(No Model.) 3 Sheets—Sheet 1.

E. HEADLEY & W. G. HORTON.

COIN RECEPTACLE AND REGISTER.

No. 384,523. Patented June 12, 1888.

Fig. 1

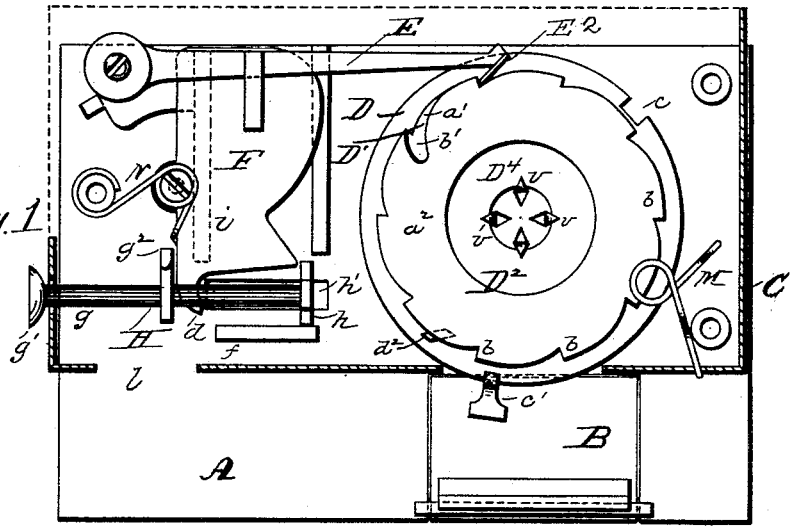


Fig. 2

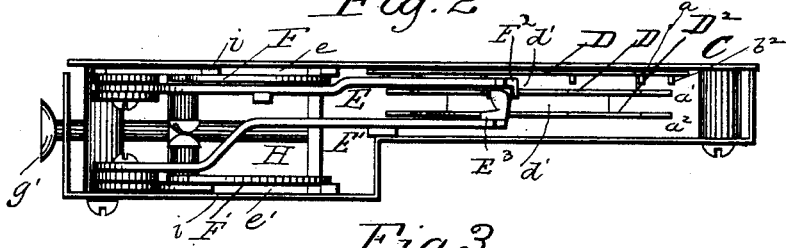
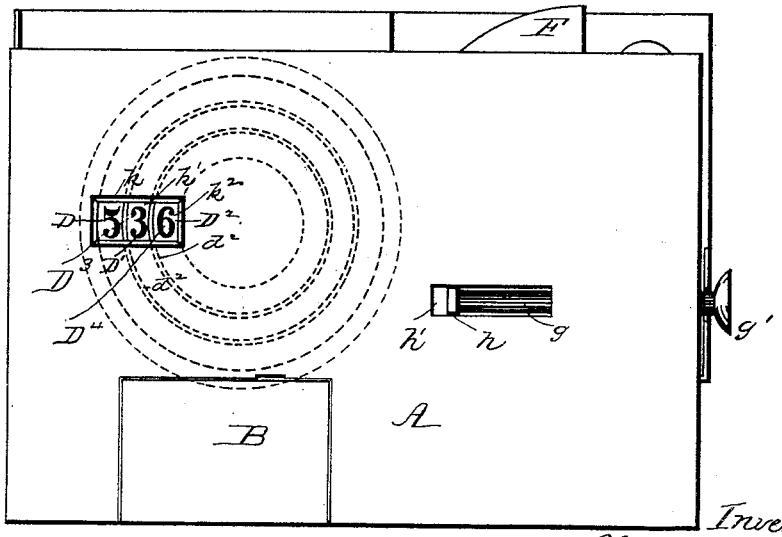


Fig. 3



Witnesses.
Wilbur C. Powell.
J. V. D. McGinn.

Inventors
Elwood Headley.
Wm G. Horton
by Connolly Bros
attys.

(No Model.) 3 Sheets—Sheet 2.

