(No Model.)

F. M. TAGUE & J. T. POWER.

CASH REGISTER.

No. 283,531. Patented Aug. 21, 1883.

Fig. 1.

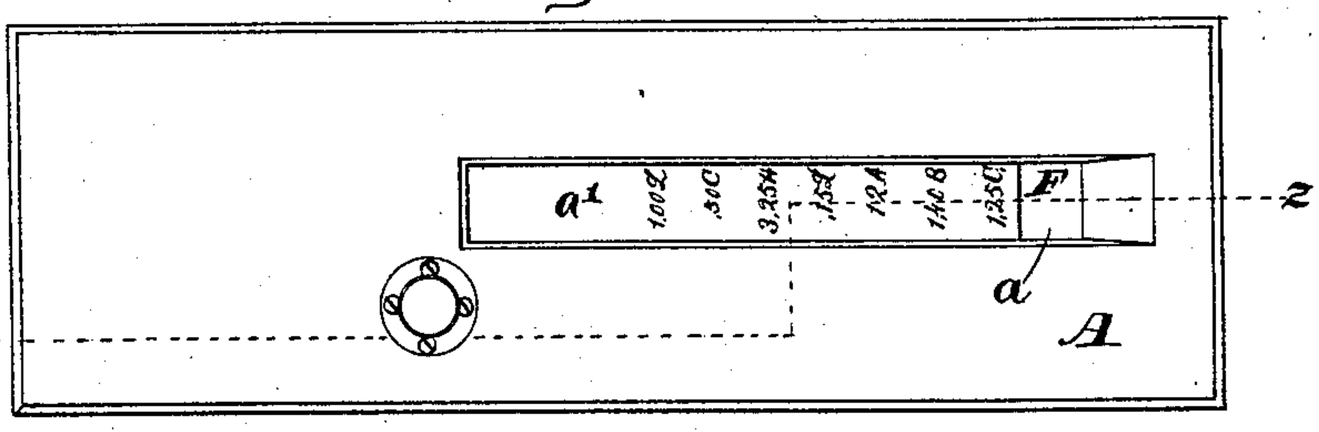


Fig. 2.

