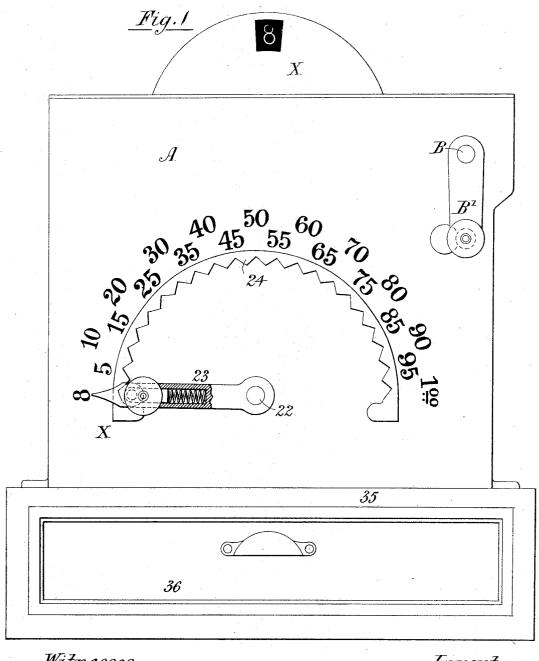
CASH REGISTER, INDICATOR, AND CHECK PRINTER.

No. 506,121.

Patented Oct. 3, 1893.



Witnesses: Robur Willond M. H. Marler Inventor.
Nilliam Koch

Per

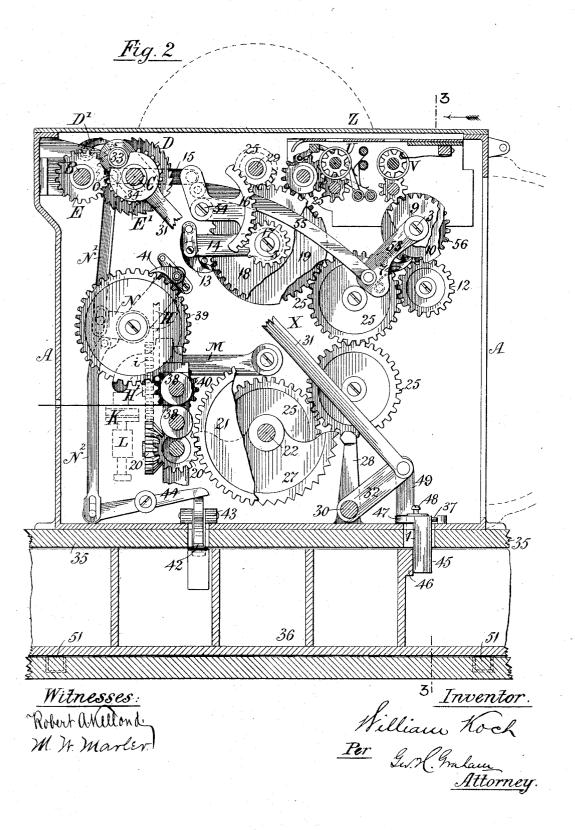
Gudding

Attorney.

