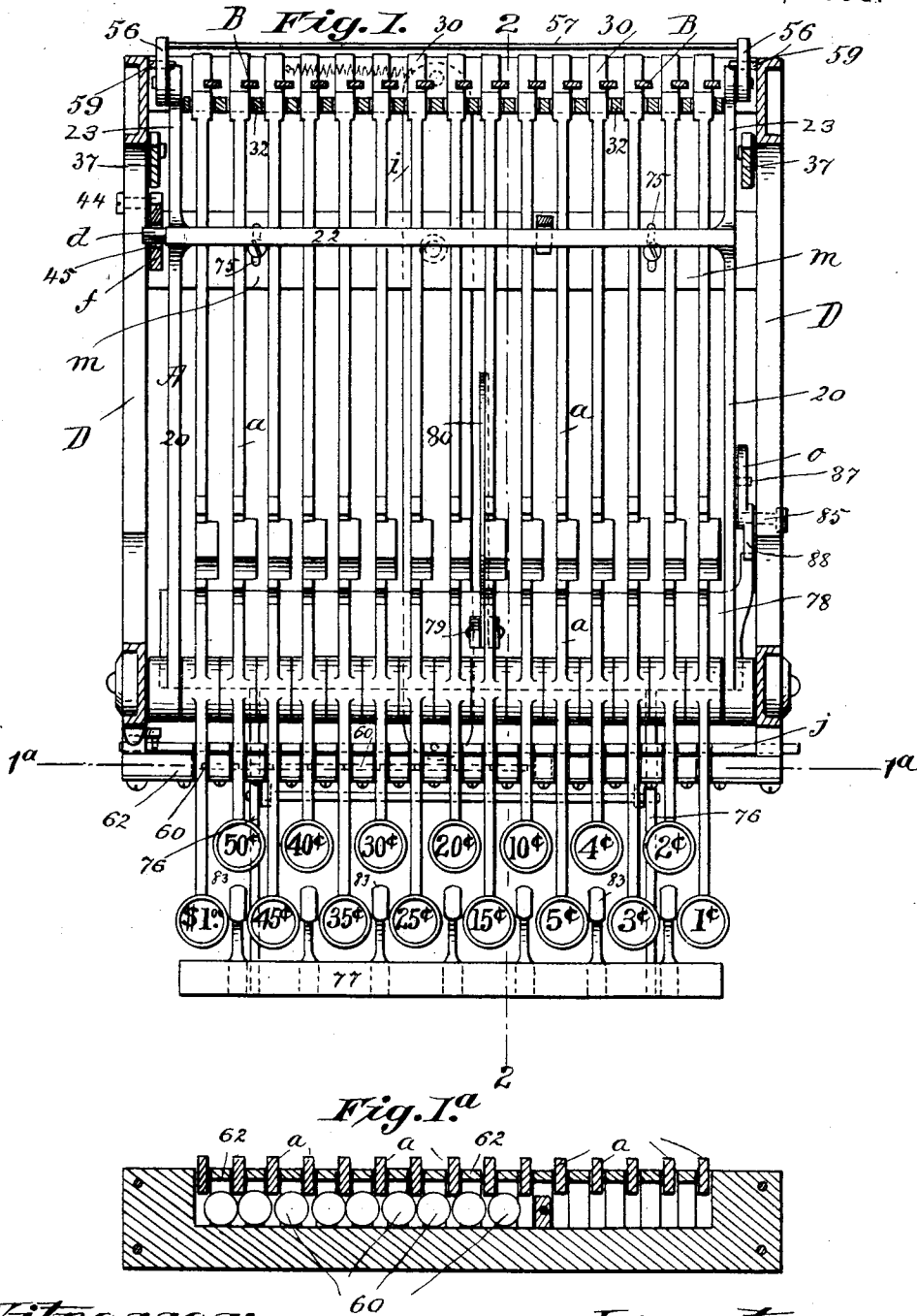


F. L. BAILEY.

REGISTERING AND INDICATING MACHINE.

No. 536,414.

Patented Mar. 26, 1895.



Witnesses:

