

(No Model.)

3 Sheets—Sheet 1.

R. E. HANVEY.
COIN SEPARATOR AND DELIVERER.

No. 512,959.

Patented Jan. 16, 1894.

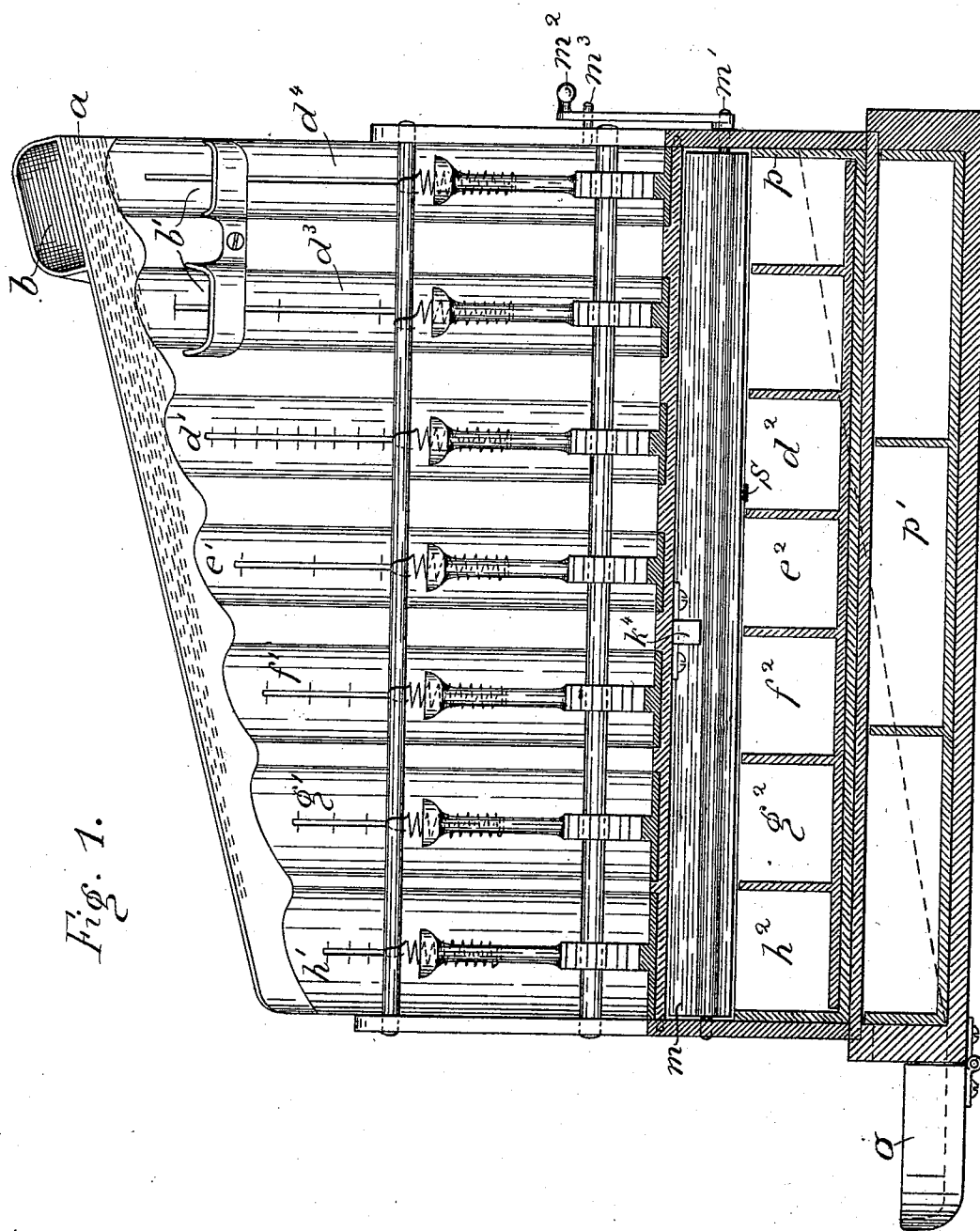


Fig. 1.

