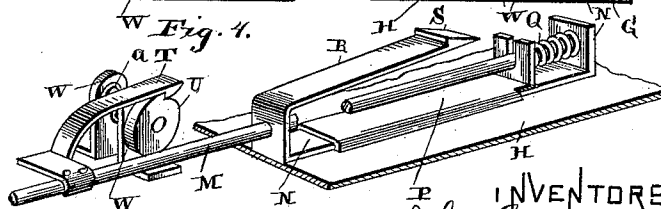
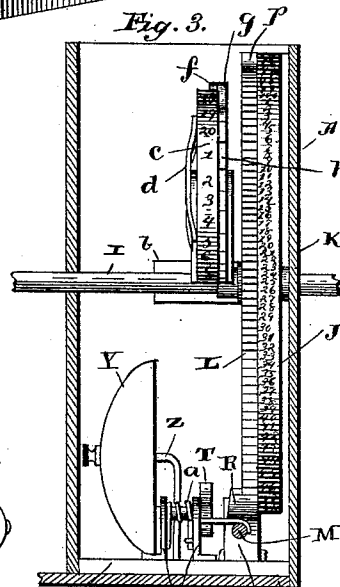
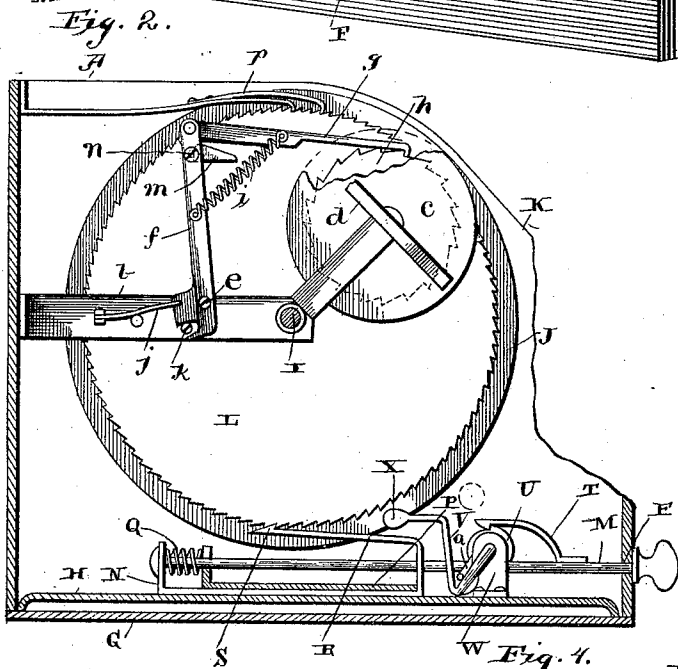
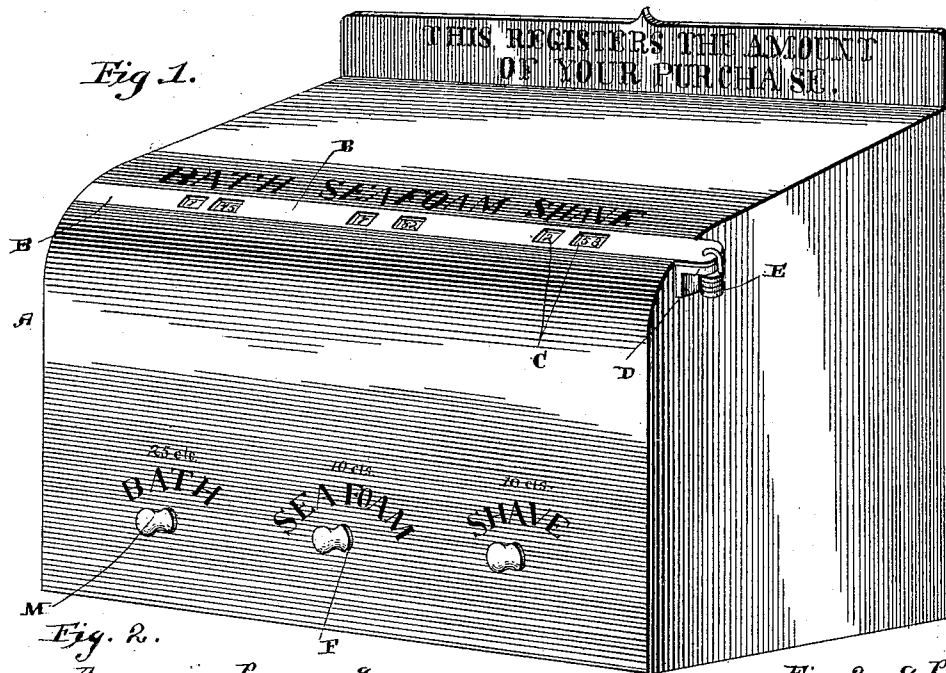


(No Model.)