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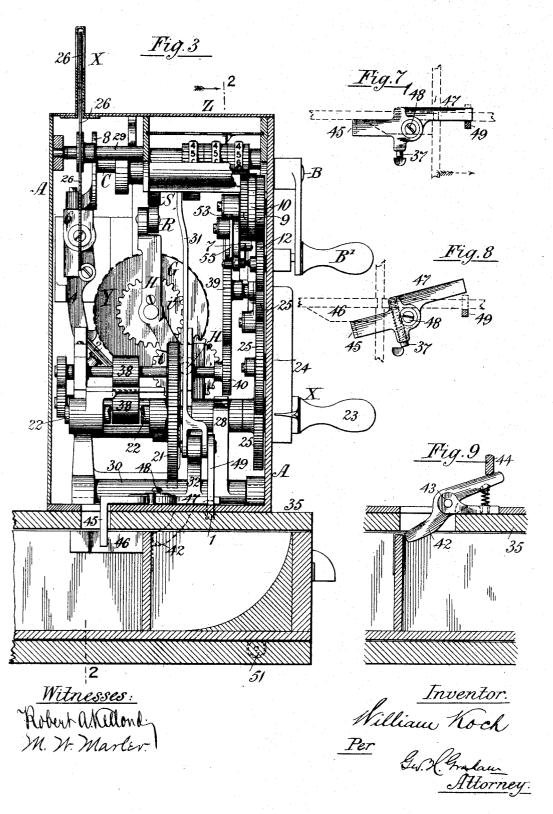
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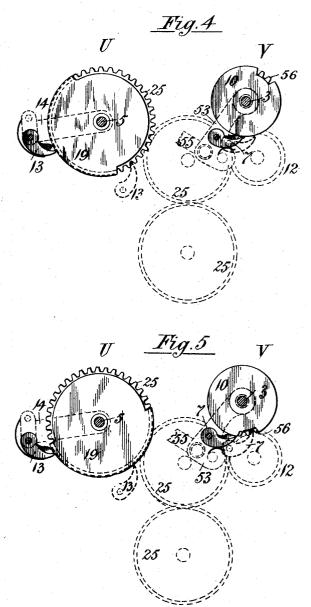
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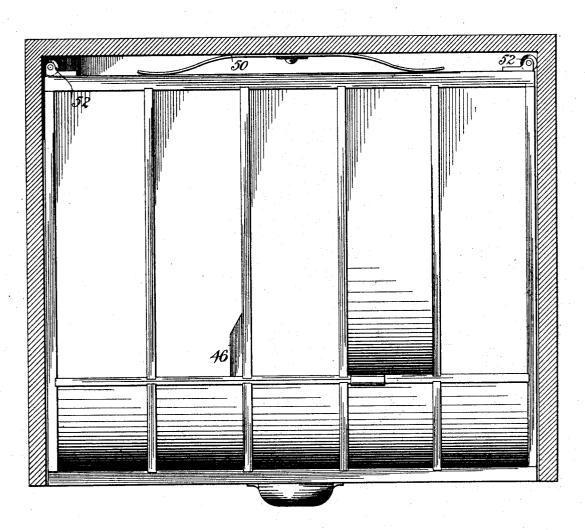


Fig.6

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Nilliam Kock,

Per

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United States Patent Office.

WILLIAM KOCH, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE NATIONAL CASH REGISTER COMPANY, OF DAYTON, OHIO.

CASH REGISTER, INDICATOR, AND CHECK-PRINTER.

SPECIFICATION forming part of Letters Patent No. 506,121, dated October 3, 1893.

Application filed March 19, 1890. Serial No. 344.525. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM KOCH, of the city, county, and State of New York, have invented certain new and useful Improvements in Cash-Registers and other Similar Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters and figures of reference marked 10 thereon, making a part of this specification.

This invention relates generally to that class of machines now commonly known as cash registers; that is to say to machines that are adapted to register various payments or 15 disbursements upon a series of counting dials, and add such payments together so that the total payments or disbursements made for any length of time may be readily determined. And it has for its object, among 20 other things, to provide means whereby different registrations or operations of the machine may be added together and preserved upon independent dials; and, also to simplify the construction and operation of the several 25 parts coacting with the cash drawer or receptacle, together with the means for locking such parts while the drawer is open.

The invention consists primarily in the employment of two or more independent and in-30 dependently operated registering or adding wheels with means for setting the operating connections so that one or the other of said independent registering wheels may be operated as desired, and means for actuating 35 either of said wheels according as the operative connections have been set to be operated

by the actuating means.

The invention also consists in a lock for the cash drawer or receptacle with means for 40 operating said lock so that the drawer or receptacle is opened or rendered accessible to the attendant, and means operated by the drawer or receptacle when opened or when in its accessible condition for locking the ma-45 chine against movement so that the drawer or receptacle must be returned to its normal or closed condition before another operation of the indicating mechanism can be effected.

