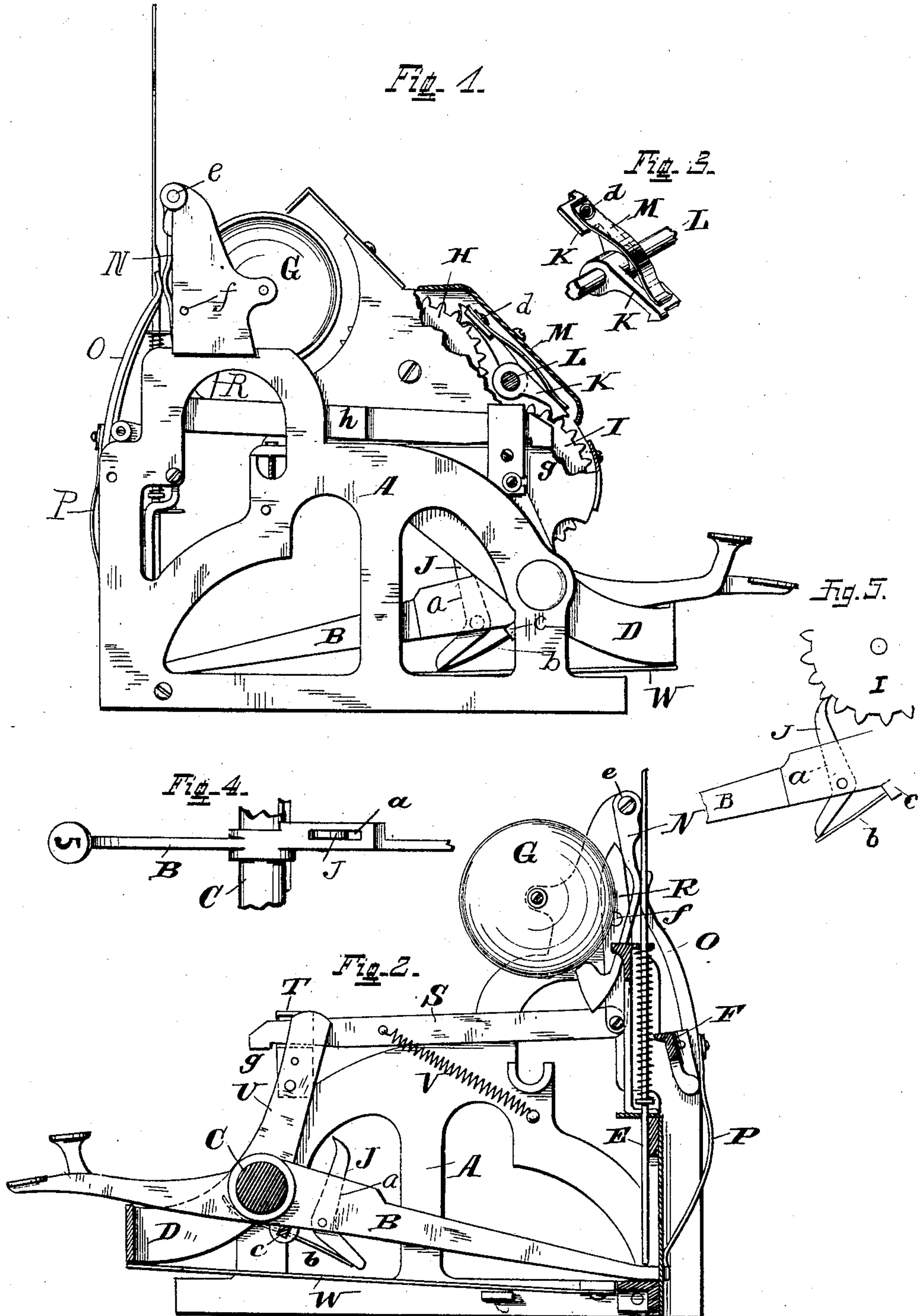


(No Model.)

C. H. MALTBY.  
CASH REGISTER AND INDICATOR.

No. 321,988.

Patented July 14, 1885.



Attest  
Carl Spengel  
E. W. Dickson

Inventor  
Clinton H. Maltby  
by Henry Beck his Atty.



# UNITED STATES PATENT OFFICE.

CLINTON H. MALTBY, OF DAYTON, OHIO, ASSIGNOR TO THE NATIONAL CASH REGISTER COMPANY, OF SAME PLACE.

## CASH REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 321,988, dated July 14, 1885.

Application filed January 2, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, CLINTON H. MALTBY, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Cash Registers and Indicators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to an improvement in cash registers and indicators designed for the use of store-keepers and others as a means of accurately registering the total cash receipts for any given period of time—as for a day—and for indicating to the customers that the amount paid has been registered by disclosing to their view such amounts upon figured tablets.