J. D. Goffey
H. J. Clemens

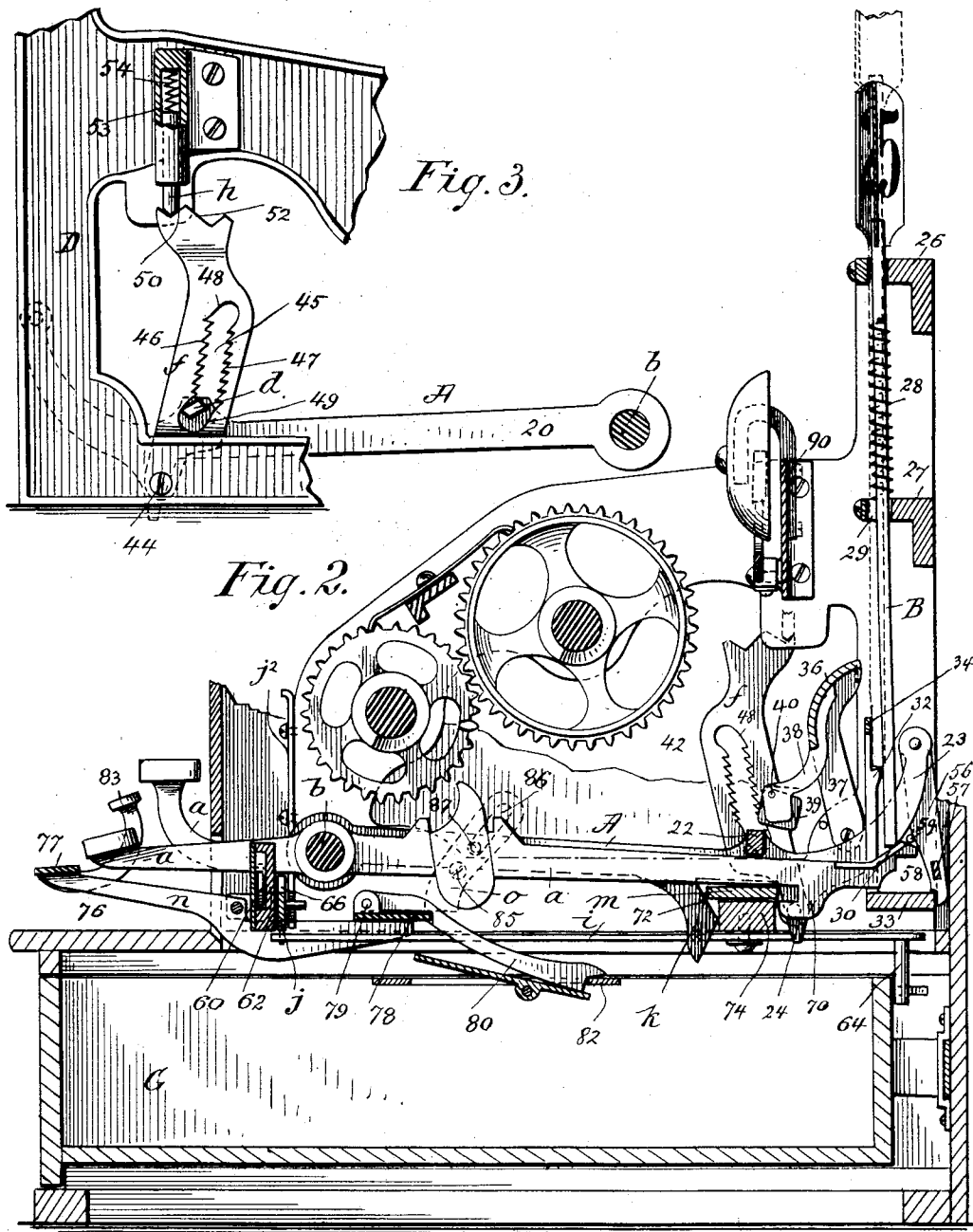
Inventor,

Fortune L. Bailey
per *Chapman & Co.* attys.

F. L. BAILEY.
REGISTERING AND INDICATING MACHINE.

No. 536,414.

Patented Mar. 26, 1895.



Witnesses:
J. W. Garfield
H. J. Clemons

Inventor,
Fortune L. Bailey
per Chapman & Co.
Attys

(No Model.)

4 Sheets—Sheet 3.

F. L. BAILEY.
REGISTERING AND INDICATING MACHINE.

No. 536,414.

Patented Mar. 26, 1895.

Fig. 5.

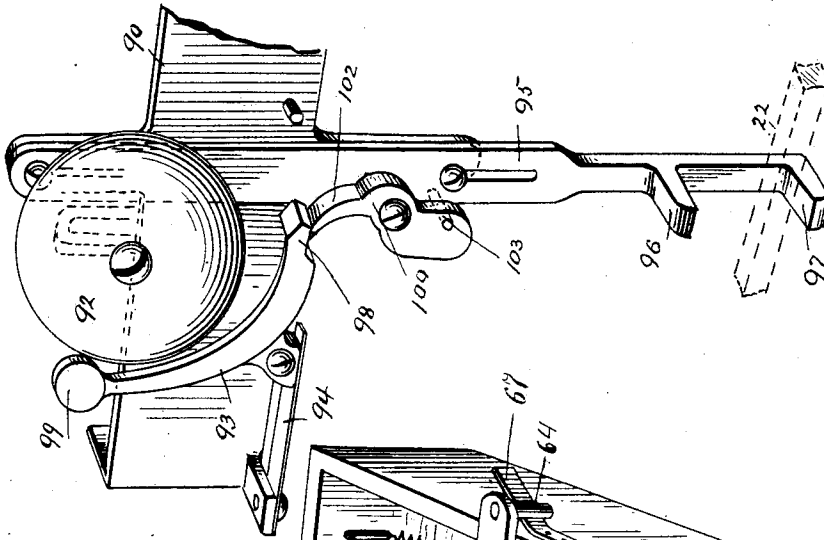
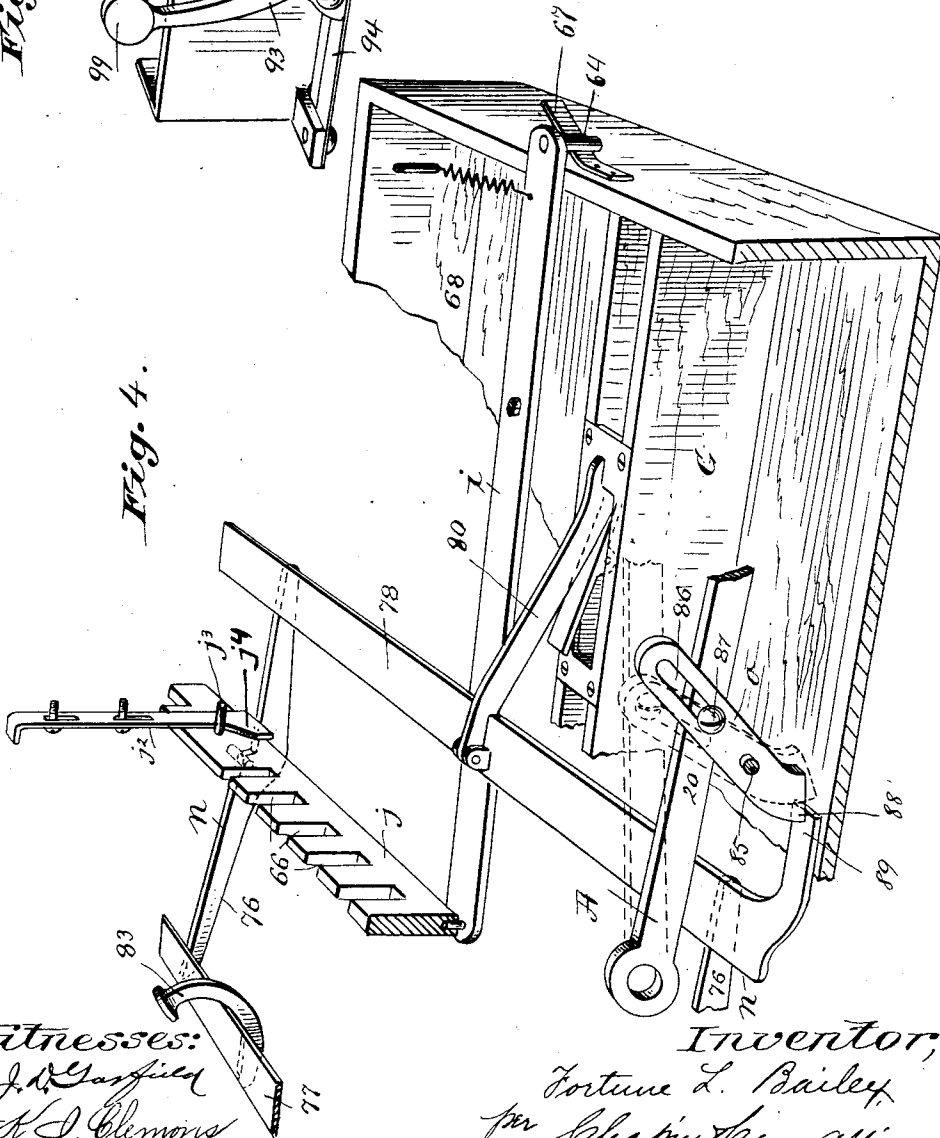