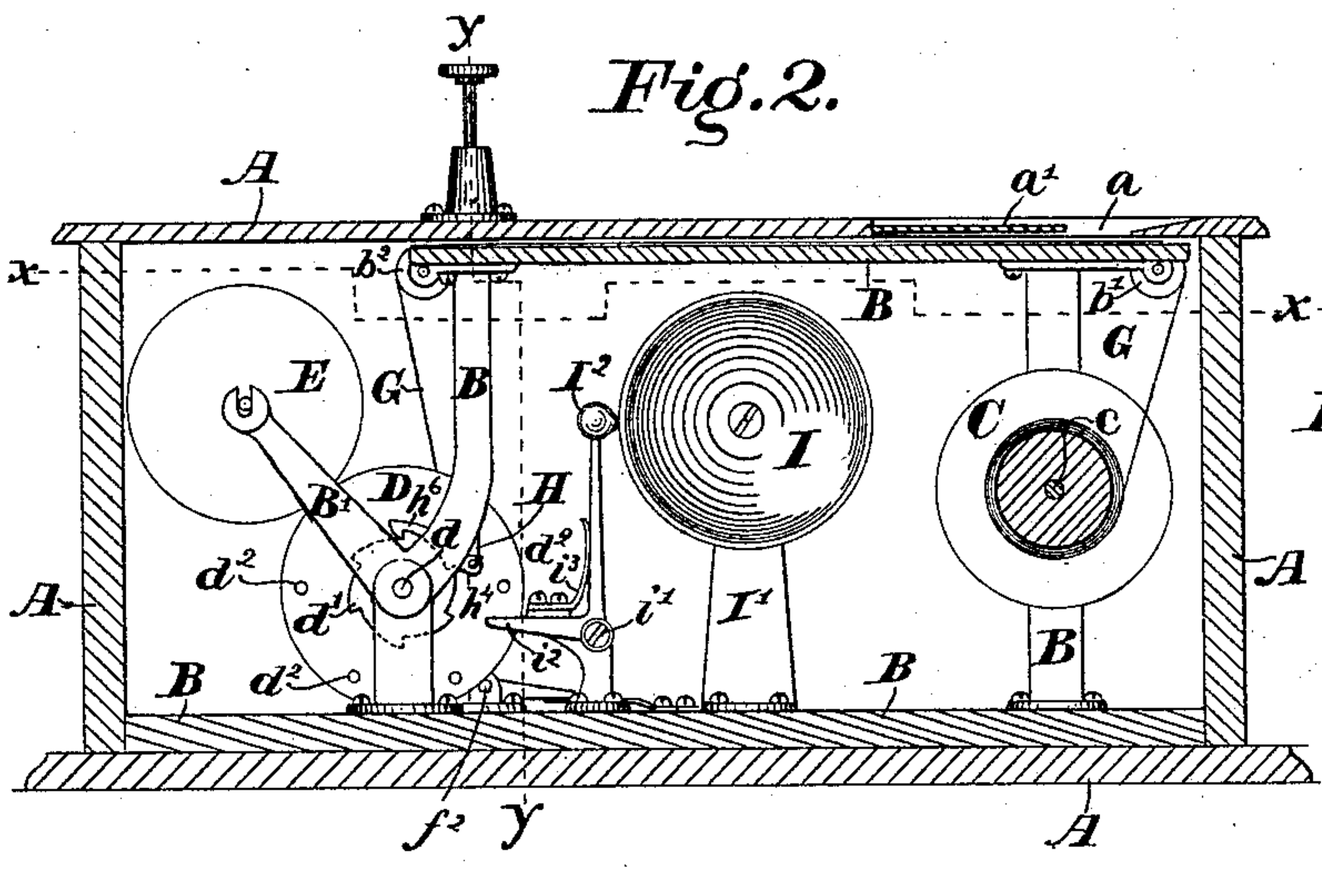


Fig. 3.

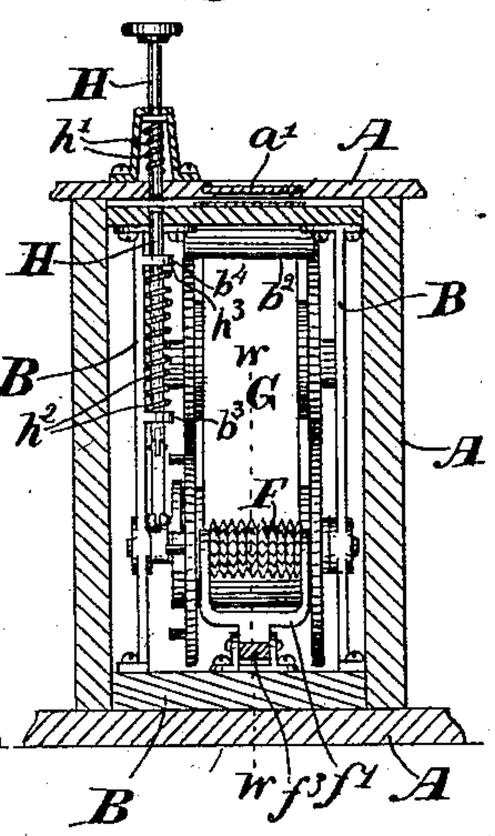


Fig. 4.

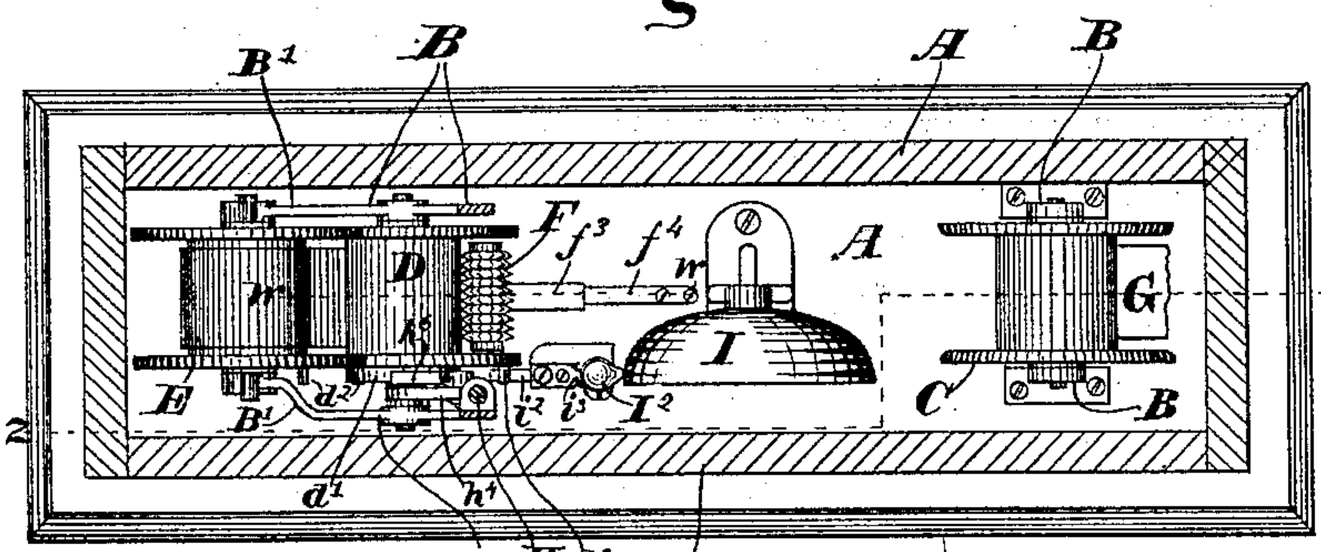


Fig. 5.