In the accompanying drawings:—Figure 1, 50 is a front elevation of a register embodying the invention. Fig. 2, is a transverse ver-

tical section taken on the line 2, 2, of Fig. 3, looking in the direction of the arrow, parts being broken to show those underlying. Fig. 3, is a cross sectional elevation taken on the 55 line 3, 3, of Fig. 2. Figs. 4 and 5, are sectional detailed elevations of the guards, the actuating pawls and the two trains of wheels for moving the pawls of the registering devices. Fig. 6, is a horizontal section taken 60 through the base of the machine and showing the cash drawer or receptacle in plan view. Figs. 7 and 8, are detailed plan views of the stop levers for the locking dog and segment hereinafter referred to, a portion of the 65 cash receptacle being shown in dotted lines. Fig. 9, is a sectional elevation of the catch for

locking the cash receptacle closed.

Before entering into a detailed description of the construction and operation of the va- 70 rious parts forming the present invention, it will be understood that as illustrated and as hereinafter described, the invention is embodied in that class of machines that have heretofore been patented to me, No. 367,213 75 dated July 26, 1887, as improved by the machine shown and described in Letters Patent No. 428,003, dated May 13, 1890. Such machines and the one illustrated employs a revoluble indicator disk bearing indicating nu- 80 merals within the capacity of the machine to indicate, register and it may be to print; an operating handle upon the exterior of the inclosing case having an index that coacts with a series of numerals delineated upon the in- 85 closing case and corresponding with those upon the indicator disk, said handle being connected to move the indicator disk to expose the numeral corresponding to that to which the index on the handle may point. 90 There is also employed a set of registering or adding wheels upon which each of the registrations made by the machine is added; connections between the operating handle and the actuating means for said registering 95 wheels, whereby the extent to which they will be moved in the act of registering or adding an amount is controlled; a second operating handle or crank having connections with said actuating means for the registering or adding 100 wheels whereby they are moved to register or add the amount that the machine has been

set to register or add. Said machines and the present one also embrace a printing or embossing mechanism that is set upon the movement of the first operating handle in position 5 to print or emboss upon a strip or ticket the amount corresponding to that indicated by the indicator disk, and registered or added upon the registering wheels, and which printing mechanism is operated by said second 10 handle or crank to print or emboss such amount upon the strip or ticket; and when a strip is used a suitable feeding mechanism and cutter may be employed to feed the proper length of strip to the printing mech-15 anism and to sever said strip into short lengths, tickets or checks.

In the improved machine illustrated with these various devices and mechanism, there is provided a second set of registering or add-20 ing wheels independent of the set usually employed, having connections with a register operating wheel to which the proper movement is automatically imparted from the second operating handle or crank by means of an actu-25 ating pawl or similar device, the movement of said register operating wheel being imparted to the lowest wheel of the registering or adding wheels and from thence to the next higher and so on. With the register operat-30 ing wheel is combined a revoluble guard having a suitable notch or depression in its surface, which guard controls the engagement of the actuating pawl with said wheel. The position of the guard with respect to the act-35 uating pawl is governed by suitable connections with the first operating handle or indicating mechanism, and is such that when the said handle is moved to cause the indicator to indicate a value or numeral that is to be 4c registered by this second set of registering or adding wheels, the said guard will have been correspondingly moved to bring the notch or depression in such position that the actuating pawl upon being moved will engage with 45 and move the register operating wheel. These connections are also preferably such that when the guard is set to permit the actuating pawl to act upon said operating wheel that the other registering wheel will not be 5c operated by its actuating pawl and vice versa.