Fig. 4.



Witnesses:

J. D. Garfield
H. C. Clemens

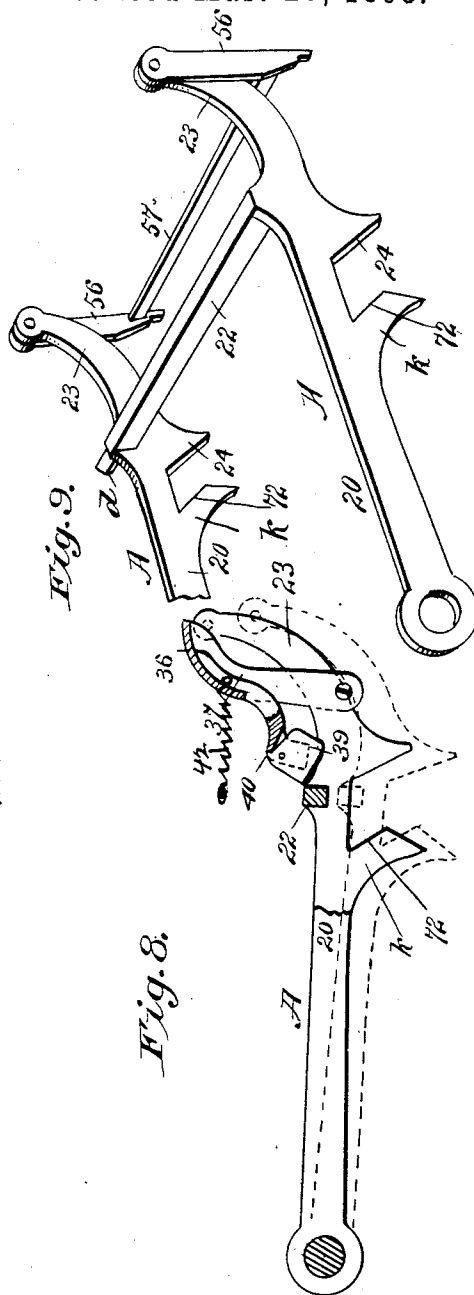
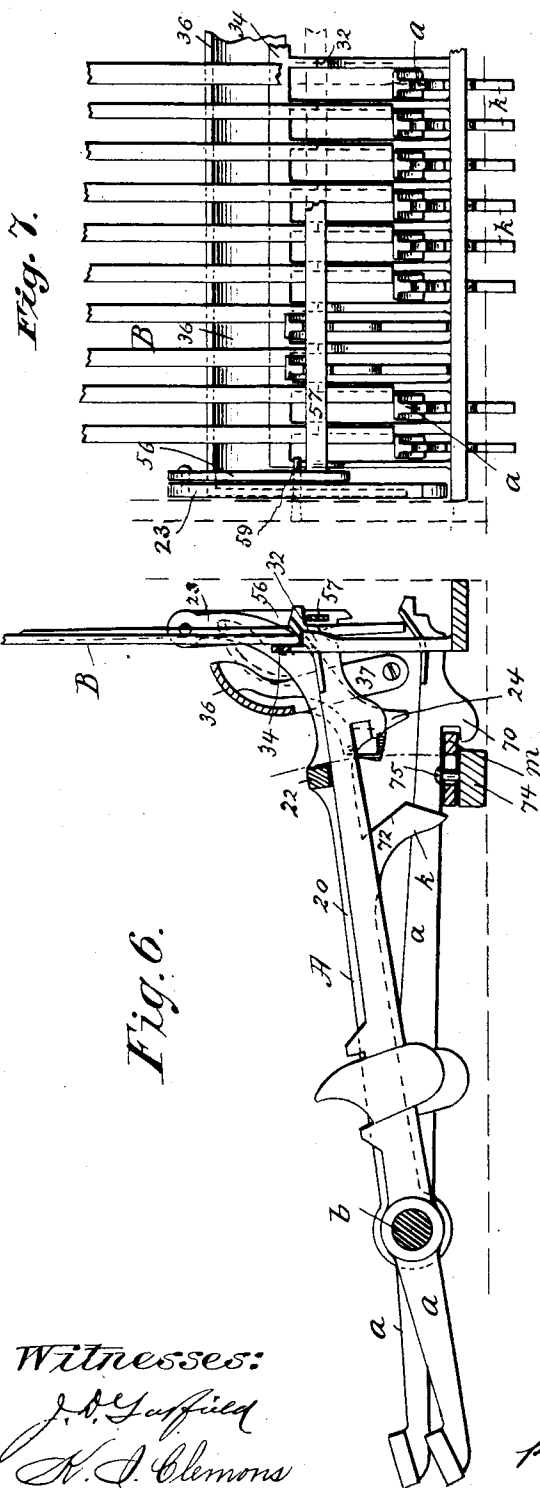
Inventor,