E. HEADLEY & W. G. HORTON.

COIN RECEPTACLE AND REGISTER.

No. 384,523. Patented June 12, 1888.

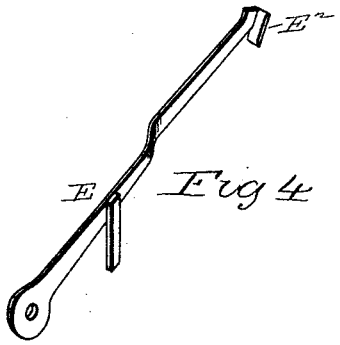


Fig 4

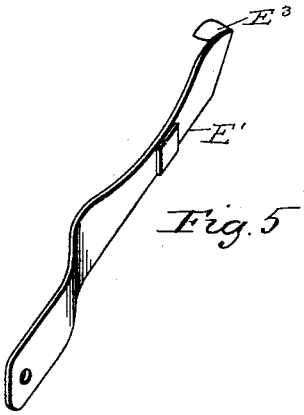


Fig. 5

Fig 6

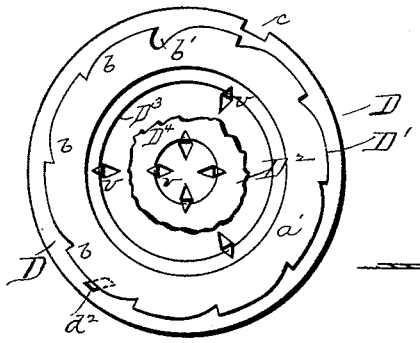
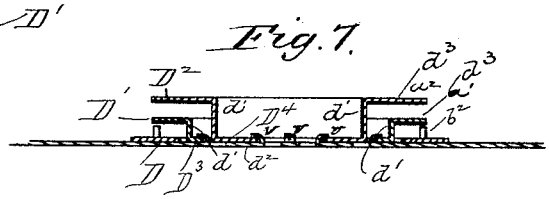


Fig. 7.



Witnesses
Wilbur Powell.
J. R. McGinn.

Inventors,
Elwood Headley.
Wm G. Horton.
by Connolly Bros.
attys.

(No Model.) 3 Sheets—Sheet 3.

E. HEADLEY & W. G. HORTON.

COIN RECEPTACLE AND REGISTER.

No. 384,523. Patented June 12, 1888.

Fig. 8.

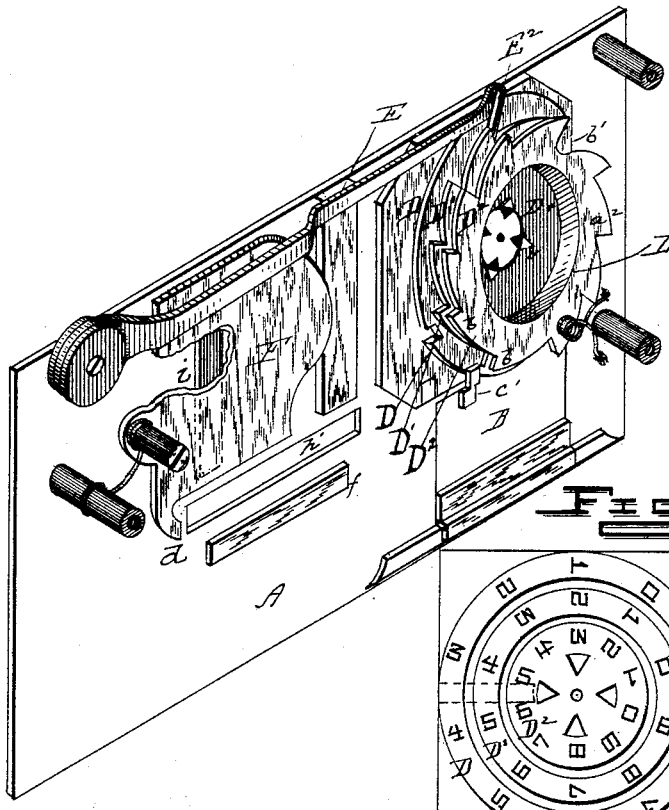
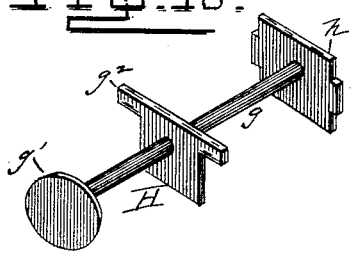


Fig. 9.