J. GOODENBERGER & L. AKINS.
CASH REGISTER.

No. 487,922.

Patented Dec. 13, 1892.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN GOODENBERGER AND LEST. AKINS, OF AKRON, OHIO.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 487,922, dated December 13, 1892.

Application filed February 12, 1892. Serial No. 421,307. (No model.)

To all whom it may concern:

Be it known that we, JOHN GOODENBERGER and LEST. AKINS, of Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Cash-Registers; and we do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to improvements in cash-registers; and it consists in the construction and arrangement of parts which will be fully described hereinafter, and particularly pointed out in the claims.

The object of our invention is to produce a cash-register of the construction hereinafter shown and described, which comprises a wheel for denoting the fractions of a dollar, that is operated by a pull-rod, and a wheel operated by the large wheel for denoting the dollars, and an alarm operated directly by the pull-rod, the parts being simple and cheap.

In the drawings, Figure 1 is a perspective view of a case in which our machine is placed. Fig. 2 is a side elevation of a machine which embodies our invention. Fig. 3 is a front edge view. Fig. 4 is an enlarged detached perspective view of the bell-operating mechanism, the pull-rod, and its catches.

A indicates a case, preferably of the form here shown, which is provided with a slot in the front of its upper portion to receive a slide B, which is provided with perforations C. This slide is to allow access to the machine for the purpose of setting it to zero at any desired time. In order to prevent the machine from being tampered with by the removal of this slide, we provide the end of the case with a perforated lug D or staple and perforate the end of the slide B and pass through the said perforation and the lug a lock E. In this manner the machine or machines within the box cannot be tampered with for the purpose of setting them, except by some one having a key for the lock. The front side of this case A is also provided with a series of openings through which the pull or operating rods of the several machines extend for the purpose of operating them. Placed within this

case A will be any suitable number of the machines, to be described presently, one machine for each opening F and for each pair of perforations C. Each machine will be for indicating a prescribed sum, as indicated upon the case.

G indicates the bottom of the box or case A, to which a base-plate H is secured in any suitable manner. The case A will have extending through it longitudinally a horizontal rod I from end to end, upon which the large operating-wheel J is journaled; also, the case A will preferably, though not necessarily, be provided with a vertical transverse wall K for each machine, and against one side of this wall the large wheel J is journaled. This wheel J is provided with a series of numbers indicating cents, nickels, dimes, quarters, or half-dollars, or even dollars, if desired. These figures show through the large perforations C of the case A. Placed upon the opposite side of the wheel J from the vertical wall K is a ratchet-wheel L, which has a tooth for each number that is upon its periphery. There may be any desired number of teeth to this wheel, as will be understood, but preferably a hundred, so that it can be divided into fives, tens, twenty-fives, and fifties. This wheel J is operated by means of a pull or operating rod M, which extends through one of the perforations F of the case A. This rod M has secured to its inner end a slide N, which has both ends turned upward, as shown, and through which upturned ends the rod passes and is rigidly secured. The top plate P of this slideway has its inner end also turned upward, and the spring Q is placed between the upturned ends of the slide and to plate, as shown, and serves to pull the rod M inward after it has been drawn out to operate the wheel J. Secured rigidly to the outer upturned end of the slide N and extending inward is a spring R, which has a ratchet or catch end S, which engages with the ratchet-teeth of the wheel J. Owing to the spring R, the catch S is held always in contact with the ratchet-teeth of the wheel J. The slide N is allowed just sufficient movement to take or pass one tooth of the wheel J when it is pulled out. In this way the wheel J is moved one tooth only each time the rod is operated.

For the purpose of sounding a bell each

time the machine is operated we provide the rod M with a spring-ratchet T, which is held to one side thereof. This ratchet T engages a projection U upon the inner end of a spring-actuated clapper V, that is journaled in two short vertical lugs W. The other end of this clapper-rod V is bent inward and has secured thereto a ball X to strike a bell Y, that is supported in any suitable manner upon a rod Z. This bent end of the clapper-rod is bent so that it rests upon the base-plate H before the ball strikes the bell. The clapper-rod is held in this position by means of a spring a, which is wound around it between the lugs and has one end resting upon the bent end of the clapper and the other end extending downward and resting upon the base. Owing to the fact that the bent end of this clapper rests upon the base, it is stopped before the ball strikes the bell, thus keeping the ball out of contact therewith after it has been struck, so that a clear sound is given. The ball strikes the bell owing to the spring of the end to which it is attached after the arm has been stopped by contact with the base, as will be understood.