Like the machine shown in Patent No. 271,263, dated January 30, 1883, to Ritty and Birch, and like the machine described in my pending application, Serial No. 106,983, filed September 21, 1883, upon both of which this is an improvement, the arrangement and operation of the parts is such that no tablet can be exhibited without its value being counted upon the registering mechanism, and whenever any tablet is disclosed it remains so until the machine is operated to disclose a second tablet.

The novelty consists in the construction, combination, and arrangement of the parts, as will be herewith set forth, and specifically claimed.

In the accompanying drawings, Figure 1 is a side elevation of my improved machine removed from its case. Fig. 2 is an interior side elevation showing the gong-operating mechanism and its connections. Fig. 3 is a detailed perspective view of a pair of disk-holding dogs. Fig. 4 is a partial plan view of one of the operating-keys. Fig. 5 is a detail view.

The same letters of reference are used to indicate identical parts in all the figures.

The general construction of the machine may be that of my application before referred to, and need not be described further than to say that A is the frame; B, the operating-keys journaled upon the shaft C; D, the vibrating frame, which is operated whenever any key is depressed; E, the tablet-rods; F, the tablet-

supporting wing, and G the bell or gong. H I are the sets of the double bank of registering-disks of the same construction as in my application before referred to, and adapted to be reset to their zero or starting point by a single revolution of their shafts.

The first feature of my invention consists in a spring, *b*, fastened at *c*, and bearing against the lower horizontal portion of a bell-cranked dog, J, one of which is pivoted in the slot *a* of each of the key-levers, and is adapted to engage with the teeth of the spur-disks I to turn the same one notch when the key is operated. By this construction the dogs are held from lateral play, and their true and constant engagement with the disks I is the more effectually insured.

The second feature of my invention consists in the holding-dogs for both pairs of disks. These holding-dogs K are strung in pairs upon a single shaft, L, as seen in Figs. 1 and 3, and each pair is held in constant engagement with the teeth or notches of the disks by a single spring, M, which is fastened, as at *d*, to the extremity of one of the dogs, and bears at its opposite end upon the extremity of the other dog, thus enabling me to simplify and cheapen the construction by having a single spring for each pair of dogs. At the same time each dog can vibrate independently of the other as the action of the machine requires.

The third feature of my invention consists in the gong-hammer tripping mechanism, and will be readily understood by reference to Figs. 1 and 2, where N is the hammer, pivoted at *e*, and against which bears an arm, O, extending from the wing F, and held under spring-pressure by the spring P, which controls the action of both the wing and hammer. R is a lever-arm pivoted at *f*, with its upper end bearing against the hammer N, and having pivoted to its lower end a latch-bar, S, passing through a recess in a plate, T, adjustably secured to the upward extension U of the vibrating frame D. This latch-arm is provided with an engaging-shoulder, *g*, as shown. V is any suitable spring for holding the latch-arm down in engagement with the lower wall of the recess in the plate T. Whenever the frame D is depressed by the operation of any of the keys, the latch-arm S is thrown forward, thereby



throwing back the hammer N and wing F until the forward tilting of the arm U and plate T has raised the shoulder *g* out of engagement with the plate T, whereupon the retraction of the spring P would throw the wing F in and cause the hammer to strike the gong. This release of the arm S would only take place when the key had been depressed to its farthest limit, and by means of the adjustability of the plate T this could always be insured and the wear of the parts be taken up. The latch-arm S is provided with any suitable stop, *h*, which, coming in contact with the frame of the machine, would limit the forward play of the arm and prevent its going so far forward as to become disengaged from the plate T. The return of the frame D by means of the springs W would cause the re-engagement of the shoulder *g* with the plate T, as will be readily understood.

Having thus fully described my invention, I claim—

1. The combination, in a cash registering and indicating machine having a disk, I, provided with teeth, of keys B, arranged as described, and provided with slots, in which are pivoted the vertical portions of bell-crank dogs, having the horizontal portions, each of

which depends below the key, and springs *b*, secured to the under side of each key, and having their free ends bearing against said lower portion of the dog, thereby holding the same in engagement with the teeth of the disk I and preventing lateral play of the dog in said slot, substantially as set forth.

2. The combination, in a cash registering and indicating apparatus, having the disks H I, of the shaft L, the holding-dogs strung in pairs upon said single shaft L, and extending in different directions, as described, a spring for each pair of dogs secured to one of the same and having its free end bearing on the other dog, substantially as set forth.

3. The combination, in a cash registering and indicating apparatus, of a series of keys, a frame, D, adapted to be vibrated by any one of said keys, a gong and operating mechanism therefor, and wing mechanism, latch-arm S, provided at its outer end with a shoulder, *g*, and a plate, T, to guide and retain said latch, substantially as set forth.

CLINTON H. MALTBY.

Witnesses:

WILLIAM B. SULLIVAN,  
HENRY THEOBALD, Jr.