The present machine like the one shown in said Patent No. 428,003 is provided with a cash drawer or receptacle, but which in the present instance is movable in and out of the 55 base portion of the machine, in contradistinction to a fixed receptacle with a movable cover as in the machine of said application. The cash drawer or receptacle and the base containing the same are each provided with 60 anti-friction rolls which serve to steady the drawer in its movements in and out of said base, as well as to allow it to move more freely and with less friction. At the rear of the drawer within the base there is provided

65 a spring that bears upon the drawer and is compressed thereby when the drawer is closed, thus tending to forcibly move the drawer

open. The machine is provided with a catch that engages with the drawer and holds it closed and locked against the pressure of the 7c spring just referred to; and with this catch and the second operating handle there is provided suitable connections by which upon the operation of said handle the catch is moved so as to release the drawer and permit the 75 spring to move it open. There is also provided a lock for the machine consisting of a serrated wheel and dog that are moved into engagement with each other upon the machine starting to register, and with which is 80 combined a stop moved into position to lock the dog in engagement with said wheel upon the opening of the drawer and kept in such locking position until the drawer is closed, and by the drawer is moved out of position 85 so as to allow the serrated wheel and dog to become disengaged. With this general understanding of the nature of the invention and the character of the machine with which it is shown as embodied, a detailed descrip- 9c tion thereof will now be given.

The various parts of the machine are inclosed and supported by a suitable casing A that is supported upon and secured to a base 35 which provides a compartment to receive 95 a cash drawer or receptacle 36. This class of machines embraces an indicating mechanism X, a printing or embossing mechanism Y, and a registering mechanism Z; and it may embrace a numbering mechanism (not 100 shown) for the checks or tickets that are printed or embossed by the printing or embossing mechanism as in my said patent. It is to be understood however that a printing or embossing mechanism while it preferably 105 coacts with the indicating and registering mechanisms as usual may be entirely dispensed with, the machine being then simply an indicating and registering machine; and while the indicating mechanism herein may 110 be said to be duplex in character—embracing the operating handle, index and fixed dial, and the revoluble indicator disk-either

one may be omitted. The indicating mechanism m X consists as 115 in said patents, of an operating handle 23 bearing an index, which handle is mounted upon the outside of the case fixedly to the projecting end of a revoluble shaft 22 that is mounted in suitable bearings within the 120 machine. The operating handle may be oscillated over the face of a scale or dial 24 arranged on the front face of the case, which dial is made up of numerals within the capacity of the machine to indicate, register 125 and print, or either. It also consists of a revoluble indicator operatively connected with said handle. The shaft 22 carries one gear wheel of a train of gear wheels 25, imparting suitable motion to a spindle 29 mount- 130 ed at the upper portion of the machine; to which spindle one of said train of wheels is secured. The spindle also carries the indicator consisting of a disk or wheel 26 that

506,121

bears upon its face or upon both of its faces numerals corresponding with those of the scale or dial on the front of the case; the arrangement of the operating handle 23 and 5 the indicator 26 being such that the said indicator will be moved to expose through an opening in the inclosing case a numeral corresponding to that on the scale or dial 24 to which the index of the operating handle 23

ro may point. The registering mechanism Z consists of two sets of registering or adding wheels U, V, adapted to register or add independently of each other and to preserve separate and 15 distinct registrations or additions. The registering or adding wheels U are mounted in the usual manner and are moved to register the proper amount from the operating wheel 18 that is mounted upon a stud 5 carrying 20 one of the train of wheels 25. With this operating wheel there is combined a guard 19 movable in unison with the train of wheels 25, secured or formed integral with its contiguous train wheel, the position of which 25 guard determines the point at which an actuating pawl 13 shall engage with the operating wheel to rotate the latter more or less according to the amount to be registered. The other registering or adding wheels V are in 30 themselves of the usual construction, and so far as their operation is concerned it may be in the usual manner. This second set of wheels is moved by an operating wheel 9 that is mounted upon a stud 3 projecting from one 35 wall of the case, which wheel receives motion from an actuating pawl 7 mounted on a pawl carrier 53 hung from the stud 3. The same stud carries a toothed wheel 56 that receives motion from one of the train of wheels 25 40 through an intermediate 12; these wheels 12 and 56 forming an auxiliary train of wheels movable in unison with the other train of wheels 25. The wheel 56 carries a guard 10 secured or formed integral therewith and 45 having a suitable notch or depression in its periphery, and the pawl 7 is of such width that it overlies the operating wheel 9 and the guard 10. The position of the notch in the guard with respect to the pawl controls the 50 engagement of the pawl with the operating wheel. From the foregoing it will be understood that in any movement of the train of wheels 25 and of the auxiliary train 12 and 56 upon the movement of the operating han-55 dle 23 to set the indicator to expose the proper amount, the guards 19 and 10 will be correspondingly set to control the engagement of the actuating pawls 13 and 7 with the operating wheels 18 and 9; and these guards are 60 so constructed and arranged with respect to each other that when the guard 19 is set to permit the actuating pawl for its operating wheel to engage with said wheel, the other guard 10 for its operating wheel will be set to 65 prevent the engagement of its actuating pawl therewith and vice versa, see Figs. 4 and 5.