A frame b is secured to the rear side of the case A and extends forward past the shaft which passes through it and has journaled to its end a disk c. This disk c is made thick enough to have figures upon its edge which will represent dollars. The outer end of the frame b is bifurcated, between which the disk is journaled, as shown, and secured to the outer bifurcated end is a transverse spring d, which has its ends engaging the outer surface of the disk and causes friction thereon to prevent it from turning accidentally.

Pivoted at the point e upon the frame b is a vertical lever f, which has pivoted to its upper end a pawl g. This pawl extends forward and engages a ratchet-wheel h upon its inner side, and this ratchet-wheel is provided with a tooth for each number that is upon the edge of the disk c. A spring i is secured at one end to the pawl g and at its other end to the pivoted lever f, which holds the pawl normally in contact with the ratchet-wheel h upon the inner side of the disk c. A spring j is suitably supported upon the frame b and extends forward and has its forward end engage the lower end of the lever f at one side of its pivotal point for holding the lever in an upright position. The lever is limited in its movement against the pressure of the spring by means of a stop pin or screw k, which engages the lower end of the lever below its pivotal point.

Placed upon the outer side of the ratchet-wheel of the large wheel J is one or more lugs m, which as the wheel J revolves engages the inner end of a screw n, which extends inward from the upper end of the lever f. By this means the lever is operated or forced inward each time the lug engages with this screw, and this movement of the lever draws the pawl g and operates the wheel or disk c. We here

show only one lug upon the ratchet-wheel L for operating the lever f, and by this construction each time the large wheel J is revolved once the small disk c is moved one notch, as will be understood. However, we do not limit ourselves to any particular number of lugs, for, if desired, a lug may be placed upon the wheel J for every ten teeth thereof, as when the machine is to register dimes, and in this way the small disk c will be operated one tooth each time the large wheel is operated ten times, thus indicating the dollars, or they may be placed for every twenty teeth, as when indicating nickels, or for every four teeth, as when indicating quarters. As here shown, the small wheel c moves one notch for every revolution of the large wheel and keeps a record of the revolutions of this large wheel, as will be understood. In this way the machine can be used to indicate any desired sum—that is, to register how many times it has been operated—and each one of the figures on the large wheel can be used to represent any desired amount, as will be understood. Then by multiplying the figure exhibited upon the large wheel by the figure exhibited upon the small wheel the number of nickels, dimes, or quarters will be ascertained. The large wheel is held against backward rotation by means of the pawls p, which extend over and engage the upper periphery of the ratchet-wheel J.

By means of a register of this character, which contains several machines, it is only necessary to pull the knob which represents the amount it is desired to register. Then by adding up the combined amount indicated upon the several machines which are in the single case A the total amount of money handled is obtained, as will be understood.

If it is desired to manufacture a cheap register for use in small stores where there is but little trade, the frame b and the wheel c may be omitted and the large wheel, pull-rod, and bell alone be used, as will be understood.

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

1. A register comprising a casing, a large wheel having a ratchet-wheel, a rod extending through the casing, upon which the said wheel is journaled, a frame having one end secured to the said casing, and its front end extending beyond and supported by the said rod, a small wheel journaled upon this extended end, carrying a ratchet-wheel, a spring-actuated lever pivoted upon the said frame inside of the rod, a pawl pivoted to the free end of the lever and engaging the ratchet of the small wheel, the large wheel having a projection for engaging and operating the said spring-actuated lever, an operating-rod carrying a pawl which engages the ratchet of the large wheel, the peripheries of the two wheels having numerals, as described, and the casing having openings through which the peripheries of the wheels are visible, substantially as specified.

2. A register comprising a large and a small indicating-wheel carrying each a ratchet-wheel, a reciprocating operating-rod, a slide having its ends bent upward, to which the rod
5 is attached, a pawl secured to one of the upwardly-bent ends and engaging the large ratchet-wheel, a cover for the slide, having an upwardly-bent end, and a spring placed between the end of the cover and the adjacent
10 end of the slide, substantially as specified.

3. A register comprising two registering-wheels, each having ratched-wheels, a lever and pawl operated by the wheel for actuating
15 the other wheel, a horizontal operating-rod extending under the ratchets of one wheel

and provided with a pawl for engaging it, a spring-actuated shaft at one side of the said operating-rod carrying a bell-clapper at one end and a lateral projection at its opposite end, a bell for the clapper, and a second pawl
20 upon the said operating-lever which engages the lateral projection of the clapper-shaft, all operating substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN GOODENBERGER.

LEST. AKINS.

Witnesses:

W. E. PARDEE,

GEO. K. PARDEE.