

(No Model.)

T. M. KENNA & W. O'CONNOR.
CASH INDICATOR AND RECORDER.

No. 467,740.

Patented Jan. 26, 1892.

Fig. 1

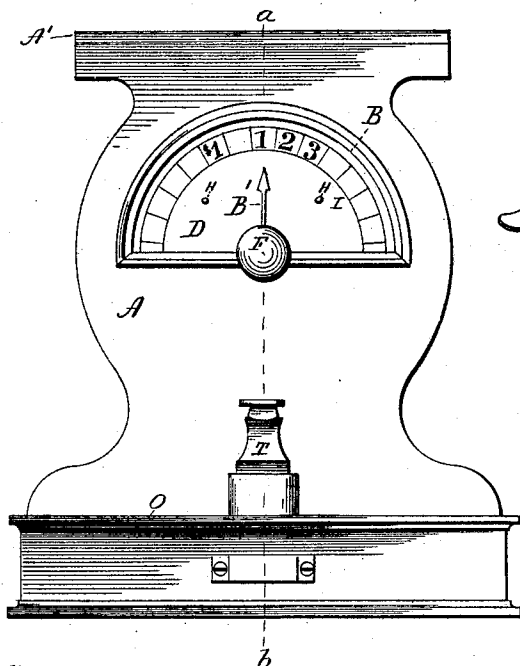


Fig. 6

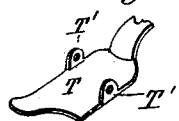


Fig. 3

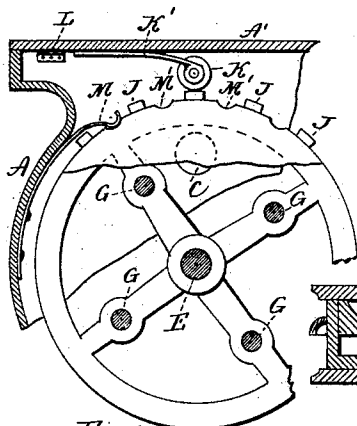


Fig. 2

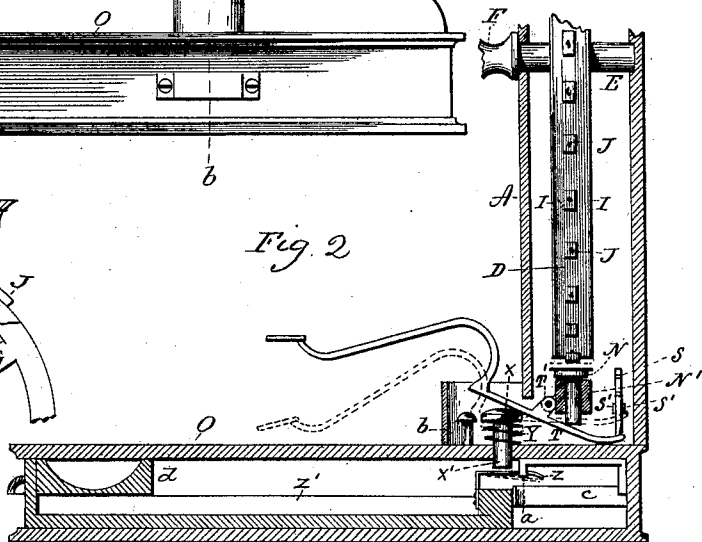


Fig. 4

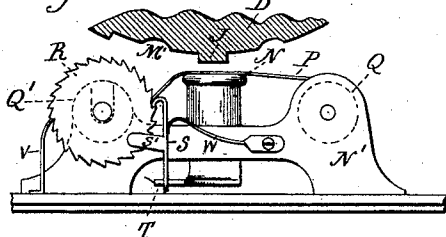
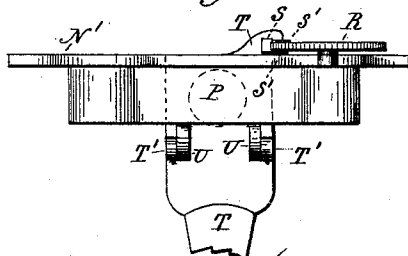


Fig. 5



Witnesses
Dejiman Zunder
Lillian D. Kelsey.

Thomas M. Kenna,
and William O'Connor
by Attys. Earle Heyman

UNITED STATES PATENT OFFICE.

THOMAS M. KENNA, OF NEW HAVEN, CONNECTICUT, AND WILLIAM O'CONNOR, OF BINGHAMTON, NEW YORK, ASSIGNORS TO EDWARD O'CONNOR AND CHARLES WOODRUFF, OF BINGHAMTON, NEW YORK.

CASH INDICATOR AND RECORDER.