Fig. 10.



Witnesses:
C. B. Blackwood.
W. R. Williams.

Edward Headley.
Wm G. Horton.
Inventors.

By Their Attorneys.
Connolly Bros

UNITED STATES PATENT OFFICE.

ELWOOD HEADLEY, OF JERSEY CITY, NEW JERSEY, AND WILLIAM G. HORTON, OF BROOKLYN, NEW YORK.

COIN RECEPTACLE AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 384,523, dated June 12, 1888.

Application filed June 18, 1887. Serial No. 241,758. (No model.)

To all whom it may concern:

Be it known that we, ELWOOD HEADLEY, a citizen of the United States, residing at Jersey City, in the State of New Jersey, and WILLIAM G. HORTON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Coin Receptacles and Registers; and we do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a vertical longitudinal section of the coin receiving and registering mechanism. Fig. 2 is a top view of the same, the cover being removed. Fig. 3 is a side view. Figs. 4 and 5 are perspective views of the dogs for operating the registering-dials. Fig. 6 is a face view, and Fig. 7 a central sectional view, of the flanged dial-rings. Fig. 8 is a perspective view showing the interior of the apparatus and a portion of the mechanism. Fig. 9 is a face view of the dials. Fig. 10 is a perspective view of the operating-handle.

Our invention has relation to receptacles for coin—such as toy or portable savings-banks—and has for its object the provision of novel mechanism for registering the deposit of each coin and registering and indicating the monetary value of the contents of the bank or safe.

Our invention has also for its object the provision of novel means for preventing access to the interior of the receptacle until a certain amount has been deposited therein.

In an application filed March 17, 1887, by Elwood Headley, one of the present applicants, Serial No. 231,297, mechanism has been shown and described for effecting the operations above suggested; but in the device constituting the subject of said application several separately-disposed indicating-dials are shown.

The improvements embraced in the present application contemplate the arrangement of the indicating-dials in a more compact and convenient manner and certain modifications and changes in the devices for operating the same when a coin is deposited, conducing to greater simplicity and compactness.

The invention consists in the novel construction and combination of devices hereinafter described and claimed.

In the accompanying drawings, A designates a safe or toy savings-bank having a hinged outwardly-swinging door, B, through which the contents are removable.

C designates a casing containing the registering mechanism and located near the upper part or top of the safe.

D D′ D² represent the several dials, numbered from 0 to 9, the cipher indicating 10.

The mechanism which we illustrate and shall describe is especially contrived for the registration of coin of the values, respectively, of one cent and one dime. No other coin can be inserted or made to operate the mechanism, nor can either coin be made to serve as the means for actuating the mechanism related to the other.

The dials are operated by dogs E E′ engaging with teeth or notches in the rims of the former, and these dogs are respectively pivoted to the upper parts of the plates or disks F F′, which in turn are centrally pivoted to the sides, respectively, of the casing.

Between the inner face of each disk F F′ and the adjacent wall of the casing is a passage-way, (designated, respectively, *e e′*,) that next to the disk F being wide enough to receive a cent and the other wide enough to receive a dime. Below the disks is fitted a slide, H, having an operating-stem, *g*, and knob *g′*, and formed with a wide head-piece, *h*, running in grooves or slots *h′* in the sides of the casing, and with a transverse notched or tenoned bar, g^2, back of said head. On the back of each disk—that is, on the face nearest the casing-wall—is a ridge or projection, *i*. (Shown in dotted lines in Fig. 1.) When a coin is dropped into the apparatus it falls by way of the passage *e* or *e′* down behind the head *h* of the slide H and upon a horizontal flange or shelf, *f*, formed on the inner surface of the casing. Each of the plates or disks F F′ is formed with a tail-piece, *d*, which, as the disk turns, passes into the adjacent notched portion of the transverse bar g^2. Now, as will be observed, the disks or plates F F′ and the slide H are independent of each