The present machine is capacitated to indicate and register from five cents to one dollar in multiples of five, and also to indicate eight cents and to register 1 or 8 therefor as 70 may be desired; the indication "8" taking the place in the present construction of the usual "0" indication; and the registering or adding wheels U are constructed to register or add amounts of five cents to one dollar in 75 multiples of five while the other wheels V are constructed to register or add 1 or 8 as

may be desired.

Motion is imparted to each of the operating wheels 18, 9, from a second handle or crank 80 B' arranged upon the outside of the machine and secured to the end of a crank shaft B supported at the upper right hand side of the machine. The movement of the crank shaft B is imparted to a cam shaft C, mounted 85 within the machine parallel to said crank shaft, by suitable intermeshing gears E, E' secured to the respective shafts. One end of the cam shaft C carries a crank disk D which is in the form of a ratchet wheel that is en- 90 gaged by a pawl D' to prevent the shaft from being turned except in the proper direction. The wrist pin O of the crank disk is connected by a link 15 to a segmental rack 16 in the form of a bell crank bearing such rack. This 95 segmental rack is pivoted upon a stud 54 and engages with a pinion 17 loosely mounted on the stud 5, (supporting the operating wheel, guard and one of the train 25,) to which pinion a pawl carrier 14 is rigidly connected, to 1co the outer end of which the actuating pawl 13 for the operating wheel 18 is pivoted. The movement of the crank disk D is also imparted to the pawl carrier 53 and its pawl 7, by a connecting rod 55 one end of which is 1c5 connected to the segmental rack 16 and the other to the pawl carrier 53. From this construction it results that upon each complete rotation of the crank disk D, both of the actuating pawls 13 and 7 will have been vibrated 110 back and forth once and returned to their normal positions; one or the other of the actuating pawls having imparted a movement to its respective operating wheel and from thence to its set of registering wheels U or 115 V, the other pawl having made an idle movement.

In the operation of the machine as thus far described, if it is desired to register any amount from five cents to one dollar, as for 120 instance fifty cents, the operating handle 23 will be moved so that its index points to the numerals 50 upon the scale or dial 24. Simultaneously with this movement of the operating handle, the indicator 26 will have 125 been moved through the train of wheels 25 to expose the numerals 50 through the opening in the inclosing case. Also simultaneously with these movements of the operating handle and indicator, the guards of the operating wheels 18, 9, will have been moved (see Fig. 4) so that for the latter wheel the guard

10 will prevent the actuating pawl 7 during its vibration from engaging with the wheel 9 while the guard 19 for the operating wheel 18 will have been moved to permit the actuating 5 pawl 13 to engage with said wheel at a point within its extent of vibration requisite to register or add fifty cents upon the adding wheels U. If it is desired to indicate and register eight cents, the operating handle 23 will be to turned so that its index points to that numeral upon the dial 24, whereupon the indicator will have been also moved to expose the same numeral through the opening in the inclosing case, and the guards for the operat-15 ing wheels 18, 9, will have been simultaneously moved so that the guard for the former wheel (see Fig. 5) will prevent the actuating pawl for said wheel from engaging therewith during its vibration; while the guard for the 20 operating wheel 9 will have been moved so that its notch or depression will permit the actuating pawl 7 to engage with said operating wheel and upon its vibration add one or eight to the adding wheels V. After each setting 25 of the indicating mechanism and consequently of the guards, the crank B' will thereupon be rotated to impart one complete revolution to the crank disk D so that the actuating pawls 13 and 7 will have been vibrated simultane-30 ously once back and forth, one of the actuating pawls as before explained having made an idle vibration.