SPECIFICATION forming part of Letters Patent No. 467,740, dated January 26, 1892.

Application filed September 21, 1891. Serial No. 406,344. (No model.)

To all whom it may concern:

Be it known that we, THOMAS M. KENNA, of New Haven, county of New Haven, State of Connecticut, and WILLIAM O'CONNOR, of Binghamton, in the county of Broome and State of New York, have invented a new Improvement in Cash Indicators and Recorders; and we do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in front elevation of a cash-recorder constructed in accordance with our invention; Fig. 2, a broken view thereof in vertical section on the line *a b* of the preceding figure; Fig. 3, a detailed view, partly in section and partly in front elevation, showing the wheel, the spring-stop therefor, and the inking-roller; Fig. 4, a view in rear elevation of the mechanism for feeding the tape and lifting the same into contact with the type on the wheel; Fig. 5, a plan view of the same parts with the wheel removed; Fig. 6, a broken perspective view of the inner end of the operating-lever.

Our invention relates to an improvement in cash indicators and recorders, the object being to produce at a low cost a simple, durable, and accurate device.

With these ends in view our invention consists in a cash indicator and recorder having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

The upright portion A of the case of the device is provided in its front wall with a semicircular opening B and in its rear wall with a small circular opening C. (Shown by dotted lines in Fig. 3 of the drawings.) A pointer B', fixed to the front wall of the said portion of the case, rises in the center of the semicircular opening B and assists the eye in setting the wheel D, which is mounted on a horizontal shaft E, journaled in the said portion A of the case and exposed through the said openings and adapted to be manually rotated by means of a handle F, forming a continuation of the forward end of the said

shaft E. The said wheel is preferably made of metal cast in one piece, in the form of arms, and a rim, its arms having plugs G made of wood inserted into them to receive tacks H, (see Fig. 1,) by means of which numbered dials I are secured to the opposite faces of the wheel, the periphery of which is provided with type J, preferably formed of rubber and corresponding to the numbers on the dials. We do not, however, limit ourselves to the use of a cast-metal wheel, or to the use of paper dials or rubber type; but however constructed the wheel will have type upon its periphery and numbers corresponding there-to upon its opposite faces.

An inking roller or pad K is journaled in the outer end of a spring K', fastened to the inner face of a lid A', secured by hinges L to the extreme upper end of the upright portion A of the case, the said lid forming the top of the said portion of the case and affording access to the inking-roller for renewing the ink upon the same. A spring-stop M, secured to the case, is arranged to enter stop-notches M', formed in the wheel between the type, whereby the type are centered over the vertically-movable presser-block N, located directly below the center of the wheel and mounted in a casting N', located in the bottom of the upright portion A of the case and attached to the top of the horizontal portion O of the case. The said presser-block is designed to lift to engagement with the type a paper tape P, the ends whereof are wound upon two rollers Q and Q', journaled on horizontal axes in opposite ends of the casting N'. The axis of the roller Q' is provided with a ratchet-wheel R, which is actuated in turning the said roller, and therefore feeding the tape under the wheel by means of an upright pawl S, having its upper end toothed to engage with the teeth of the said wheel, while its lower end is pivotally connected with the extreme inner end of the operating-lever T, which is constructed with two perforated lugs T' T', located opposite each other, for pivoting it to corresponding lugs U U, projecting outwardly from the outer face of the casting N'. The said pawl is constructed with two arms S' S', extending on opposite sides of the wheel, to prevent the

pawl from lateral displacement. A small spring V, also engaging with the teeth on the opposite thereof from the pawl, prevents its retrograde movement. A spring W, pressing against the outer face of the pawl, holds the same in engagement with the teeth of the wheel. The presser-block N, before mentioned, rests upon the inner end of the operating-lever at a point between its fulcrum and the operating-pawl S, whereby when the outer end of the lever is depressed its inner end will be elevated and lift the presser-block and the pawl. The said operating-lever is held in its normally-elevated position, in which it is shown by full lines in Fig. 2 of the drawings, by means of a button X, having a long stem X', which is encircled by a spiral spring Y, interposed between the inner face of the button and the top of the horizontal portion O of the case, and exerting a constant tendency to lift the operating-lever into its elevated position. The lower end of the said stem X' passes through the said top of the lower portion of the case in position to engage with a spring-catch Z, attached to the inner end of the drawer Z', and constructed at its inner end with a small opening to receive a locking-pin a, with which the spring is engaged when the drawer is closed, so as to prevent the same from being opened. A screw b, located in front of the button X, forms an adjustable stop for regulating the play of the operating-lever. A spring c, located within the horizontal portion of the box, is arranged to engage with the inner end of the drawer, so as to automatically push the same out into its open position, when it is unlocked by the clearance of the spring-catch Z from the pin a. A bell located within the case, but not shown herein, is arranged in any approved manner to be rung when the drawer is opened.