Fortune L. Bailey
per *Chapman & Atty.*

F. L. BAILEY.
REGISTERING AND INDICATING MACHINE.

No. 536,414.

Patented Mar. 26, 1895.



UNITED STATES PATENT OFFICE.

FORTUNE L. BAILEY, OF NORTHAMPTON, MASSACHUSETTS, ASSIGNOR TO
THE BOSTON CASH REGISTER COMPANY, OF SAME PLACE.

REGISTERING AND INDICATING MACHINE.

SPECIFICATION forming part of Letters Patent No. 536,414, dated March 26, 1895.

Application filed May 25, 1893. Serial No. 475,523. (No model.)

To all whom it may concern:

Be it known that I, FORTUNE L. BAILEY, a citizen of the United States, residing at Northampton, in the county of Hampshire and State of Massachusetts, have invented new and useful Improvements in Cash Registering and Indicating Machines, of which the following is a specification.

This invention relates to improvements in cash registering and indicating machines of the well known type in which numbered key-levers are employed for operating the registering wheels and for displaying at each registration an indicator tag corresponding to the amount registered.

The improvements pertain to the particular construction of the rear members of the key-levers and their combination or arrangement with the tag spindles and with supports for the tag spindles, whereby any key on its depression will elevate the spindle of the indicator corresponding to such key, and force it laterally to a position upon the tag spindle support; a new, simplified, and specific construction of improved anti-pumping device for the keys, that is, a device which prevents any return movement of a key after it has commenced its working movement, until such working movement is entirely finished, and which also prevents any movement of the key in its working direction after it has commenced to return and until the key has resumed its normal position; a locking device for the key-levers which is operated by the one or more key-levers which are simultaneously started in their working movements, all of the key-levers not so started then becoming locked against being moved until the so started key-levers have resumed their normal positions; an improved device which is automatically movable relative to the key-levers to prevent their movements, and which is movable by the cash drawer in its closing, so as to leave the key-levers then free to be operated; to mechanism for holding the drawer locked and which may be released at the pleasure of the operator independently of the operation of a key; and to other constructions and combinations of parts, all substantially as will hereinafter fully appear; and the invention therefore consists in devices and

mechanisms and the construction of parts, all as will be hereinafter fully set forth and specified in the claims.

In the accompanying drawings, Figure 1 is a horizontal section with the parts in plan view of the cash registering machine, the plane of section being understood as taken just above the key-levers. Fig. 1^a is a vertical cross section of a part of the machine taken on the line 1^a—1^a, in Fig. 1. Fig. 2 is a sectional elevation of the cash register machine taken from front to rear thereof, a part only of the inclosing cabinet being indicated. Fig. 3 is an elevation with some parts in vertical section taken at the rear side of the machine particularly showing the improved anti-pumping device. Fig. 4 is a perspective and vertical sectional view illustrating the mechanism for unlocking the cash drawer. Fig. 5 is a perspective view showing the improved bell-ringing device. Fig. 6 is a sectional elevation showing the indicator tag operating mechanism and also the key-coupling device; and Fig. 7 is a rear elevation of the same. Fig. 8 is a view in illustration of the device for restoring the indicator tags to their normal positions. Fig. 9 is a perspective view of the improved form of the rocking-frame.

Similar characters of reference indicate corresponding parts in all of the views.

The cash registering machine seen in sectional elevation, Fig. 2, is of the class known as a detail adding machine, but the present improvements are not essentially limited to such particular class of machines.

The key-levers *a, a*, are intermediately thereof pivotally supported in parallelism upon the stud or shaft, *b*, for their swinging movements in vertical planes, as usual. *A* represents the rocker-frame which consists of the two levers, 20, 20, united, toward their rear extremities, by the cross-bar, 22, the extremities of these levers being rearwardly and upwardly extended beyond the cross-bar, in the members, 23, 23. The forward ends of the levers, or frame members, 20, 20, are hung upon the aforesaid shaft, *b*, which constitutes the support and fulcrum for the key-levers, the cross-bar, 22, which may be termed "the universal bar," transversely overlying all of the key-levers of the series so that as

any one of the key-levers is operated the said frame, A, will be swung or rocked. This rocker frame has the laterally extended projection, *d*, which constitutes an element of the anti-pumping device to be hereinafter particularly described, and each of the side levers, 20, has the depending cam-formed member, 24, which is an operative element in the novel key-locking device, which will be hereinafter duly described and explained, together with the depending, inclined projections, *k*, *l*.

B B represent the indicators, the same comprising the spindles with the figured tags at their upper ends, and the indicator spindles are vertically guided through the supports, 26 and 27, thereof, and have springs, 28, for insuring their falling, after having been raised, and then released, to resume their normal position. The opening, 29, through the support, is widened, as seen in Fig. 2, so that there may be a proper degree of forward and rearward play of the indicator spindles.