The means for locking and releasing the cash drawer or receptacle and the means by 35 which the mechanism while the drawer is open is locked against movement will now be described. The shaft 22 of the indicating mechanism is fitted with a toothed segment 27 secured thereon in position to be engaged 40 by a dog 28 extending from a rock shaft 30 that is mounted in suitable bearings upon the base plate of the machine. The said rock shaft 30 is provided with an arm 32, the end of which is pivotally connected to the forked 45 end of a locking bar 31 that at its upper end is slotted to embrace the cam shaft C. The said cam shaft at this point carries a suitably shaped cam wheel 34 upon which bears a roll 33 extending from the upper end of the 50 locking bar. The arrangement of the parts is such that while the said roll is bearing upon the lowest part of the cam, which is formed by a notch therein, the locking bar will hold the dog out of engagement with the teeth of 55 the segment 27 so as not to interfere with the movement of the shaft 22; but when the shaft C is turned so that the roll of the locking bar bears upon the high part of the cam wheel, the dog will be moved into engagement with 60 the segment and lock it and the shaft 22 against movement, and thus also preventing any movement of the indicating mechanism. Normally, the low part of the cam will be in position to allow the roll of the locking bar 65 to enter it so that the dog is held from engagement with the toothed segment and when

to 3; but as soon as the crank is rotated, the high part of the cam in bearing upon said roll will have rocked the dog into engage- 70 ment with the toothed segment and will continue to hold it in engagement until the low part of the cam arrives beneath the roll and the crank has reached its original or normal position, when the dog will have been moved 75 from engagement with the segment.

In order to hold the indicating mechanism locked while the cash drawer is in its open condition, there is provided a stop brought into position to prevent any movement of the 80 dog from engagement with the segment as soon as the drawer moves or is moved into its open condition. This stop is in the form of a lever 47 that is pivoted upon a stud 48 projecting from the base of the machine and 85 having at one end a projection 45 extending down through an opening in the base plate of the machine and base 35 in position to be engaged by a bearing 46 carried by the drawer to hold said lever out of operative position 90 against the force of a spring plunger 37 so long as the drawer remains closed. The opposite end of the lever is arranged to be vibrated in the path of an arm 49 that is mounted at the end of the locking bar 31 so as to move ver- 95 tically upon the movement of the locking bar. The end of the arm 49 is recessed so that when the arm is raised to its highest position, that is when the dog is brought into engagement with the toothed segment, the lever 47 100 may be moved into said recess or under the end of the arm and thus prevent any movement of said arm, the locking bar, or the dog 28. Upon the movement of the drawer to its open condition, the bearing 46 will leave the 105 projection 45 of the stop lever 47 (see Fig. 7) so that the lever will be rocked under the stress of its spring-plunger 37, to put its opposite end into engagement with the recess of the arm 49, in which position it will re- 11c main until the drawer is moved to its closed condition, (Figs. 2, 3 and 8) so that the bearing 46 will rock the stop lever 47 back to its inoperative position. It is to be remarked in passing that should the locking bar not have 115 been operated so as to raise the arm 49, the stop lever 47 will upon the movement of the drawer to its open condition simply bear against the side of the arm 49 ready to enter the recess to lock the locking bar and dog as 120 soon as the said dog is moved; and to insure the arm keeping its position its lower end 1, Figs. 2 and 3, is extended to play in an opening in the machine base. The rear wall of the compartment formed by the base 125 35 is provided with a suitable spring 50 that bears against the rear of the drawer and tends to force it to its open condition. The drawer is held closed against the force of this spring by a catch 42 Figs. 2 and 9, formed by the 130 end of a lever mounted in bearings 43 upon the base 35, the said eatch extending through an opening in the base so as to engage with the crank is in the position shown in Figs. 1 I a portion of the drawer, as for instance one

506,121

of the cross partitions dividing the drawer into compartments. The opposite end of the catch 42 extends within the machine in position to be acted upon by one end of a lever 44 that is actuated at the proper time from any suitable moving part of the machine to rock the catch from engagement with the drawer, releasing the latter so that it may move to its open condition under the force of said spring.

