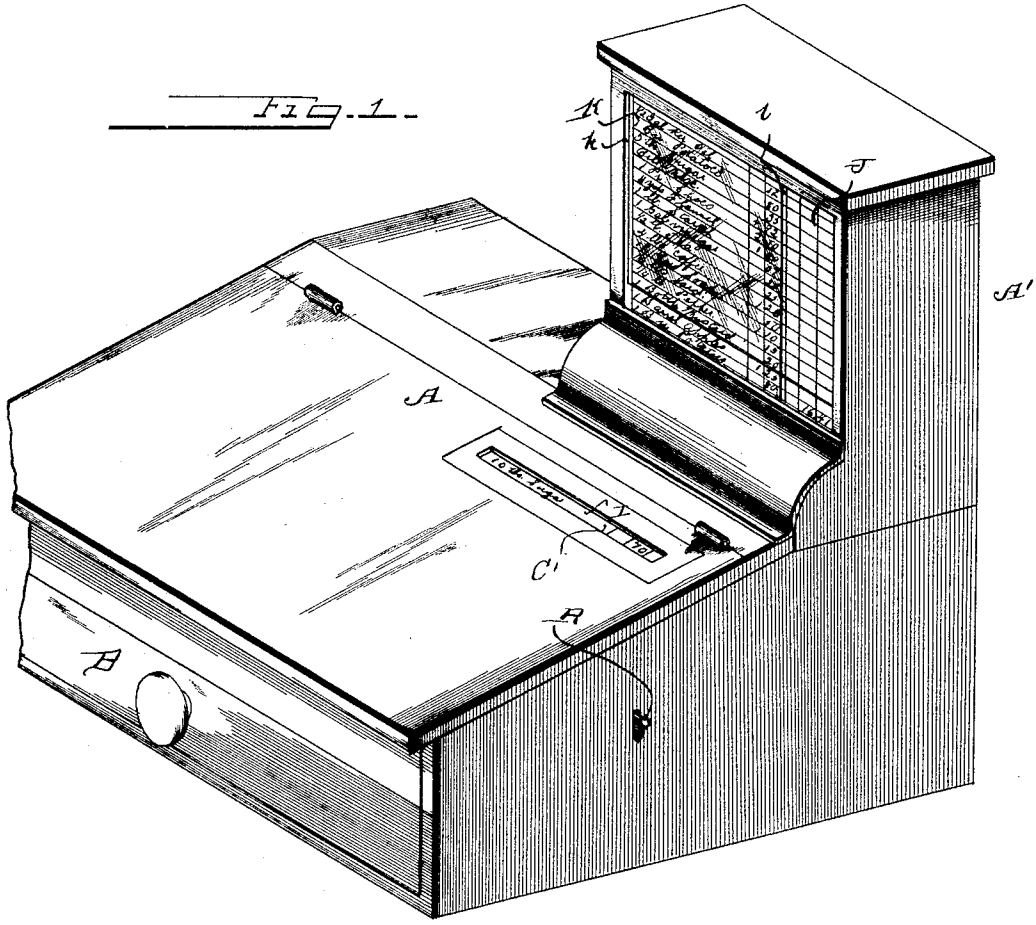
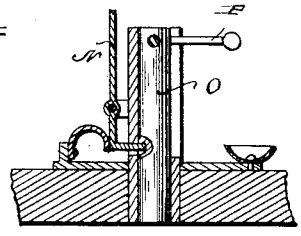


Fig. 4.



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(No Model.) 2 Sheets—Sheet 2.

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CASH DRAWER AND MANUAL SALES RECORDER.

No. 497,141. Patented May 9, 1893.

Fig. 2.