Witnesses
Walter Wagner
Anton Fougner

Inventor
Robert E. Hanvey
By his Attorney
Wm Zimmerman

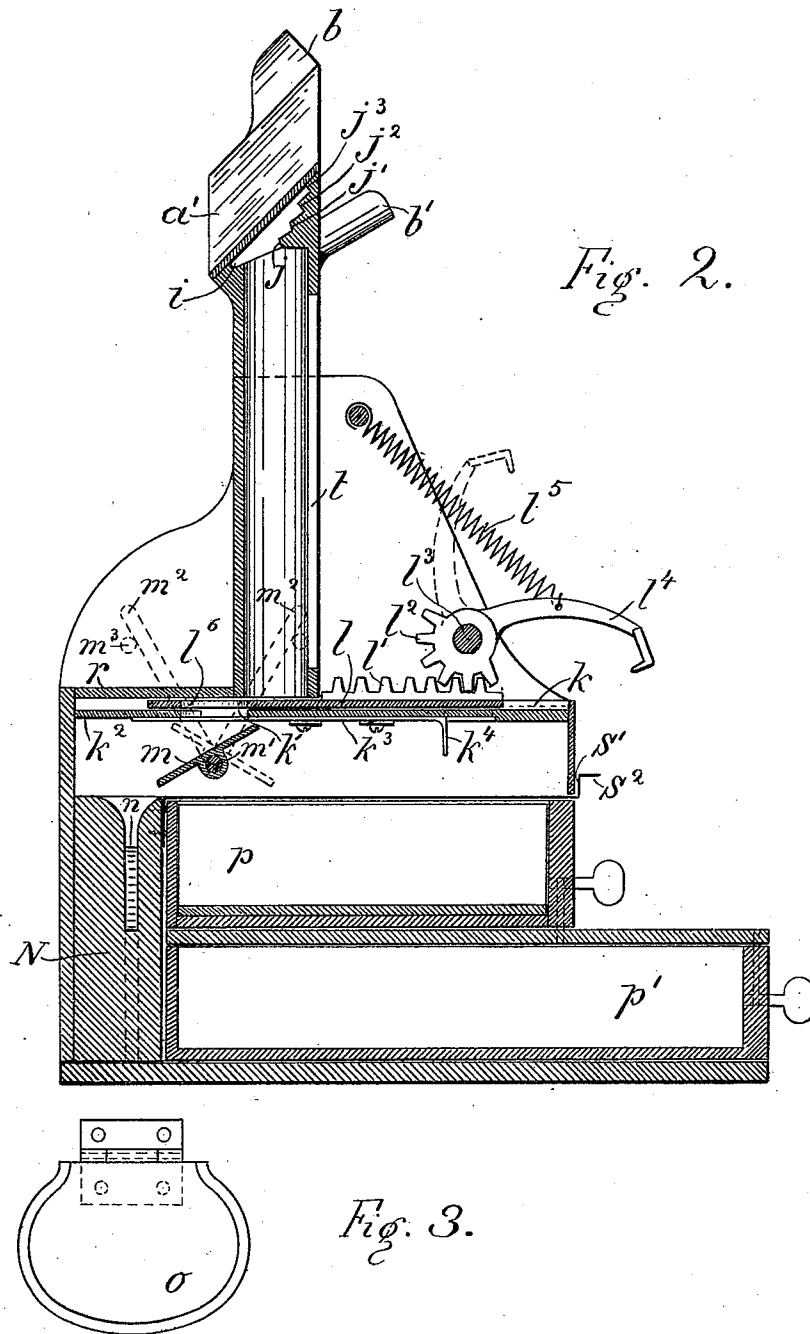
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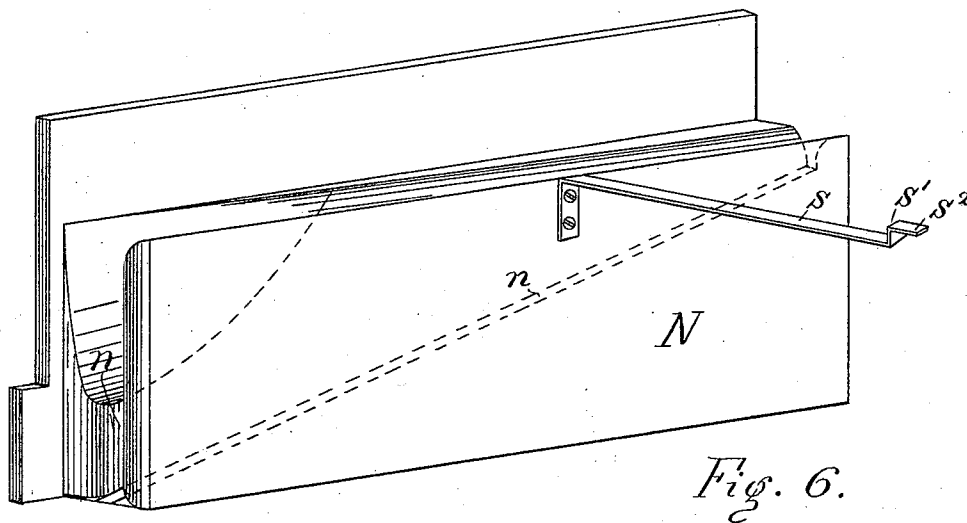
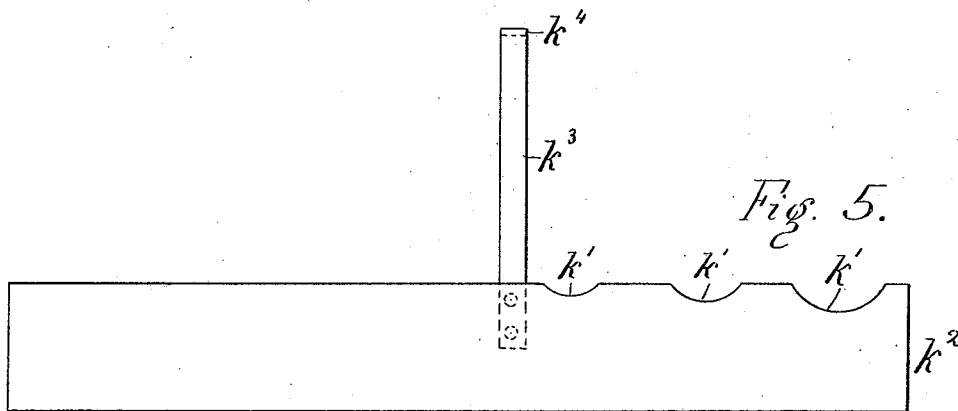
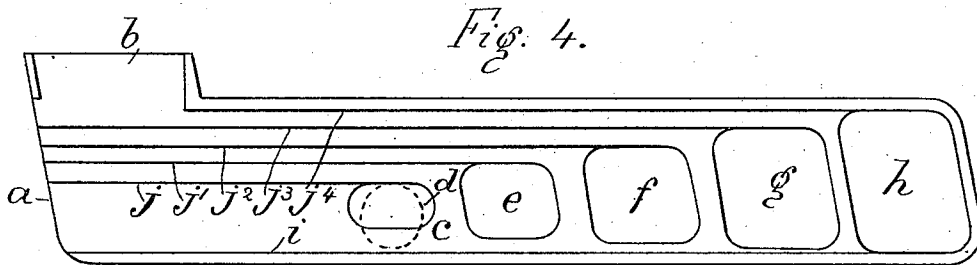
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UNITED STATES PATENT OFFICE.

ROBERT E. HANVEY, OF CHICAGO, ILLINOIS.

COIN SEPARATOR AND DELIVERER.

SPECIFICATION forming part of Letters Patent No. 512,959, dated January 16, 1894.

Application filed September 2, 1892. Serial No. 444,874. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. HANVEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coin-Distributing Devices, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 shows my new coin distributing and change making device, in front elevation, of which the part below the cam levers is shown in section on a vertical plane immediately behind the front of the upper drawer. Fig. 2 shows my device in a transverse section taken near the center of its length. Fig. 3 shows, in plan view, the pan, or receptacle which receives the coins from the machine. Fig. 4 shows, in plan view, the coin distributing device at the top of the machine, the cover being removed to show the arrangement of the different sized openings and the runways for the coins to each hole. Fig. 5 shows, in plan view, a slide which opens and closes the holes in the plate or base through which the coins are dropped from the reciprocating plate. Fig. 6 shows, in perspective, the part, or piece, which closes the lower and back part of the device, which contains the drawers, and the runway in said piece upon which the coins pass out from the machine.

Like letters refer to like parts.

The object of my invention is to produce a machine by means of which any coin, or number of coins may be deposited in a suitable receptacle, in any sum, without handling the coins, and thereby making less liability to err in paying out a number of coins, and at the same time performing said operation much more expeditiously than can be done by hand in the old way, from drawers and tills, and to attain said desirable ends I construct my said new device in substantially the following manner, namely: I make a receiving and distributing hopper *a*, adapted to receive any suitable number of coins promiscuously, at its mouth *b*, from whence they fall into a long throat *c*, which is inclined from that point, downward, both lengthwise and transversely, and provided with holes *d*, *e*, *f*, *g*, *h*, corresponding to the size of the coins to be

sent through the machine. Said throat has a ledge *i*, at its lower longitudinal edge which forms a track on which all coins run, and parallel to said track, and in said throat are ledges, or steps, *j*, *j'*, *j''*, *j'''*, *j''''*, which terminate at the upper sides of the holes, *d*, *e*, *f*, *g*, *h*, respectively. There is a suitable cover *a'*, over said tracks and ledges, shown in Fig. 2. When, therefore, coins are dropped into the mouth, *b*, they immediately fall upon the track *i* and drop down under the ledge adapted to their specific size. Thus, for instance, a dime will just freely pass between the ledges *i* and *j*, and a dollar between the track *i* and ledge *j''''*, and intermediate coins in like manner between said intermediate ledges and track *i*. Each coin will, therefore run to the end of its ledge and then drop into its tube which it cannot pass, therefore making it impossible for a coin to go wrong. The highest denomination, or, largest coin, being placed at the lowest end of the throat and each successively lower denomination coin being placed next above it and so on until to the upper end of said throat as shown. Under the holes through said throat are placed vertically slotted tubes, of proper caliber, for their coins, which terminate in the horizontal base *k*, and on said base and under each tube is a reciprocating plate *l* provided with a fixed rack *l'* actuated by a pinion *l''*, turning on a shaft *l'''*, provided with a lever *l''''*, to which is attached a retracting spring *l'''''*. Said plate *l*, is provided with a hole *l''''''*, adapted to receive a single coin, when in its normal position under the tube, and the lever *l''''* up, as shown in dotted outline, and, beyond the tube and within the range of motion of said plate *l* is a hole *l''''''''*, through, or partly cut out of said plate *l*, large enough to freely pass a coin and drop it on a tilting board *m* turning on a shaft *m'*; said holes, board and shaft passing through the entire length of the machine. A lever *m''* on shaft *m'* tilts said board into either of the two positions indicated and holds it in such place by means of suitable stops *m'''*. Said board receives the coins as they are dropped on it and causes them to fall either into the inclined discharging channel *n*, or into the drawer *p*. Said channel has vertical sides which flare at the top so as to readily receive the falling coins which then slip down into

the narrow space between its erect sides and rest and roll on the inclined bottom between the sides of said channel into a receptacle, or pan *o*, secured to the end of said channel.

5 In this case said pan is hinged to the bottom of the machine so that it may be turned back, or down, so that coins may be received directly into a bag or other receptacle, or the hand. When said tilting-board is turned to

10 its opposite position the coins fall from it into a drawer *p* which is divided, by partitions, into spaces d^2 e^2 , f^2 g^2 , h^2 , under and corresponding with the tubes e' , f' , g' , h' .

15 The rear edge of the platform *k* consists of a piece k^2 , adapted, in any suitable way, to slide toward and from the holes k' , and to it is attached an operating handle consisting of a blade k^3 with a handle k^4 which becomes accessible for the hand by removing the drawer

20 *p*. The block *N* containing the channel *n* forms the back of the machine from the top of the cover *r* to the bottom of the device. It is held in place by a blade *s* having a shoulder s' which slips over the face of the front

25 wall and up above the drawer *p* where it is held in place by said drawer *p* which, the drawer, must first be removed from the machine before the blade *s* can be released so as to release the block *N*. Under the drawer

30 *p* is a drawer p' , adapted to hold paper money for which it is divided into suitable compartments. Said drawers are also, each, provided with a suitable lock and key. Through the slots *t* the operator may readily see when any

35 tube needs to be replenished with its coin. There are also tubes d^3 , d^4 each provided with a mouth or hopper b' into which special, or odd, coins may be placed and passed out by mechanism like that which is used for the

40 other tubes.

The operation of the machine is very simple; coins are fed into the mouth *b* from whence, by gravity, through the construction of the throat they distribute themselves into

45 their respective tubes, and any special coins, as Canadian dimes, or pennies, &c., are fed into the secondary tubes d^3 , d^4 . After the machine is thus charged with coins it is ready to operate. Then to pay out any desired sum

50 the levers l^4 , corresponding to the respective

coins in the tubes are worked upon which the desired coins will fall on the board *m* and from it roll into the channel *n* and from thence into the pan *o*; but if it is desired to pass the coins into the drawer *p* so that they may be locked up, the board *m* is tilted into the position shown in broken lines after which, when the levers l^4 are operated, the coins may be drawn from the tubes into the drawer.

What I claim is—

1. In a change making device, the combination with a throat provided with spaces for special coins to move in and holes to drop therefrom and tubes to receive the coins, of mechanism adapted to discharge the coins from said tubes, a tilting-board to catch and drop the coins upon either side of its axis, substantially as specified.

2. In a change making device, the combination with a throat provided with spaces for special coins to move in and holes to drop therefrom and tubes to receive the coins, of mechanism to discharge the coins from said tubes, a tilting-board; an inclined channel and a drawer with partitions corresponding to said tubes, substantially as specified.

3. In a change making device, the combination with a throat provided with spaces for special coins to move in and holes to drop therefrom and tubes to receive the coins, of mechanism to discharge the coins from said tubes, and adjustable openings in the base of said tubes, a tilting-board; an inclined channel and a drawer, arranged, substantially as specified.

4. In a change making device, the combination with a doubly inclined throat provided with a track at its lower longitudinal edge, and, opposite and parallel thereto with ledges, and holes at the ends of said ledges, and tubes under said holes, of mechanism adapted to discharge the coins from said tubes, and a channel with an inclined bottom to receive and finally discharge the coins from the machine substantially as specified.

ROBERT E. HANVEY.

Witnesses:

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