other, so that the slide may be moved in and out without affecting the disks. As soon, however, as a coin is inserted it occupies the space between the head *h* of the slide and the flange *i*. With reference to the disk F, this space is so proportioned that when a coin of the exact size of a cent is inserted it will cause the disk to turn by forming a connection between the slide-head and the ridge *i* when the slide is drawn out, the tail-piece of the disk passing into the adjacent notch in the transverse bar g^2.

Should a coin of different size be dropped into the passage, it will still form a connection between the disk and slide, but will strike the flange *i* at a different point, and thus cause it to turn too soon or too late to avoid the catching of the tail-piece upon the bar g^2 at some point where it will become locked or wedged, thus preventing the coin from being conveyed to its opening *l*, through which it would pass into the safe.

The parts pertaining to the disk F′ are constructed and arranged on the same plan, but adapted for the passage of a dime and no other coin. The mechanism may be obviously constructed and arranged to receive other denominations.

The registering-dials are of peculiar form and arrangement. They are annular and flanged. The ring portions d' d' of the dials D′ D^2 are concentric and, on their outer edges, flush or even with each other and with the dial D. Around each edge are painted or produced numbers from 0 to 9. A slot or window, D^3, in the face of the casing exposes at a time three figures on their respective dials. Thus, for instance, the figures 275 indicate that two dollars and seventy-five cents have been deposited, while 000 will show that ten dollars have been put in the safe, this being the next rise after 999.

Each dial D′ D^2 has a flange on its inner edge, and the ring or concentric portions of the dials are of different widths, so that the flanges will lie parallel to each other or in a row with a narrow space intervening. The flanges are designated, respectively, a' and a^2. Flanges a' a^2 are notched or toothed on their edges, each having nine similar teeth or notches, *b*, and one deep notch, *b′*, while flange or dial-plate D has corresponding teeth or projections b^2 on its inner face and a supplementary beveled or oblique stud, b^3, immediately following the stud corresponding to the 0 on the ring portion. Diametrically opposite the 0 stud on the dial-plate D is a notch, *c*, in the flange, which is adapted to coincide with a catch, *c′*, on the door B when the 0 mark appears at the window or when the dials register ten dollars. At this time and at no other can the safe be opened and its contents withdrawn.

The dogs E E′ are formed with downwardly-projecting rearwardly-inclined teeth E^2 E^3, respectively, and these are beveled and lie in such relation that one tooth overlaps and will ride over the other. The tooth E^3 on the dog E′ is wide enough to traverse the edges of both flanges a' a^2 and intercept the teeth on the plate D. A step is formed in this tooth, so that ordinarily when operating on the teeth of the flange a^2 it will be raised above the teeth of the flange a' and not engage therewith. When, however, the deep notch b' in the flange a^2 is reached, the tooth falls low enough to engage with one of the teeth on the disk a'. Again, when the two deep notches in flanges a' a^2 coincide, the tooth E^3 will engage with one of the teeth or projections b^2 upon the plate *a*. The tooth E′ is only wide enough to take into the notches of the flange a' and, when the deep notch is reached, to engage with one of the teeth or projections on the plate D.

It being understood that the flange a^2 is turned to register cents and the flange a' to register dimes, the operation will be easily comprehended. Supposing, for instance, that a cent is deposited, slide H being previously pushed in, the coin will fall on the shelf *f* between the head *h* and the flange *i*. Now, as this slide is drawn out, the coin, forming a temporary connection between the head *h* and the ridge *i*, will cause the plate F′ to turn and thrust forward the dog E′, so as to pass one of the teeth or notches in the flange a^2. The coin now escapes into the safe, and the slide H being pushed back, the cross-bar g^2 will catch the tail-piece of the plate F′ and restore the latter to its normal position. At the same time the dog E′ is drawn back by the plate F′, connected therewith, and, engaging with one of the teeth of the flange a^2, turns the cent-registering dial one step, thus indicating that a cent has been deposited. If a dime be dropped into the safe, the dog E operates similarly on the flange a' and proper registration is made. Now, when nine cents have been deposited, the dog E′ will have reached the deep notch b' in the flange a^2, and, in addition to turning its own dial, will turn the dime-dial one step; and when nine steps have been made by the dime-dial the dog E or dog E′ will catch upon one of the teeth of the plate D and effect a registration of one dollar, and so on until ten dollars, either in dimes, cents, or both, have been deposited, when the notch in the dollar-dial or its flange will coincide with the catch on the safe-door and allow the same to be opened. When this point is reached, it will be seen that the deep notches in the two flanges a' a^2 coincide with the tooth b^2 on plate D, next preceding the tooth which is opposite the door-catch, and that between said coinciding tooth and the next the additional tooth, d^2, is located and placed sufficiently beyond the circle of the other teeth to be in the path of either of the dogs E E′. Now, if either a cent or a dime be deposited in the safe, the very next motion of the proper dog will not only turn the corresponding dial, but will catch on the tooth d^2 and turn the dollar-dial sufficiently to again lock the safe-door, but not

enough to register another dollar. The safe can only be opened after another sum of ten dollars has been deposited.

While we do not confine ourselves to any specific construction or arrangement of the dials beyond what is necessary to the operation described, we have shown a simple and comparatively inexpensive construction and arrangement. The dial D is formed with three slots, k k' k^2, allotted, respectively, to the separate indications. The dials D′ D^2 are flanged at D^3 D^4, and upon the face of these flanges the figures are placed, while the face of the flat dial D is figured or numbered. To hold the dials D′ D^2 in place, the dial D is punched and angular lugs v struck up and bent over the flanges D^3 D^4, thus serving as retaining devices, as well as bearings for the disks to turn upon, and obviating the necessity of using a shaft or spindle and fitting the dials or disks thereto. By making the dials in the form shown they are easily and cheaply constructed and are capable of being arranged in compact order.

A coiled spring, M, having its ends attached to the casing and its coils embracing the flanges a' a^2, exerts sufficient pressure to keep the disks from working too loosely and from turning in the wrong direction. Springs N N are also connected with the plates F F′ to hold them upright.

Having described our invention, we claim as new and desire to secure by Letters Patent—

1. In a coin-receptacle, the combination, with a series of concentric dials representing different values, of the dogs E E′, engaging with said dials, the pivotal plates or guards F F′, and the slide H, substantially as described.

2. The combination, with the concentric dials representing different values and having notched flanges, of the dogs E E′, the pivotal plates or disks having tail-pieces, and the slide H, having head h and notched cross-bar g^2, substantially as described.

3. In a coin-receptacle, the combination, with the registering-dials and the dogs E E′, engaging therewith, of the plates or disks formed with the flanges i and tail-pieces d, and the slide H, having the head h and notched bar g^2, said parts being so arranged as to be conjointly operative only when the space between the head h and flange i is occupied by an independent body, such as a coin of given diameter, substantially as described.

4. In a coin registering or counting apparatus, the combination of a registering-dial, a dog, E, whereby the same is moved step by step, a pivotal plate or disk to which said dog is attached, having a flange, i, on its face and a tail-piece, d, and a slide, H, having a head, h, and notched cross-piece g^2, to control the movement of the parts when a coin is placed between the head of the slide and the flange on the disk, substantially as described.

5. In a registering apparatus, the combination of the dials comprising the plate D, having the bent lugs, and the interiorly and exteriorly flanged rings D′ D^2, substantially as described.

In testimony that we claim the foregoing we have hereunto set our hands this 20th day of May, 1887.

ELWOOD HEADLEY.
WM. G. HORTON.

Witnesses:
WM. E. DURYEE,
EUGENE W. BURD.