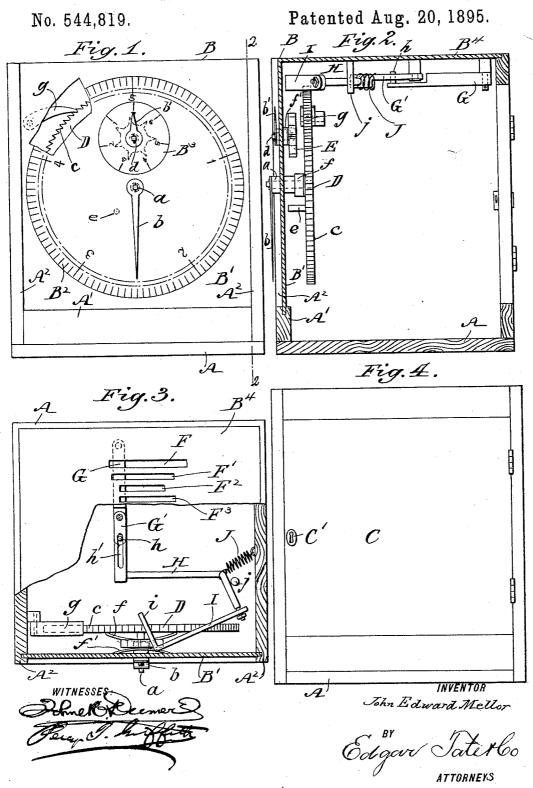
J. E. MELLOR. REGISTERING SAVINGS BANK.



UNITED STATES PATENT OFFICE.

JOHN EDWARD MELLOR, OF NEW YORK, N. Y.

REGISTERING SAVINGS-BANK.

SPECIFICATION forming part of Letters Patent No. 544,819, dated August 20, 1895.

Application filed December 6, 1894; Serial No. 530,955. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDWARD MELLOR, a citizen of Great Britain, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Registering Savings-Banks, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in all the figures.

This invention relates to savings-banks such as are used for the deposit of coins of various denominations, and has for its object to provide a simple, cheap, readily-constructed, and perfectly-operating device which will register the deposit therein of said coins and constantly indicate upon a common dial the amount of the contents thereof.

The invention consists in the novel construction and arrangement of parts hereinafter fully described.

In the accompanying drawings, Figure 1 is a front elevation, partially broken away, of a device embodying my invention. Fig. 2 is a vertical section of the same, taken upon the line 2 2, Fig. 1. Fig. 3 is a plan view of the device with a portion of the top or roof of the bank removed to more fully illustrate the insterior construction. Fig. 4 is a rear elevation.

In the practice of my invention I construct a box or frame A open at the top and at the front, the front being provided with an up35 wardly-projecting rib A'. The front and top of the deviceare formed by an angular metallic plate B, inserted in the sides A² of the box and in the projecting rib A'. At the rear of the device is a door C, provided with a lock C' or 40 otherwise fastened.

Upon the face B' of the angular plate B, forming the front of the device, is marked a dial B², having suitable graduations thereon and numbered to designate units which may be comprised by any desired coin, and which in the device shown is five cents. Rearward of the front B' within the box is journaled a gear-wheel D, having its axle a projecting through said face, on which axle is mounted 50 a pointer b, which indicates upon said dial B²

the rotation of the wheel. In the drawings I have illustrated a dial divided into one hundred units, each of which designates five cents, and therefore the whole dial a total of five dollars, and the gear wheel is provided with an 55 equal number of beveled teeth c, whereby its rotation the distance of one tooth will indicate upon the dial the deposit of five cents.

Immediately above the axle α within the box is journaled a pinion E, the axle d of 60 which projects likewise through said face B', and has mounted thereon a pointer b', indicating upon a dial B3 within the periphery of the dial B2, said dial being suitably graduated to designate any number of units of five dol- 65 lars each. The gear-wheel D has mounted thereon a stud or pin e, which at each rotation of said wheel engages the pinion E and rotates the same one tooth and the pointer b' consequently one unit. Too free rotation 70 of said gear-wheel and pinion is prevented by means of plate-springs ff', bearing one between the wheel and pinion and the other be-tween the pinion and the front B' and surrounding their respective axles, and the ro- 75 tation of said gear-wheel is further restricted, as well as its rotation in more than one direction prevented, by means of a gravity-pawl g, pivoted upon the front B' within the box toward one side of said wheel and en- 80 gaging the teeth c thereof.

In the upper portion or roof B^4 of the plate B, near and somewhat rearward of the center, are formed slots F, F', F², and F³, ranging transversely, and beneath the said slots is piv-85 oted to the roof B^4 a lever G, having upon the free or forward end thereof a pin h, which works in a slot h', formed in a similar lever G', which is independently pivoted beneath said roof. Projecting laterally from the end 90 of said lever G' is an angular arm H, secured thereto and having pivoted upon the end thereof an angular gravity-pawl I, provided with a flange i, which rests upon and engages the teeth c of the gear-wheel D. The arm H 95 is maintained in the retracted position against a pin j by means of a coiled spring J, secured thereto and to one of the sides A^2 of the box.