Each of the key-levers has, at its rear extremity, the rearwardly and upwardly inclined surface, 30, upon which rests the lower end of the indicator spindle corresponding to the key-lever; and as any key-lever is operated the raising rear member formed with the incline, 30, will, in raising the indicator spindle, cam-force it forwardly so that at about the completion of the working movement of the key-lever the spindles will come to rest upon the step-formed support, 32, therefor. The step-formed supports for the indicators are arranged in a series which is extended transversely of the machine just forward of the plane in which the indicators stand when they are in their normal positions. These step-formed supports, 32, are arranged intermediately of the key-levers, they resting upon the stationary rail, 33, while their upper ends are joined by the uniting-bar, 34, for imparting rigidity to the structure, and the same may be integrally formed of cast metal, or otherwise. As indicated in Figs. 1 and 7 the indicator spindles have parts of their widths resting on the key-levers while the other parts of their widths which are offset from the key-levers are those which receive support by the rests, 32, therefor.

The keys, having been operated, one or more, to deposit the indicator or indicators upon the stepped supports therefor, may return to their normal positions leaving the indicators raised, the next operation, by any key-lever, insuring the displacement of the indicator spindles whereby they resume their normal positions (unless the key operated should be the one corresponding to the already elevated tag when, of course, its retention in the elevated position is insured, as necessary). The means for so displacing the elevated indicator tags will be now described in detail, and consists of a bar, 36, which is supported transversely of the machine, and above the rear members of the key-levers, by

the swinging arms, 37, which, at their lower ends, are pivoted at each side of the machine to the framing or other adequate support therefor.

The bar, 36, has the forwardly and downwardly extended arm, 38, the forward lower extremity of which is a pivoted dog or pawl, 39. This pivoted dog has the abutment piece, 40, (see Fig. 8) whereby its swinging movement, forwardly, relative to the arm, 38, which carries it, is limited, although the dog may have, as seen, a considerable degree of rearward swinging movement. The universal bar, 22, on the next operation of any key-lever will impinge against the dog, and thereby force the same and the bar, 36, rearwardly, the rear edge of the latter coming to the rearwardly forcing contact against the indicator spindles insuring their displacement to fall. This action is accomplished almost immediately, whereupon on the continued movement of the key the universal bar, 22, passes clear from and above the dog, and whereupon the parts, 36, 37, and 38, resume their normal positions, as insured by the spring, 42. When the universal bar returns to its normal position it freely passes by and below the dog, the latter rearwardly receding therefor.

The new and improved anti-pumping device will be now described.

On the inner side of the frame of the machine is pivoted an element, *f*, the pivot, 44, passing through the lower portion thereof and into the side of the framing, D, as indicated at 44, whereby said part, *f*, may have a forward and rearward swinging movement in a vertical plane. Within the part, *f*, is a slot, 45, having at the opposite boundaries thereof the ratchet-teeth, 46 and 47, and within the slot is extended the aforementioned projection, *d*, of the rocker-frame, A. This projection is of a diamond shape, thus presenting two angular parts which constitute a double pawl for engaging either the ratchet-teeth, 46 or 47, according as to whether the rocker-frame, A, is moving with the key upwardly or is downwardly returning.

It will be perceived that at the upper end of the slot, 45, is the cam-incline, 48, which is extended upwardly and forwardly and obliquely to the general length of the slot, while the slot has another oblique cam-incline, 49, below the set of ratchet-teeth, 47.

The rocker-frame, A, upwardly swinging upon the working movement of any key-lever of the series, causes the rearward tooth of the double pawl, *d*, to click past the ratchet-teeth, 46, and as soon as the rocker-frame completes its upward movement with the key-lever, the impingement of the rear tooth of the pawl, *d*, against the cam-incline, 48, swings the part, *f*, rearwardly carrying the teeth, 46, free from the rear tooth of the pawl, and bringing the ratchet-teeth, 47, in the line of the return movement of the forward tooth of the pawl, *d*. The rocker-frame, A, and key-lever commencing the return movement must, of course,

complete such movement before there can be any reverse movements of said parts, and upon the completion the impingement of the pawl against the cam-incline, 49, insures the reswinging of the part, *f*, to its normal position, and which is shown in Fig. 3. The member, *f*, is retained in either of its swung positions during the ascent or descent of the pawl, *d*, by a suitable spring-pressed detent, *h*, which automatically engages the inclined surfaces, 50 or 52.

The detent consists of a stud or bolt vertically movable in a socket, 53, therefor, within which socket is the spring, 54, which downwardly presses against the detent-stud; and this device is such that while insuring the retention of the part, *f*, in its proper position, the said part may have a slight vibratory movement as the pawl, *d*, rides over its teeth, as common in analogous pawl and ratchet mechanisms.

The coupling device will be now described, reference being had to Figs. 1, 2, 6, and 7, in which it will be seen that there is pivoted at the rear upwardly extended extremities, 23, of the side levers of the rocker-frame, the depending arms, 56, 56, carrying horizontally between them, and transversely, and normally back of the rear ends of the key-levers, the thin bar, 57. Each of the key-levers has at its rear end the formation of an inverted step, as seen at 58; and when the rocker-frame, A, is in its normal position, the lower extremities of the depending arms, 56, 56, are held rearwardly swung by the impingement of their forward inclined edges against the studs or projections, 59, which extend from the opposite inner sides of the framing. Now, if two or more of the key-levers are started together in their working movements far enough to cause a slight elevation of the aforesaid arms, 56, 56, said arms will be permitted to so forwardly swing as to bring the bar, 57, under the stepped rear ends of the so moved key-levers, and a continued movement positively imparted by the fingers to but one of these so started key-levers will cause the movement in unison therewith of the others, because the rocker-frame must move therewith and the thin bar, 57, is hung to such frame. On the return movement of this mechanism the bar, 57, is, with its carrying arms, rearwardly swung by the impingement of their forward inclined edges against the studs or projections, 59, as is already plain.