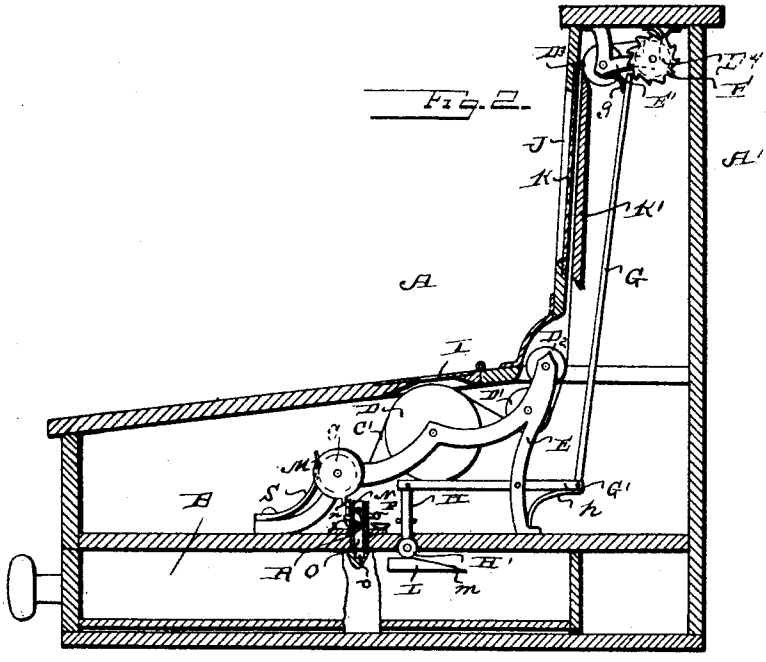
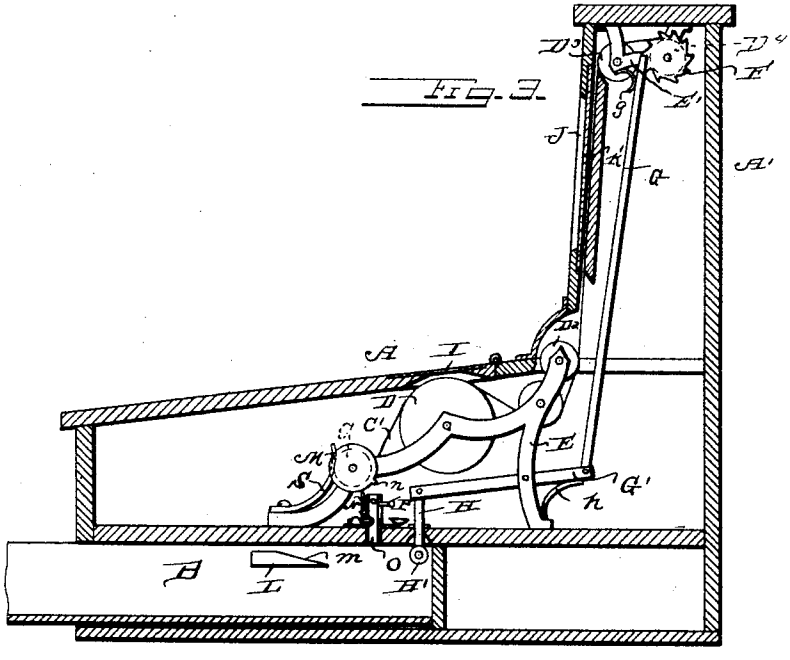


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE D. STRAYER, OF EAST STROUDSBURG, PENNSYLVANIA.

CASH-DRAWER AND MANUAL SALES-RECORDER.

SPECIFICATION forming part of Letters Patent No. 497,141, dated May 9, 1893.

Application filed December 31, 1892. Serial No. 456,895. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. STRAYER, a citizen of the United States, and a resident of East Stroudsburg, in the county of Monroe and State of Pennsylvania, have invented certain new and useful Improvements in Cash-Drawers and Sales-Recorders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a perspective view of the invention. Fig. 2 is a vertical longitudinal section of same and Fig. 3 is a similar view operated. Fig. 4 is an enlarged detail view of the locking devices for the drawer.

This invention has relation to certain new and useful improvements in cash drawers and sales recorders, the object being to provide a simple and efficient device for use by merchants and others, by which to keep a record of sales, together with the total amount of same, so that at the close of a day's business, the total value of the sales may be readily ascertained; and the invention consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the accompanying claims.

Referring to the accompanying drawings, the letter A indicates the inclosing case or frame, having a horizontal portion which incloses the cash drawer, and an upper vertical extension A′, the arrangement and interior devices of which will be hereinafter described.

In the horizontal portion A of the case, above the sliding drawer B, is journaled a roll C, upon which is designed to be wound the paper or ribbon C′, upon which the transactions are to be recorded. From the roll C, the paper passes to and over a second roll D, thence to and under third and fourth rolls D′, D^2, located in the upper forward angle of the case, thence upwardly through the front portion of the upper case A′, at the upper portion of which said paper passes over a fifth roll D^3, and is wound upon a sixth roll D^4. The said rolls are journaled in brackets E, E′, secured within the casing.

On one end of the roll D^4 is secured a ratchet wheel F, having a holding pawl or stop *a* to prevent the reverse or backward movement of said wheel and roll, said wheel being also engaged by a pawl lever G, the lower end of which is pivotally jointed to the rear portion of a horizontal bar or lever G′, which is fulcrumed intermediately to the bracket E, and at its forward end is loosely connected to short vertical arm H, which at its lower end projects through into the cash drawer chamber, and carries thereat a small wheel H′. The pawl lever G is held in engagement with the teeth of the ratchet wheel by a spring *g*, and the rear portion of the horizontal bar or lever G′ is supported by an upwardly-pushing spring *h*.

Directly over the highest point of the second roll D, which is usually made larger than the other rolls of the series, is a transverse opening I, through which the items are written or recorded on the paper C′, and in the front portion of the upper case or extension A′, is a larger opening J, immediately in front of the paper C′, as it passes from the roll D, to the upper roll D^3. This opening from *k* to *l* at the left hand side, has a glass K which covers the item column of the paper, and the dollar and cent columns, leaving the remainder of the paper to the right exposed.

K′ is a band which is placed behind the paper, in order that the latter may be written upon.

Secured to the cash drawer is a block L, having the upper edge of its rear portion formed with an incline *m*, and the block is so placed that when the drawer is pushed all the way in, the wheel H′ will run up said incline, and will run down the incline when the drawer is pulled out.