The operation of the device will be readily understood from the foregoing description, 100

taken in connection with the accompanying drawings

The slots F, F', F2, and F3 are of such width as to receive therein, respectively, coins rep-5 resenting denominations of fifty, twenty-five, ten, and five cents, and by reason of such width and of their arrangement, as shown with respect to the lever G, the coins inserted therein will move the said lever, and, through 10 the agency of the mechanism above described, rotate the gear-wheel D a distance of ten, five, two teeth, and one tooth, respectively, whereby, as each of said teeth represent the register upon the dial B2 of a single unit of five cents, 15 the amount of the coin will be duly indicated thereon. Thus, a fifty-cent piece being inserted in the slot F, the lever G is moved upon a horizontal plane by the entrance of said coin, carrying with it the lever G' and the 20 arm H, thereby causing the gravity-pawl I to slide over the teeth c of the gear-wheel D, and as the dropping of the coin into the box releases the said levers the spring J will retract the same and the flange i of the pawl I 25 engage the teeth c immediately beneath and rotate said gear-wheel the distance of ten teeth, thus indicating upon the dial B2 the deposit into said bank of fifty cents. operation is continued likewise or similarly 30 with other coins until five dollars or more have been received into the bank, whereupon the pin e upon the gear-wheel, engaging the pinion E, rotates the pointer b' the distance of one unit.

The object of the double or compound levers G G' is to render the operation of the device more easy and accurate than would be the case were a single lever used.

I do not confine myself to the exact forma-40 tion of parts or construction of details herein set forth and illustrated, as the same may be changed or varied in many particulars without altering the nature or principle of the invention, the advantages resultant from the 45 use of which will be manifest to all who are conversant with the general class of devices to which the same appertains.

Having thus fully described my invention, what I claim as new, and desire to secure by

50 Letters Patent, is-

1. A registering savings bank comprising a box, having a dial marked upon its face, suitably divided to designate units corresponding to the lowest denomination of coin for which 55 the bank is adapted, a gear-wheel journaled in said front within the box, and having peripheral teeth thereon corresponding in number to the units of the dial, a plurality of slots of varying widths formed in the top of the 60 box to accommodate coins of varying denominations, a lever pivoted beneath said top, an angular arm projecting therefrom, a flanged gravity pawl pivoted upon the end of said arm forwardly movable, and adapted to engage

same according to the distance of movement of the lever, a coiled spring secured to the arm and to the side of the box to normally retract said pawl, a pin adapted to limit the movement of said pawl, and a gravity pawl 70 bearing upon the gear-wheel to prevent its reverse rotation, substantially as shown and described.

2. A registering savings bank comprising a box having a dial marked upon its face, suit- 75 ably divided to designate units corresponding to the lowest denomination of coin for which the bank is adapted, a gear-wheel journaled in said front within the box and having peripheral teeth thereon corresponding in num- 80 ber to the units of the dial, a plurality of slots of varying widths formed in the top of the box to accommodate coins of varying denominations, a lever pivoted beneath said top, a similar lever independently pivoted in front 85 of the same and having a longitudinal slot therein, a pin upon the main lever working in said slot, an angular arm projecting therefrom, a flanged pawl pivoted to said arm, forwardly movable, and adapted to engage the 90 gear-wheel when retracted, and rotate the same according to the distance of movement of the levers, a spring normally retracting said pawl, a pin to limit the movement thereof, and means for restricting the rotation of the 95 gear-wheel, substantially as shown and described.

3. A registering savings bank comprising a box open at the top and at the front and provided with a door at the rear, an angular plate 100 closing said top and front and having a dial marked upon the face thereof divided into units indicating the lowest denomination of coin for which the bank is adapted, a smaller dial within the periphery of the same, a gear- 105 wheel journaled in said front upon an axle which projects therethrough, and provided with peripheral teeth corresponding in number to the units of the main dial, a pinion journaled above said gear-wheel having a 110 pointer upon its axle which registers upon the smaller dial, a pin upon said gear-wheel adapted to engage the pinion and partially rotate the same at each rotation of the gearwheel, plate springs between said gear-wheel 115 and pinion, and the pinion and the box respectively, to limit the movement thereof, and a pawl bearing upon said gear-wheel to prevent its reverse rotation, a plurality of slots of varying widths formed in the top of the 120 box, a lever pivoted beneath said top and adapted to be moved horizontally by the insertion of coins through said slots, a similar lever independently pivoted in front of the same, having a longitudinal slot therein, a 125 pin upon the main lever working in said slot, an angular arm secured to the end of the slotted lever, a flanged gravity pawl pivoted upon the end of said arm, forwardly movable and 65 the gear-wheel when retracted and rotate the 4 adapted to engage the gear-wheel when re- 130 tracted, a coiled spring secured to the arm and to the side of the box to normally retract said pawl, and a pin to limit the movement of said pawl, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in pres-

ence of two witnesses, this 4th day of December, 1894.

JOHN EDWARD MELLOR.

Witnesses:

PERCY T. GRIFFITH, L. MULLER.