The key-levers are peculiarly constructed, and combined with a movable locking-bar, therefor, so that after one or two or more keys have been simultaneously started in their working movements all of the remaining keys, not so started, will be locked against movement; and reference being had to Figs. 2 and 6 it will be seen that each key-lever has, at its rear extremity, a downwardly extended hook-like member, 70, while somewhat in advance thereof, at each side of the aforesaid rocker-frame is another depending projection, *k*,

having the downwardly and rearwardly inclined surface, 72.

m represents the key-locking bar which is supported upon the fixed horizontal rail, 74, of the machine, this bar being constrained for movements forwardly and rearwardly by the stud and slot engagements indicated at 75, 75. As any one or more keys is moved the incline, 72, forces the bar, *m*, rearwardly to interlock with the hooked projection, 70, of those keys which are not operated. On the return to normal position of the key or keys which had been operated, the before mentioned duplicated projections, 24, of the rocker-frame exert cam-like impingements upon the locking-bar, *m*, to return it to its normal, and key-disengaging, position.

In the example of the cash registering machine here given, referring to Figs. 1 and 1^a, it will be seen that the first keys at the right are numbered from 1 to 5, inclusive, while the other keys to the left have numbers rising in multiples of five up to fifty, although here the next key to the left of the 50 cent key indicates \$1.00. Now, in this machine, it is possible to register any amount within the capacity of the machine, whether the same be a multiple of five, or otherwise. Therefore if it be desired to register, say thirty-nine cents, the 35 cent key may first be partially depressed, and also the 4 cent key, whereupon the two key-levers will be coupled together, and then on fully depressing either the one or the other, both will be operated to move their respective register-wheels in the proper extents.

Of the key-levers for the amounts showing ten cents to one dollar, inclusive, but one thereof, as the machine is arranged, may be operated at one time, because of the provision of the set of disks, 60, 60, in the disk-holder, 62, under these keys, said disks being common in cash registering machines. The absence of the disks, or equivalent devices under the five lower keys permits two or more, or all, thereof, to be simultaneously operated.

The device which is automatically movable relative to the key-levers, to prevent their movement, but which is movable by the cash drawer in closing, so as to leave the key-levers free to be operated, will be now described in detail, although the invention is not to be regarded as limited to such specific construction.

i represents a lever horizontally and immediately pivotally supported, above, and free from, the cash-drawer, G, and having at its rear end the depending stud, 64. This lever, *i*, has its forward end connected to the horizontal transverse movable bar, *j*, which is located just below the forward members of the key-levers with a series of vertical recesses, 66, within its upper edge.

The drawer has a cam, 67, thereon for impingement against the stud, 64, to swing the lever and transversely move the bar, *j*, against its spring upon the closing of the drawer so

as to bring the recesses, 66, in the planes of the key-levers, thus leaving them free to be moved. Upon the opening of the drawer, whereupon the cam, 67, is freed from the lever-stud, 64, the spring, 68, insures such movement of the bar, *j*, as to bring the portions thereof which are between the recesses into the plane of the key-levers. Therefore, after a registration has been effected by a key or keys and the drawer opened, no key may again be operated for another registration until the drawer has been closed, (except by switching out, or rendering for the time inoperative, the key-locking device, whereupon the keys may be operated successively, even while the drawer remains open.) The key-locking bar, *j*, may therefore be held in its position of disengagement relative to the keys, by the sliding switch-bar, *j*², which is movably mounted within the cabinet at the front of the machine. This bar has a prominent part, *j*⁴, which may be brought to engagement against the projection, *j*³, of the locking bar. The cam, 67, upon the drawer, may be in the form of a comparatively rigid spring, unyielding under ordinary circumstances but,—at such times as the locking-bar is immovably retained in its position of disengagement relative to the keys,—such cam, 67, in the impingement against the adjacent projection, 64, yielding sufficiently against its spring reaction to permit the drawer to close without displacing the stud which under the just stated circumstances is, with the locking-bar, immovable.

In this machine the drawer is not dependent for its opening upon the operation of any key-lever, but the means for opening the drawer is operative independently of the key-levers and will be now described, reference being had to Figs. 1, 2, and 4.

n represents a rocking frame comprising the intermediately pivotally supported side levers, 76, a front bar or rail, 77, uniting, and supported by, said levers, 76, 76, and the rear transversely extended bar, 78, united, and supported by, the rear members of the side levers. 80 represents the locking or latch-lever for engaging the abutment, 82, this latch-lever being pivoted upon the middle of the bar, 78, as seen at 79. The upward swinging movement of the bar, 78, bodily lifts the latch-lever out from its locking engagement with said drawer abutment, 82. The swinging movement may be imparted by depressing the bar, 77, either by direct finger pressure thereon or by unconsciously applied pressure upon any of the projections or buttons, 83, which are rearwardly extended from said bar, 77, into proximity to the key-levers, as seen in Fig. 1. The finger pressure for operating any of the key-levers will, therefore, insure the unlocking of the drawer even although the operator takes no particular pains to place his finger upon the rail or any of the buttons thereof because of the relative arrangement of these parts to the keys. Provision may be made, however, whereby the

drawer locking devices may not be operated to unlock the drawer until some key-lever has been operated, and this will be seen to consist in the obliquely arranged lever, *o*, which is intermediately pivotally hung to the framing of the machine, as indicated at 85. The upper arm of this lever has the slot, 86, in which plays the stud, 87, which is a part of one of the side levers, 20, of the rocker-frame, *A*. The lower extremity, 88, of this lever, *o*, normally engages with a part or projection, 89, of the aforesaid rocker-frame, *n*, thereby preventing its upward movement. The stud, 87, moving with the rocker-frame, *A*, conjointly with a key or keys acting on the wall of the inclined slot, 86, insures the swinging of the lever, *o*, out from the engagement with the said frame, *n*. See the dotted lines Fig. 4.