The operation of the device is as follows:—When a sale is made, it is recorded upon the paper through the opening I. The drawer is then pulled out to receive the coin or check, which operation causes the wheel H′ to travel down the incline *m*, allowing the vertical arm H to fall. At this time, the spring *h* throws the pawl lever upwardly, moving the ratchet wheel one notch, and winding the paper C′ to that extent on the roll D^4. When the drawer is closed, the pawl lever is forced to drop downwardly into engagement with the next

tooth of the ratchet. After several items have been thus recorded, and the paper has been carried successively ahead by each operation of the drawer, the items first recorded will commence to appear at the lower portion of the opening I; and as the operation is continued, after a time, the entire length of the paper in front of said opening is covered with the items. At this time, the column of items is footed up and the total written at the bottom to the right. The operation then continues again until the total is carried up to the top of the opening, when the new column of items is added up, and the sum added to the first total, and the result again written to the right at the bottom. At the close of business, the grand total will indicate the day's sales, with the exception of a few last items which will not have reached the opening, but which will require only a few moments' time to add to the total.

In order that the operator may not forget to add at the proper time, and items be carried by the opening without being added, I provide the following automatic locking device. I make the first roll C of such diameter that the length of the paper unwound therefrom at a single revolution shall correspond to the length exposed at the opening J. On the end of said roll, outside the bracket E, is a plain wheel or disk M, having projecting from its periphery a pin *n*, so located that when the roll has completed a revolution, it will engage with the arm of a small catch lever N, which engages a locking bolt O, adapted to fall into a socket *o* in the cash drawer. Upon the engagement of said pin with the lever N, the latter will be withdrawn from engagement with said bolt, which then falls into engagement with the drawer, and prevents its being withdrawn. Said bolt also has an arm P, which when the bolt falls, strikes a bell or gong, thus giving double notice of the proper time to add. After the items have been added the bolt is raised by means of a handle R, which projects through the case. S is a spring brake, the tension of which may be adjusted, and which bears upon the paper on the roll C, in order to give the proper tension to the paper.

Access to the interior of the case may be had by hinging the upper portion of the case A to form a door, and by forming a door in the rear of the case A'.

Although in the drawings I have illustrated an arrangement wherein the paper is extended vertically beyond the roll D^2, I desire it understood that I do not limit myself to such arrangement, as it is obvious that by slight modifications in the form of the case, and the pawl-lever connections, I may extend it horizontally or at any angle, without departing from the spirit and scope of the invention. It will also be understood that I do not confine myself to the particular number of carrying rolls, as shown and described.

By the use of this device, the necessity for merchants and others to spend considerable time after busines hours in adding up the cash accounts is obviated.

Having described this invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an accounting machine, the combination with a case or closure, and the vertical extension thereof, of a cash drawer operating in the lower portion of said case or closure, a series of paper-carrying rolls journaled in said case or closure, and in the extension thereof, a ratchet on one of said rolls, a pawl lever engaging said ratchet, a cam block carried by said cash drawer, mechanism operated by said cam block upon the opening of said drawer, for operating said pawl lever, and a device for automatically locking said drawer at the proper time, substantially as specified.

2. In an accounting machine, the combination with a case having a cash drawer operating therein, a paper carrying roll, and guide rolls, journaled in said case, a paper or ribbon carried thereby, and a recording opening through said case above said paper or ribbon, of the extension into which said paper or ribbon is carried, the guide roll and winding roll thereon, mechanism for automatically operating said winding roll when the cash drawer is operated, the opening in the front of said extension, and means for automatically locking said drawer at the proper time, substantially as specified.

3. In an accounting machine, the combination with the paper-carrying mechanism, and the mechanism operated by the cash drawer for operating said paper-carrying mechanism, of the case extension having the opening therein, the glass partially covering said opening, the back board for the paper, and means for automatically locking said cash drawer at the proper intervals, substantially as specified.

4. In an accounting machine, the combination with the case, the paper-carrying mechanism, and the paper carried thereby, of the cash drawer, the mechanism operated by said drawer for operating said paper-carrying mechanism, the bolt adapted to enter a socket in said drawer and form a lock therefor, the holding catch for said bolt, and means for automatically disengaging said catch when said paper-carrying mechanism and paper have been advanced a given movement, substantially as specified.

5. In an accounting machine, the combination with the paper-carrying rolls, and the mechanism for operating said rolls, of the cash drawer, the locking bolt therefor, the holding catch for said bolt and the pin or projection on one of said rolls arranged to engage said holding catch upon the complete revolution of said roll, substantially as specified.

6. In an accounting machine, the combination with the paper-carrying rolls, and the mechanism for operating said rolls, of the

cash drawer, the locking bolt therefor, the holding catch for said bolt, the pin or projection on one of said rolls arranged to engage said holding catch upon the complete revolution of said roll, means for raising said bolt, and an alarm sounded by said bolt, substantially as specified.

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

GEORGE D. STRAYER.

Witnesses:
W. W. WARNE,
W. H. LODER.