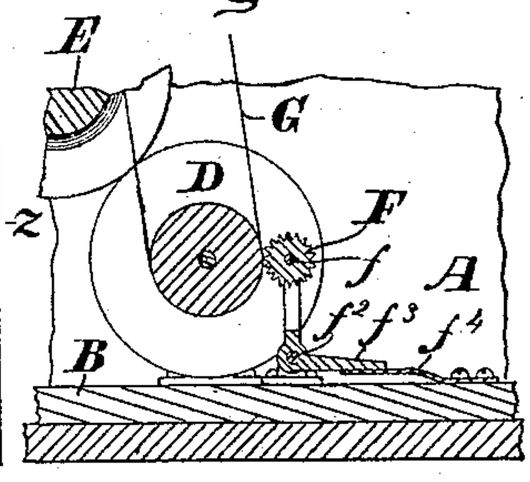
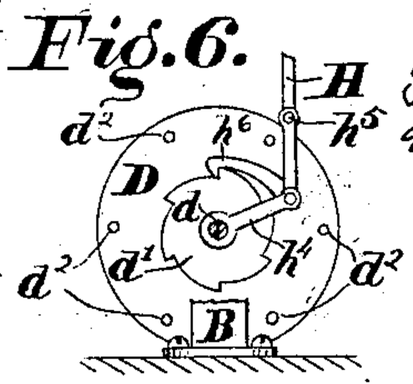


Fig. 6.



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FRANCIS M. TAGUE AND JESSE T. POWER, OF INDIANAPOLIS, INDIANA.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 283,531, dated August 21, 1883.

Application filed May 5, 1883. (No model.)

To all whom it may concern:

Be it known that we, FRANCIS M. TAGUE and JESSE T. POWER, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Cash-Registers, of which the following is a specification.

The object of our said invention is to produce a device by means of which sales may be registered in a convenient and permanent manner, and after being registered a change in the entry is made impossible, thus insuring as far as possible that the sum total of the entries made and the cash in the drawer at the end of a day's business shall fully correspond.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a top or plan view of our invention as it appears when in use; Fig. 2, a longitudinal vertical section on the dotted line *z z;* Fig. 3, a transverse vertical section on the dotted line *y y;* Fig. 4, a horizontal section on the dotted line *x x;* Fig. 5, a sectional view on the dotted line *w w*, and Fig. 6 a detail view, showing the ratchet and pawl connections.

In said drawings, the portions marked A represent the outside casing; B, the frame-work in which the mechanism is mounted; C, the spool bearing the unused paper; D, a cylinder against which the rotary puncturing-die operates; E, a spool which receives the paper after being used; F, the rotary puncturing-die; G, a strip of paper; H, a push-pin, and I an alarm or signal bell.

The top or one end of the case A is adapted to be removed, and thus allow the frame-work B with the mechanism thereon to be taken out. Said top or end is usually hung upon hinges, and provided with a lock in order that only the proper person can have access to the entries upon the strip of paper contained within. The top is also provided with an opening, *a*, which is located directly over the strip of paper G, and the greater portion of which is filled with a glass, *a'*, leaving an open space at one end through which the entries are made on said paper. By means of this glass several of the entries last made are exposed to view; but being under the glass cannot be changed. Instead of this case A the mechanism may be placed in a money-drawer with the opening and glass in the counter and the push-pin mounted thereon. In some cases this may be desirable.

The frame-work B is adapted to slide in and out of the case A, and to have all of the mechanism mounted thereon except such as is upon the top of the case A. The top portion of this frame-work serves as a table, over which the paper passes along under the opening *a*, and is provided at the ends with rollers b' b^2, over which the paper passes in coming onto and leaving the table. Arms B' are provided upon the front portion of said frame-work, which serve to support the spool E.

The spool C is mounted upon a shaft, *c*, journaled in suitable bearings in the frame-work B, and carries the strip of paper G, whereon the entries are to be made.

The cylinder D is mounted on a shaft, which is also journaled in bearings in the frame-work B. Its periphery is preferably covered with some elastic material, as rubber. Upon its outer end is formed a ratchet-wheel, d', by which it is operated through the pallet h^6, and on the same end, upon a line nearer the periphery and parallel to it, are pins d^2, which operate the bell-hammer.