Now, describing the bell-ringing device it will be perceived that the bell, 92, is mounted on a stationary support, 90, therefor, while the striker, 93, is connected to the horizontal spring arm, 94, fixed to said support.

95 represents a vertically reciprocating bar, suitably guided, and having at its lower extremity the two lugs, 96, 97, separated by a considerable vertical distance, between which is the universal bar, 22.

The striker has an end portion, 98, thereof, which is opposite from the hammer end, 99, arranged adjacent the said vertical bar on which is the pivoted dog, 100, the arm, 102, of which as it rises with the bar contacts with the striker end, 98, causing the depression of, and spring reaction in, the striker carrying spring-arm, 94, and just at the completion of the upward movement of the bar, 95, which is about concurrent with the completion of the working movement of the key-lever, (or suitably otherwise accordingly as the mechanism is adjusted and timed to cause the ringing of the bell) the dog passes by the striker leaving it free to rebound with its carrying arm. The pivoted dog has a stop therefor, such, for instance, as the stud, 103, which contacts with the side of the bar to prevent the dog from swinging away from the striker on the working movement. The dog, on the return movement, however, may swing to pass by the striker end without effect thereon, it resuming its normal position by gravity.

The universal bar by its abutment against the lugs, 96 and 97, causes positively the upward and return movements of the dog carrying bar, 95, although the lower lug, 97, might be dispensed with the return movement of said bar being dependent on its gravity, or as the equivalent thereof, a suitably applied spring.

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

1. In a cash registering and indicating machine, the combination with the indicator spindles which are vertically movable and which have a transverse play, of the key-levers having their extremities formed with the

cam-inclines upon which the bottoms of the indicator spindles rest and by which, as they are raised, they are forced transversely, and a support onto which the so raised and transversely forced spindles are brought to rest, substantially as and for the purpose set forth.

2. In a cash registering and indicating machine, the combination with the indicator spindles which are vertically movable and which have a transverse play, of the key-levers having their extremities formed with the cam-inclines upon which the bottoms of the indicator spindles, as to portions only, of their widths, rest, and a series of supports arranged between the key-levers and adjacent the plane of movement of the indicator spindles, substantially as and for the purpose set forth.

3. In a cash registering and indicating machine, the combination with the indicator spindles which are vertically movable and which have a transverse play, of the key-levers having their extremities formed with the cam-inclines upon which the bottoms of the indicator spindles, as to portions only of their widths, rest, and a frame comprising a series of vertical stepped-formed members, 32, arranged between the key-levers and just in advance of the indicator spindles, and the uniting bar, 34, all substantially as described.

4. In a cash registering and indicating machine, the combination with the indicator spindles which are vertically movable and which have transverse play, of the key-levers having their extremities formed with the cam-inclines upon which the lower ends of the indicator spindles rest, and an adjacent support onto which the so raised and transversely forced spindles are brought to rest, and a movable device actuated by any of the key-levers for displacing the elevated and supported spindles upon the commencement of the working movement of the key, substantially as described.

5. In a cash registering and indicating machine, the combination with the indicator spindles guided for vertical movement and also capable of transverse movements, and having the down-pressing springs, and the key-levers for elevating them, which have at their portions which engage the indicators the cam-inclines, 30, and an immovable support above the normal position of the lower ends of the indicators up to and onto which the indicators are by the incline-provided key-levers raised and then transversely moved, of a bar, 36, and swinging supports therefor, said bar being caused to be swung at the beginning of the operation of any key-lever primarily by means thereof for forcing the elevated indicator spindles transversely off from said spindle supports, leaving them subject to the downward forcing action of their springs, substantially as described.

6. In a cash registering machine, the combination with key-levers, and a conjointly movable rocking device having a double

toothed pawl, of a part pivotally mounted for a vibratory movement adjacent the course of the pawl and having a slot with the double series of ratchet teeth 46 and 47, and the cam inclines, 48 and 49, and having its extremity adapted for the clicking engagement of a spring detent device which is mounted adjacent thereto for retaining the vibratory device with either of its set of ratchet teeth in the position in which it is positively placed as the pawl is upwardly or downwardly moving, substantially as described.

7. In a cash registering machine, the combination with a series of key-levers and the rocker-frame movable in unison therewith, and having the double toothed pawl, *d*, at the side of the part, *f*, pivotally mounted for a vibratory swinging movement and having the slot, 45, with the opposing series of ratchet teeth, 46 and 47, and with the cam inclines 48 and 49, said part, *f*, having its upper extremity formed with the depressions with the inclined boundaries, 50 and 52, and a spring detent device adapted for engagement with said depressions, substantially as described and shown.

8. In a cash registering machine, the combination with the series of key-levers having the depending hooked projections, 70, and the rocker frame having the depending projections, *k*, with the cam inclines, 72,—of the transversely movable locking-bar, *m*, arranged between the hooked projections and the projections, *k*, for movement by a projection, *k*, on the operation of any key into engagement with the hooked projections of the non-operated keys, substantially as described.

9. In a cash registering machine, the combination with the key-levers having the hooked projections, 70, and the rocker frame having the projections, *k*, with the inclines, 72, and the bodily movable locking-bar, *m*, the said rocker frame having the one or more inclines 24, substantially as and for the purposes set forth.

10. In a cash registering machine, the combination with a series of separated key-levers and the cash drawer, of a bar having a series of recesses, and movable relative to the key-levers so as either to bring the recesses coincident with the planes of movements of the key-levers,—to permit the operating movements thereof,—or to bring the intermediate unrecessed portions in said planes of movements,—for preventing the movements of the key-levers,—said bar being automatically movable into its key-locking position, and operated by and at the closing of the drawer, to assume its key-releasing position, substantially as described.