The operation of the device is as follows: A sale having been made, the wheel is turned by its handle until the number on its outer dial corresponding to the amount of the purchase is brought into line with the pointer B'. At the same time the corresponding number on the rear dial has been brought into range with the small aperture C in the rear wall of the case, so that if the recorder is placed between the salesman and the purchaser the latter may know that the recorder is being truly operated. In case the recorder is placed on a stand back of the salesman the front of the dial will be exposed to both the salesman and the purchaser. Our device is therefore adapted to be used equally well in either of the two positions suggested. The number corresponding to the amount of the purchase having been brought into line with the pointer B', the operating-lever is depressed, whereby the presser-block will be lifted to press the tape against the type above it, whereby the tape is printed with a number corresponding to the amount of the purchase, for the type and numbers are arranged so that when a number is brought into line with

the pointer a type corresponding to that number will stand over the presser-block. Now when the operating-lever is relieved of pressure the spring Y will immediately restore it to its normal position, and in doing so cause the ratchet-wheel R' to be rotated by the pawl S, whereby the tape is fed along over the presser-block, so as to present a new surface to the next type which it is lifted against. When the operating-lever was depressed, the stem X' of the button X cleared the spring-catch Z from the pin a and permitted the spring c to throw the drawer open. Change having been made or the amount of the purchase having been placed in the drawer, the same is closed and automatically relocked by the re-engagement of the spring-catch Z with the pin a. The drawer cannot now be opened again until the operating-lever is depressed and without again ringing the bell.

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

1. In a cash indicator and recorder, the combination, with the case thereof, of a wheel mounted therein on a horizontal axis and provided upon its periphery with type and upon its faces with numbers corresponding thereto, an inking roller or pad mounted within the case in position to engage with the type on the wheel, means for manually rotating the wheel, two tape-rollers, a vertically-movable presser-block located between the same for lifting the tape carried by them against the type, a ratchet-wheel carried by one of the said rollers, a pawl engaging with the said wheel, and an operating-lever for operating the said block and pawl, substantially as described.

2. In a cash indicator and recorder, the combination, with a case having its upright portion constructed with front and rear openings and with a lid which forms its top, of a wheel mounted on a horizontal axis in the said portion of the frame and provided upon its periphery with type and upon its front and rear faces with numbers corresponding thereto, an inking roller or pad carried by a spring attached to the inner face of the said lid, means for manually rotating the wheel, two tape-rollers located beneath the wheel, a vertically-movable presser-block located between the rollers, a ratchet-wheel carried by one of the rollers, a pawl for engagement with the said wheel, and an operating-lever for operating the pawl and presser-block, substantially as described.

3. In a cash indicator and recorder, the combination, with a case having its upright portion constructed in its front with a large semi-circular opening and in its rear face with a small opening, of a wheel mounted on a horizontal axis in the said portion of the frame and provided upon its periphery with type and upon its opposite faces with numbers corresponding thereto, means for manually rotating the wheel,

two tape-rollers located beneath the wheel, a vertically-movable presser-block located between the said rollers, a ratchet-wheel carried by one of the rollers, a pawl engaging with the said ratchet-wheel, and an operating-lever for operating the presser-block and pawl, substantially as described.

4. In a cash indicator and recorder, the combination, with the case thereof, of a wheel mounted therein on a horizontal shaft and provided upon its periphery with type and upon its faces with numbers corresponding thereto, means for manually rotating the wheel, two tape-rollers located beneath the wheel, a ratchet-wheel carried by one of the rollers, an upright pawl having its upper end hooked to engage with the teeth of the wheel, an operating-lever having the lower end of the pawl pivoted to its extreme inner end, a vertically-movable presser-block having its lower end engaged with the inner end of the said operating-lever, springs for preventing a retrograde movement of the wheel and for holding the pawl against the teeth thereof, and a spring

for holding the outer end of the operating-lever in a normally-elevated position, substantially as described.

5. In a cash indicator and recorder, the combination, with a case having its upper portion constructed with an opening in its front and in its rear face, of a wheel mounted in the said portion of the case on a horizontal shaft and made of cast metal, wooden plugs set into the arms of the said wheel, type fixed to its periphery, dials numbered in accordance with the said type fixed to the opposite faces of the wheel by tacks driven into the said plugs, means for rotating the wheel manually, a tape, and means for lifting the same against the type and for feeding it, substantially as described.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

THOMAS M. KENNA.
WILLIAM O'CONNOR.

Witnesses:

FRED. C. EARLE,
LILLIAN D. KELSEY.