The spool E is similar to the spool C, and is mounted in suitable bearings on the arms B'. This is the spool on which the paper containing the entries is finally wound. The ends of said spool come in contact with the ends of the cylinder D, and said spool is thus operated by frictional contact. In order to prevent slipping, the surface is usually covered with rubber, leather, or some other like material.

The rotary puncturing-die F is mounted on a shaft, *f*, journaled in bearings on the yoke f'. Said yoke f' is pivoted at f^2, and has a tail-piece, f^3, under the outer end of which is a spring, f^4, which operates to hold the die against the cylinder D, and thus perforate the paper as it passes between said die and said cylinder. The strip of paper G is first wound upon the spool C. One end is then passed up over the roller b', along the table-piece, over the roller b^2, down around the cylinder D, passing between said cylinder and the rotary puncturing-die F, and up to the spool E, where it is fastened,

The push-pin H is constructed in two separate parts, one of which is mounted on the top of the case, and the other in the lugs b^3 b^4 on the frame-work B, and so arranged that upon pressing down the upper portion it comes in contact with the lower portion and presses that down also. After being pressed down the upper portion is carried back by the spring h', and the lower portion by the spring h^2, which is located between the lug b^3 upon the frame B and the pin h^3, running through the lower portion of the push-pin H. The lower end of the push-pin is connected to the shaft d by a link, h^4, and has a short distance from the end a joint, h^5. The straight portion then passes up along the inside of the frame B, through the lugs b^3 and b^4, and meets the upper portion, which is mounted upon the top of the case A. A pallet, h^6, is pivoted to the lower end of the push-pin H at the same point at which the link h^4 is connected thereto, which said pallet engages with the ratchet-wheel d', and thus, when said push-pin is operated, said ratchet-wheel and the cylinder D are partly rotated.

The bell I is an ordinary alarm or signal bell mounted upon a standard, I′, in the ordinary manner, and adapted to be sounded by the hammer I^2, as follows: The stem of said hammer is pivoted at i', and has a tail-piece, i^2, which projects out under the pins d^2 on the end of the cylinder D. Back of the vertical portion of the stem is secured the spring i^3, which operates to press the hammer against the bell. Thus, when the cylinder is partially rotated, one of the pins, d^2, comes down upon the tail-piece i^2 and presses it downward until it passes, when the spring immediately operates to throw the hammer forward against the bell and thus sound the alarm or signal. The object of this is to inform the person operating the device when he has pressed the pin H down far enough, so that the pallet h^6 will engage with another notch of the ratchet-wheel when released, the pins d^2 being especially arranged and adapted for the accomplishment of this purpose.

The operation of our said invention may be described as follows: The spools, with the strip of paper thereon and the other mechanism, are first properly arranged and mounted on the frame B, and said frame is placed in the case A or other receptacle prepared therefor. The frame is so located in the case that the portion of the push-pin which is upon said frame comes directly under the portion which is mounted on the top of the case and the strip of paper directly beneath the opening a. Upon making a sale the salesman, at the time of receiving the cash, makes the proper entry upon the said paper through the opening a, and then presses down upon the push-pin H. This operates to move the pallet h^6, which, being engaged with the ratchet-wheel, operates to partially rotate the cylinder D, and this, in turn, by means of the frictional contact therewith, partially rotates the cylinder E, to which the end of the paper ribbon is attached. This operation, as will be readily understood, pulls the paper along a short distance, and, as it passes between the cylinder D and the rotary puncturing-die F, it is thoroughly perforated, thus making it impossible to alter the entries after the paper containing them has once been wound upon the spool E. Each time the push-pin is operated one of the pins, d^2, presses down past the horizontal portion of the hammer-stem and sounds the bell, as before described.

The spools may be readily removed at any time when it is desired to replenish the supply of paper or examine the registrations. At the close of the day's business the proprietor, chief clerk, book-keeper, or whoever has charge of the matter removes the strip of paper from the spool E and foots up the entries which have been made thereon. If the sum total corresponds with the amount of cash in the drawer, it is evident that the proper amount of cash has been turned in by the selling-clerks at each sale.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

In a cash-recorder, the combination of the frame B, carrying-wheels C D E, the paper G, the bell I, the right-angular striking-lever I^2, and the push-spring i^3, with the push-rod H, working in lugs b^3 and b^4, the coiled spring h^2, ratchet-wheel d', connecting-link h^4, the pivoted rotating puncturing-wheel F, having arm f^3, and lifting-spring f^4, all arranged and operated substantially as shown and specified.

In witness whereof we have hereunto set our hands and seals at Indianapolis, Indiana, this 2d day of May, A. D. 1883.

FRANCIS M. TAGUE. [L. S.]
JESSE T. POWER. [L. S.]

In presence of—
C. BRADFORD,
E. W. BRADFORD.