11. In a cash registering machine, the combination with a series of separated key-levers and the cash drawer, of a bar having a series of recesses, and movable relative to the key-levers so as either to bring the recesses coincident with the planes of movements of the

key-levers,—to permit the operating movements thereof,—or to bring the intermediate unrecessed portions in said planes of movement,—for preventing the movements of the
 5 key-levers,—said bar being automatically movable into its key-locking position, and operated by and at the closing of the drawer to assume its key-releasing position, and a device for confining the said bar in the key-releasing position, whereby the keys may be
 10 successively operated, even while the drawer remains open, substantially as described.

12. In a cash registering machine, the combination with the series of separated key-levers and the cash drawer having a cam incline thereupon, of the bar, *j*,—having the series of recesses, 66,—which is movable transversely relative to the key-levers, the pivoted lever, *i*, connected to the said bar, and having a
 20 part to be impinged upon by the cam incline of the drawer, and the spring, 68, substantially as described.

13. In a cash registering machine, the combination with a series of key-levers and a cash
 25 drawer and a locking device for holding the latter closed, of a mechanism, which is in its operation independent of the operation of any of the key-levers, for releasing the drawer locking device, a catch device which normally
 30 holds the drawer locking mechanism against movement and which receives its releasing movement primarily from the operation of any of the key-levers, substantially as set forth.

14. In a cash registering machine, the combination with a series of key-levers, and a cash
 35 drawer, of a rocking device having a drawer locking element, and having a series of projections, or buttons, which are extended into proximity to the several key-levers, substantially
 40 as described.

15. In a cash registering machine, the combination with a series of grouped key-levers and the cash drawer, of a rocking device having a drawer-locking element and having at
 45 the front the bar, 77, which is extended across and in proximity to the group of keys, and having the rearwardly extended finger projections, or buttons, extended between the various keys, substantially as described.

50 16. In a cash registering machine, the combination with key-levers having finger-keys arranged in double lines, as shown, and the cash drawer, of a rocking device having a drawer locking element, and having the bar
 55 or rail, 77, transversely arranged in front of the forward row of keys and having the finger projections, or buttons, 83, 83, extended between the keys of the first row to positions just in front of the keys of the second row,

substantially as shown and for the purpose
 60 set forth.

17. In a cash registering machine, the combination with a series of key-levers, and a cash drawer, of a rocking device having a
 65 drawer-locking element, and the rocker-frame, *A*, having a projection, as 87, the pivoted locking lever, *o*, normally engaging the bar, 78, of said rocking device and with which
 70 said projection of the rocker-frame, *A*, has a releasing cam-forcing engagement, substantially as described.

18. In a cash registering machine, the combination with the rocking device, *n*, and the
 75 frame, *A*, movable in conjunction with the key-levers, and the cash drawer with an abutment of which a locking lever, which is on the rocking device, engages, and the obliquely
 80 and pivotally supported lever, *o*, with the cam slot, 86, in which a stud of the frame, *A*, has a forcing engagement, as shown.

19. In a cash registering machine, the combination with a series of key-levers and the
 85 lock-bar, *m*, therefor, the part, *f*, with the doubly ratcheted slot and the cam surfaces 48 and 49, the drawer locking mechanism and
 90 a confining lever, *o*, therefor, of the rocker frame having, the cam surfaces for coaction with the key lock-bar, *m*, the double toothed pawl for coaction with the said ratcheted and
 95 cam-formed part, *f*, and, the stud for a cam-forcing action upon said confining lever, *o*, substantially as described.

20. In a cash registering machine, the combination with a series of key-levers having
 100 the hooked projections, 70, of the rocker frame, *A*, with the cam projection, 24, and the cam inclined projections, *k*, and the rearwardly and upwardly extended arms, 23, and the depending arms, 56, hung to the arms, 23, and carrying the coupling bar, 57, which is adapted
 105 on the beginning of the elevation of the rocker-frame to swing to engagement with the one or more started keys, substantially as described.

21. In a cash registering machine, the combination with the series of key-levers, the
 110 transversely arranged and movable bar, *j*, with the recesses, 66, and the stud, *j*³, of the cash drawer with the cam member, 67, which is constituted by a yielding spring piece, there
 115 being an operating engagement between the cam and lock bar, *j*, and the slide bar, *j*², with the projection, *j*⁴, all as described and shown and for the purposes set forth.

FORTUNE L. BAILEY.

Witnesses:

WM. S. BELLOWES,
 K. I. CLEMONS.

It is hereby certified that Letters Patent No. 536,414, granted March 26, 1895, upon the application of Fortune L. Bailey, of Northampton, Massachusetts, for an improvement in "Registering and Indicating Machines," were erroneously issued to "The Boston Cash Register Company" as owner of said invention; whereas said Letters Patent should have been issued to *William H. Hodges, Trustee, of Lynn, Massachusetts*, said William H. Hodges, Trustee, being assignee, by mesne assignments, of the entire interest in said invention as shown by the assignments of record in this Office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 16th day of April, A. D. 1895.

[SEAL.]

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents.

It is hereby certified that Letters Patent No. 536,414, granted March 26, 1895, upon the application of Fortune L. Bailey, of Northampton, Massachusetts, for an improvement in "Registering and Indicating Machines," were erroneously issued to "The Boston Cash Register Company" as owner of said invention; whereas said Letters Patent should have been issued to *William H. Hodges, Trustee, of Lynn, Massachusetts*, said William H. Hodges, Trustee, being assignee, by mesne assignments, of the entire interest in said invention as shown by the assignments of record in this Office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 16th day of April, A. D. 1895.

[SEAL.]

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents.