

H. BROOME.

COIN DELIVERING DEVICE.

No. 489,863.

Patented Jan. 10, 1893.

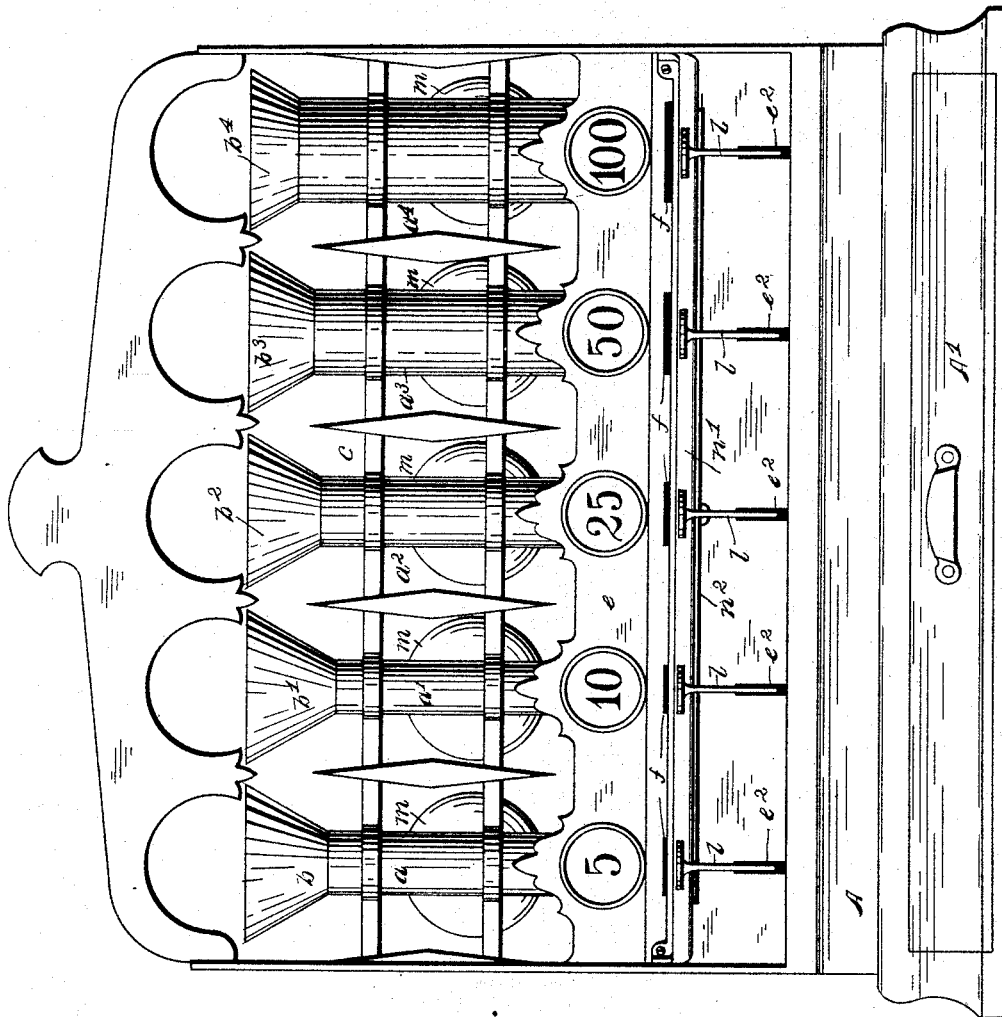


Fig. 1.

Witnesses

H. D. Baker

Frank Platt

Inventor

Henry Broome

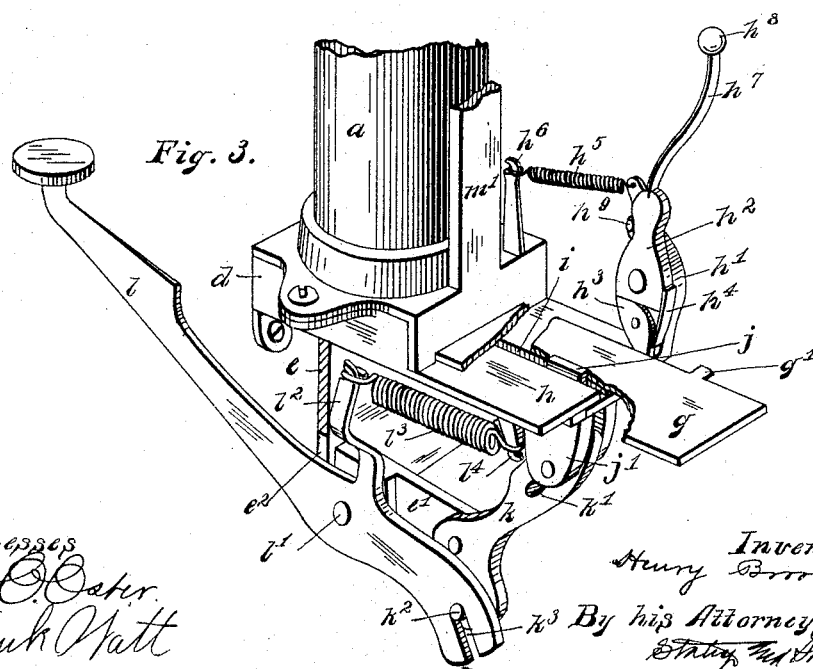
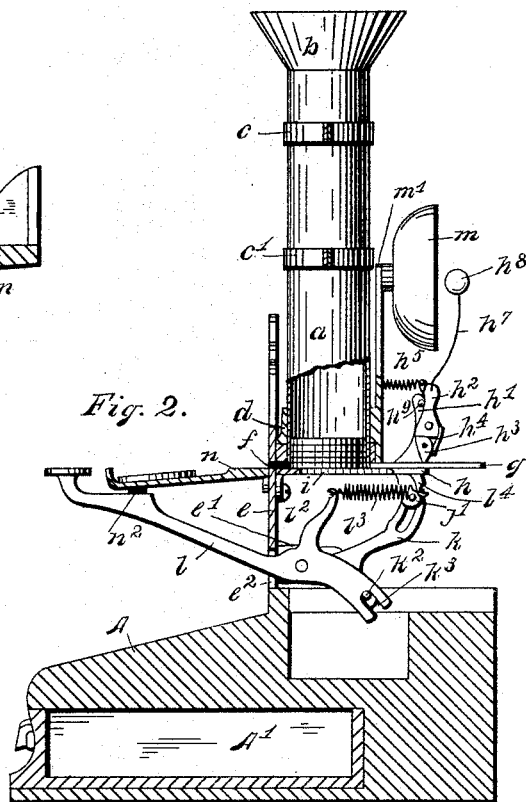
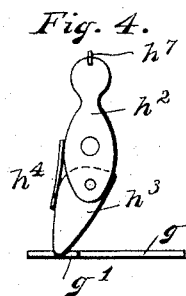
By his Attorneys

Shepherd

H. BROOME.
COIN DELIVERING DEVICE.

No. 489,863.

Patented Jan. 10, 1893.



Witnesses
H. O. Oaker.
Frank Watt

Inventor
Henry Broome
By his Attorneys
Stacy & Shepherd

UNITED STATES PATENT OFFICE.

HENRY BROOME, OF SPRINGFIELD, OHIO, ASSIGNOR OF TWO-THIRDS TO
ELMER E. ALBIN AND JOHN W. HUGHES, OF SAME PLACE.

COIN-DELIVERING DEVICE.

SPECIFICATION forming part of Letters Patent No. 489,863, dated January 10, 1893.

Application filed April 20, 1892. Serial No. 429,823. (No model.)

To all whom it may concern:

Be it known that I, HENRY BROOME, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Money-Changers, of which the following is a specification.

My invention relates to improvements in money changers, and the object of my invention is to provide a simple and effective device suitable for use as a cash receptacle and provided with means by which coins of different denominations may be readily extracted therefrom in making change.

A further object of my invention is to provide means for producing an alarm when the device is set into operation, by means of which the amount of change extracted from the device may be determined by the character of the alarm.

My invention consists in the various constructions and combinations of parts hereinafter described and pointed out in the claims.

In the accompanying drawings Figure 1 is a front elevation of a device embodying my invention. Fig. 2 is a partial transverse sectional view of the same. Fig. 3 is a detail view in perspective and partly in section showing the arrangement of the ejecting mechanism and the devices for producing an alarm. Fig. 4 is a detail view of the same and Fig. 5 is an enlarged detail of the coin receiving trough and table, hereinafter referred to.

Like parts are represented by similar letters of reference in the several views.

In the said drawings A A, represent the main frame or casing, the bottom or base of which is provided with a drawer A', which may be arranged in any suitable manner for the reception of bank notes or other forms of paper money, the money changing part of the device being especially adapted for coins and, as illustrated in the drawings, for silver coins, though the construction may be employed for use with gold or other coins.

Arranged in series in the upper part of the main frame A A, are money receiving tubes or cylinders a, a', a^2, a^3, a^4 , surmounted at the top by an open cone shaped receiving funnel or hopper b, b', b^2, b^3, b^4 . These tubes or bar-

rels are each made of a diameter slightly larger than the diameter of the coin which it is intended to receive and hold, so that a coin thrown in at the cone or hopper shaped open top will find its way to the bottom of said tube and lie horizontally thereon, the tubes being arranged vertically. The tubes are preferably supported in the main frame A A, by horizontal bars $c c'$, which extend across the frame and are provided with suitable openings to receive the respective tubes. These bars $c c'$, may each preferably be made in two parts adapted to be clamped together, as indicated in Fig. 2 so as to embrace the said tubes and hold them firmly in a vertical position. The tubes are each connected at the bottom to a supporting stand d , the base of which forms the bottom of the tube. These stands $d d'$, are each connected to a vertical supporting bar e , which extends entirely across the main frame and forms a part thereof. This bar is preferably cast in metal of an ornamental shape and has opposite to each tube figures denoting the denomination of the coins contained within the respective tubes, preferably in raised figures cast directly on the plate, as indicated at 5, 10, 25, 50, and 100 in Fig. 1.

The supporting stand d , of each of the tubes A, &c. is provided at the front and rear with a slotted opening f , of a sufficient size just to allow a coin of the denomination contained in the tube to pass through. At the rear of this slotted opening f , and extending into the same so as to stand substantially flush with the inner periphery of the tube, is a reciprocating slide g , which rests on the bottom of the stand d , as shown in Figs. 2 and 3, the said bottom being extended rearwardly, as shown at h , to form a support for the slide g , when in its normal position. This support h , as well as the bottom of the tube is provided with a longitudinal slot i , through which is extended the projecting end j , of a bifurcated connecting piece j' , the projecting end of which is connected to the slide g , and serves to move and guide said slide transversely through the said coin containing tube at the bottom.

Immediately below the supporting stand d , 100

and pivoted to a projecting arm e' , from the transverse bar e , is a pivoted vibrating arm k , connected at its upper end through a slotted opening k' , to the bifurcated connecting piece j' , and provided at its lower end with a projecting stud k^2 , which engages in a notched or slotted opening k^3 , at the inner end of a pivoted key-lever l , also pivoted at l' , to the projecting arm e' , and adapted to extend through a slotted opening e^2 , in the transverse bar or frame plate e . The key-lever l is provided with an upwardly extending arm l^2 , to which is connected one end of a spring l^3 , attached at its other end to a projecting stud l^4 , extending downwardly from the extended portion h , of the supporting stand d . Extending upwardly from the extension h , is a projecting arm or finger h' , to which is pivoted a vibrating arm h^2 , having at its lower end a pivoted spring pressed catch h^3 , normally held in the position indicated in Figs. 2 and 3, by a spring h^4 . This spring pressed catch h^3 , is adapted to be engaged by a projecting lug g' , on the slide g , when the said slide is moved in a forward direction and thus move the pivoted arm h^2 , the spring pressed catch being adapted to yield when engaged on the opposite side by said projection and permit the projection to pass without moving the arm h^2 . The arm h^2 is connected at its upper end to a spring h^5 , which spring is attached at its opposite end to a suitable projecting stud h^6 , on the supporting stand d . Extending upwardly from the arm h^2 , is a resilient arm h^7 , carrying at the top a hammer h^8 , adapted to strike a gong m , supported on a suitable stand m' , from the supporting stand d . Located in front of and connected to the transverse bar or plate e , is the change receiver B, having at its rear end a table n , the top of which stands flush with the bottom of the slot f , leading from the coin receiving tube; the outer portion of said change receiver being depressed so as to form a coin receiving trough n' , into which the coin passes when discharged through the slotted opening in the respective tubes.

It will be understood that the ejecting mechanism for one tube is a substantial duplicate of the other tubes. Different toned gongs m , however, are arranged for each tube, so that the alarm produced by the operating mechanism of one tube produces a different sound or tone from the other tubes.

It is thought that the operation will be understood from the above description. The coin as it is received is thrown into the cone shaped opening at the upper ends of the respective tubes, coins of each denomination being placed in the tube adapted to receive the same. In making change the key-lever l , corresponding to the denomination desired, is depressed. This depression through the operation of the intermediate pivoted arm, produces a longitudinal movement of the

slide g , which discharges a single coin of that denomination through the slotted opening f , onto the table n , which supports the same, until the inner edge has passed entirely through the slotted opening, when the coin falls into the trough n' , from which it is gathered. The arrangement of the trough n' , and the table n , permit any number of coins of one denomination to be discharged from the same tube without interfering one with the other. When the key-levers are released all the parts are returned to their normal positions by the spring l^3 . As the slide g , passes inwardly it engages the catch m^3 , thus moving the arm h^2 , outwardly until it is released by the lug g' , and the spring h^5 , causes it to strike the gong m , corresponding to the tube, and thus producing a tone representing a coin of that denomination. As the slide g , is moved outwardly the spring actuated catch h^3 , permits the projection g' , to pass the arm h^2 , without moving the same, said arm being prevented from moving in a backward direction by a stop h^9 , on the supporting arm h' .

A device as thus described is extremely simple in construction and operation. The coins may be thrown into the different tubes, and, by reason of the cone shaped openings, will find their way into the tubes, where they will be deposited in the proper position for discharge without the necessity of arranging them. The arrangement of the frame and casing may be made attractive so as to form an ornament, which, with the different tones to the gongs, as the different denominations of coin are ejected, produce an attractive device.

Immediately under the change receiver B, I preferably provide an elastic strip n^2 , of rubber or other suitable material, adapted to receive the recoil of the key-levers l , which contact therewith, and thus prevent the jar and wear which otherwise would occur.

It is obvious that various modifications in the device may be employed without departing from the spirit of my invention. I do not, therefore, limit myself to the exact constructions shown and described, but

I claim:

1. In a money changer a series of vertical tubes having cone shaped receiving ends, supporting stands at the base of said tubes each having slotted openings at right angles to the axis of said tubes corresponding in size to the coins contained in said tubes, an ejecting slide passing through each of said openings, and means for operating said slides, a change receiver located in front of and extending transversely across the entire series of tubes, having at its rear a table the top of which stands flush with the bottoms of the respective slotted openings, and formed at the front with a coin receiving trough, substantially as specified.

2. The combination with a coin receiving

tube having the cone shaped receiving end, a stand for said tube having a slotted opening and an extended bottom, a reciprocating slide passing through said opening and connected to a pivoted arm through a longitudinal slot in the bottom of said tube, a pivoted key-lever connected to said pivoted arm and having a retracting spring, a gong supported adjacent to said tube, a spring actuated hammer for striking said gong, and

a projection on said reciprocating slide adapted to retract said hammer, substantially as specified.

In testimony whereof I have hereunto set my hand this 18th day of April, A. D. 1892.

HENRY BROOME.

Witnesses:

OLIVER H. MILLER,
H. O. OSTER.