As it is desirable that the drawer shall be released at the time or during the time that the registering is being effected, the wrist pin O of the crank disk D is connected to one end of said lever 44 through a link N', an arm N 15 and a second link N2; from which construction it results that upon the movement of the erank B' and the cam shaft C through the connections described—which might obviously be a single connecting rod instead of the two links shown—the lever 44 will be vibrated so as to rock the catch out of engagement with the drawer. The connection between the end of the link N2 and the lever 44 and between the ends of the link N' and the 25 arm N is slotted to allow the links to move a short distance independent of the lever 44 and of the arm N. The catch 42 is springseated so that its normal tendency is to keep in engagement with the drawer so that as soon as the force of the lever 44 is relieved from the end of the catch, it will return to its normal position under the force of its spring ready to again engage the drawer and hold it closed when the latter is moved into the 35 compartment for that purpose, in which movement the catch will yield as that portion of the drawer with which it engages passes beneath it. The movement of the drawer is steadied, and effected with a less powerful 40 spring, and with less friction by providing the base of the compartment with a pair of horizontal friction rolls 51 that are in position for the bottom of the drawer to rest and move upon, and at the rear of the drawer at the 45 corners adjacent to the sides thereof there are provided other rolls 52 arranged vertically and adapted to bear and roll against the side walls of the compartment and thus steady the

drawer as it is moved in and out thereof. The printing mechanism Y is substantially of the same construction and mode of operation as that shown and described in said Patent No. 428,003 and therefore need not be particularly described here. It may, how-55 ever, be stated that the said mechanism consists of a printing or embossing wheel G carrying the type or embossing characters upon its periphery. This type wheel revolves freely upon an axis mounted in a pair of 60 swinging arms H secured to a rock shaft H'. The type wheel is moved in unison with the indicating mechanism to bring the proper type in position to print the strip or ticket by means of a gear wheel 21, (secured to the 65 shaft 22 of the indicating mechanism,) beveled wheels 20, 20, pinion i, and pinion i' se-

cured to the type wheel. The impression is effected as in my said Patent No. 428,003 by the rocking of the type wheel down upon the strip or ticket supported above a flexible 70 platen K, by the action of the cam S that is secured to the cam shaft C acting upon a roll R mounted at the upper end of the swinging arms that carry the type wheel. The flexible platen K is moved up upon the under side of 75 the strip or ticket simultaneously with the downward movement of the type wheel by the rocking of a lever L that is moved through arms M, N, upon the rotation of the cam shaft through the link N' before referred to. The 80 inking of the type wheel when it is arranged for printing instead of embossing the strip or ticket is effected by an ink pad 2 removably mounted at the end of a pivoted arm 4 that is moved into contact with the type by a cam 85 8 mounted on the end of the cam shaft and bearing against a roll projecting from and carried by a piece 6 connected to vibrate the ink pad arm, all of which is fully set forth in said Patent No. 428,003. The proper feeding 90 of the strip is effected by a pair of feed rolls 38 geared together and between which the strip or ticket is led, said feed rolls receiving intermittent motion sufficient to feed the proper length of the strip below the type 95 wheel from a gear 39 that meshes with a pinion 40 secured to the end of one of the feed roll shafts. Suitable motion is imparted to said gear wheel by a pawl 41 carried upon one end of the arm N, motion being imparted 100 to said arm from the crank disk D in the manner before described.

While the second set of registering or adding wheels V and the indicator are capacitated to register and indicate a single value, 105 it is obvious that they may be arranged to register and indicate a number of values as does the remainder of the indicator and the other set of registering wheels U.

What is claimed is-

1. The combination of two independent registers and a single operating handle and connections for independently operating both of said registers and imparting a variable movement to one of them, whereby different 115 amounts may be added upon one register and both may be operated independently by the same handle, substantially as described.

2. In a register, the combination of two independent sets of registering or adding 120 wheels, guards for controlling and determining the movement of such wheels with means for moving them, a pair of actuating pawls controlled by said guards, and means for moving said pawls, substantially as described.

3. In a register, the combination of a pair of independent registering or adding wheels, a pair of independent guards for controlling and determining the movement of said wheels, an indicating mechanism, and con- 130 nections between said indicating mechanism and the guards by which the positions of

pair of actuating pawls and means for moving

them, substantially as described.

4. In a register, the combination of a pair 5 of independent registering or adding wheels, a pair of register operating wheels arranged to impart their movements to their respective registering wheels, a pair of actuating pawls one for each operating wheel, a guard 10 for each operating wheel for controlling and determining its movement, means for simultaneously operating said guards, and means for actuating the pawls, substantially as de-

5. In a register, the combination with a set of registering or adding wheels, an operating wheel, an actuating pawl and a guard for controlling the engagement of the pawl with the operating wheel, of a second set of reg-20 istering or adding wheels, a register operating wheel, an actuating pawl adapted to engage therewith, a guard for controlling the engagement of said pawl with the wheel, means for simultaneously setting the guards, 2; and means for simultaneously actuating the

pawls, substantially as described.

6. The combination with two sets of independent registering or adding wheels, a register operating wheel for each set of register-30 ing wheels, a guard for each operating wheel, an indicating mechanism having a handle for setting the same, and a chain of gearing connecting the handle with the guards by which the guards are set simultaneously with the 35 setting of the indicating mechanism, of an actuating pawl for each operating wheel, and means for simultaneously actuating the pawls, substantially as described.

7. In a check printing or embossing register, 40 the combination with an indicating mechanism, a check printing or embossing mechanism, of two independent sets of registering or adding wheels, a pair of operating wheels therefor, a pair of pawls for moving said op-45 erating wheels, a pair of guards for controlling and determining the engagement of the pawls with the wheels, and connections between said guards and the indicating mechanism for moving them simultaneously with 50 such mechanism, a crank, and connections with each of the pawls for actuating them si-

the latter are simultaneously determined, a 1 multaneously, and with the printing or embossing mechanism for actuating it, substan-

tially as described.

8. In a register, the combination of two sets 55 of registering or adding wheels, a pair of guards for controlling and determining the movement imparted to said wheels, an indicating mechanism with connections with said guards for moving them simultaneously with 60 the indicating mechanism, a pair of actuating pawls for the registering wheels controlled by said guards, a crank and connections with the pawls for actuating them simultaneously, and a lock for locking the in- 65 dicating mechanism and the guards against movement during the operation of the crank, substantially as described.

9. In a register, the combination with the indicating and registering mechanisms, a cash 70 receptacle and means for rendering its interior accessible in the operation of the regising mechanism, and a lock for locking the indicating mechanism against movement, an arm as 49 carried by one portion of said lock, 75 a pivotally mounted stop one end adapted to engage with the arm 49, and the other end in position to be moved by the cash receptacle,

substantially as described.

10. In a register, the combination with the 30 registering mechanism, the indicating mechanism embracing a shaft as 22, a toothed segment secured thereon, a dog for engagement with said segment and connections with the register operating mechanism for moving the 85 dog into engagement with the segment, an arm 49 movable with said dog, a pivotally mounted and spring actuated stop 47 having one end in position to engage with the arm 49 and its opposite end extending in position to 90 be borne upon by a cash receptacle, of a cash receptacle and means connected with the register operating mechanism for rendering the receptacle accessible upon the movement of said mechanism, substantially as described.

In witness whereof I have set my hand, this 4th day of February, 1890, in the presence of

two witnesses.

WILLIAM KOCH.

Witnesses: HENRY L. BRANT, M. W. MARLER.