J.W. MEAKER,

Money holder-assorter and register

73911

PATENTED

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Fig. 1.

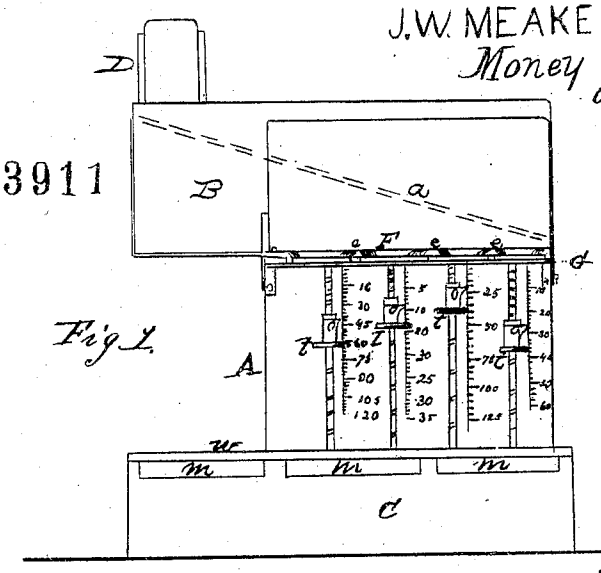


Fig. 7.

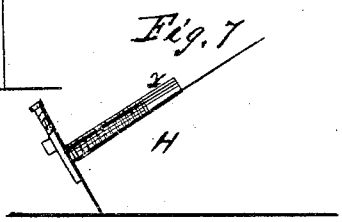


Fig. 8.

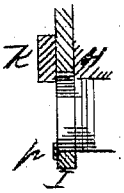


Fig. 9.

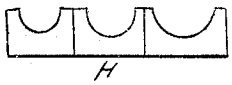


Fig. 4.

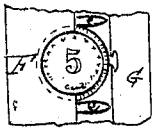
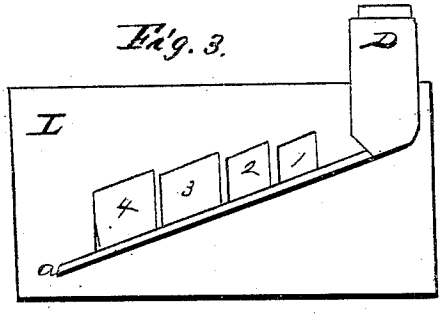


Fig. 2.

Fig. 3.



Witnesses

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United States Patent Office.

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Letters Patent No. 73,911, *dated January* 28, 1868.

IMPROVEMENT IN APPARATUS FOR COUNTING MONEY.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. W. MEAKER, of Chicago, in the county of Cook, and State of Illinois, have invented certain new and useful Apparatus for Assorting, Holding, and Registering Coin; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention consists in a novel device for assorting, holding, and registering coin, to be used in business transactions in banks, and wherever money is received and paid out; and also in a device for holding currency, to be used in connection with the coin-apparatus when desired.

Figure 1 is a front elevation.

Figure 2 is a vertical section, taken on the line *x x* of fig. 1.

Figure 3 is a rear view of a portion of the assorter, with a portion removed to show the interior.

Figure 4 is a top plan view of a portion; and

Figures 7, 8, and 9 are views representing modifications of the devices for removing the coin.

In constructing my apparatus, I provide a body, A, in which is formed a series of vertical tubes, of a diameter internally corresponding with the coins of the various denominations to be used. In these tubes is placed a sliding plate or follower, *l*, supported by a spring, *b*, and having attached to it, at its front, a thumb-piece, *t*, with an index or pointer, *o*, these latter being connected to the follower *l* by projecting through a vertical slot in the front of the tubes, as shown in figs. 1 and 2. Upon the front of the tubes, and flush with their upper ends, is secured a small shelf or plate, G, and between each of the tubes, above their upper ends, is secured a small division piece, *e*, of a thickness corresponding with that of the various coins, and upon these is secured a plate, F, having circular recesses cut in its front edge, slightly less in diameter than the tubes, so that when the coin is raised by the spring and follower to the top of the tubes, the edge of the circular recesses in the plate F will slightly project over the coin and prevent it from being raised up out of the tubes, as shown in fig. 4. Upon the front of each tube is marked a series of points or graduations corresponding with the thickness of the coins, so as to indicate the number that each tube will hold, and these graduations are divided into series or groups, numbered by figures, arranged decimally, or otherwise, as may be desired, the index or pointer *o* always indicating at a glance the exact number contained in any tube, the index being caused by spring *b* to rise as the coins are removed, as hereinafter explained.

The coins may be inserted singly by depressing the follower and shoving them in sidewise at the top, and letting them fall down until the tube is filled, but to facilitate the operation of filling them, I provide an apparatus which I term an assorter, and by which the various coins, when placed into one common hopper, will be automatically assorted and delivered separately to their proper tubes. This device is represented by B in the drawings, and consists of a box having its front standing nearly vertical with its bottom, and rear side slightly inclined, as shown in fig. 2. In the interior of this box is a division-plate, L, upon the rear side of which is secured a strip, *a*, slightly thicker than the coin, this strip *a* being inclined downward from the hopper D toward the opposite end, thus forming an inclined way upon which the coin rolls gradually down towards its lower end, as shown clearly in fig. 3. In the division-plate L is cut a series of holes, corresponding in size to the various-sized coins, the smallest hole being located next to the hopper or upper end, the holes increasing in size successively in regular order to the lower end. At the upper end of the inclined way is located a hopper or mouth, D, of proper size to permit the coin to slide in edgewise, and on the rear of the box B is secured a plate, T, which prevents the coin from falling over, and keeps it leaning against the rear side of the plate L. Now, when coins are placed in the hopper, they will slide down on to the inclined strip *a*, upon which they roll on their edge until they arrive opposite a hole in the plate L of sufficient size to permit the coin to drop through, when it will fall upon the inclined bottom *n*, from whence it will slide under the plate F into the tube below. When a coin is started down the inclined way *a*, if it be a small one, it will drop through the first hole, but if too large for that, it will pass on until it arrives opposite a hole that is large enough to let it fall through, and thus each coin is delivered at the proper point to enter its proper tube, there being division-plates to prevent

the coin from becoming mixed after they enter the box through the holes in plate L, which division-plates serve to guide the coins to their proper tubes.

The coin being thus assorted and placed in the separate tubes, can be used as desired by simply placing the finger on the upper one, in any one or more of the tubes and drawing them forward on to the shelf G, the springs *b* instantly shoving others up into their places, ready to be drawn off in like manner.

Various modifications may be used for removing the coins from the tubes. If preferred, instead of the tubes, a series of semicircular troughs, as represented in fig. 9, may be arranged side by side, to receive and hold the coin, these troughs being inclined, as represented in fig. 7, sufficiently to cause the coin to slide down therein, there being a weight or follower, *r*, placed behind the column of coin in the trough, to prevent them from falling over, the graduation and index being used as before. At the lower end of the trough is placed a gate, I, having a hole through it of a size corresponding with the size of the coin, as shown in section in fig. 8, this gate being arranged to slide vertically, and held up by a spring, so that when released from pressure it will rise to a position to bring the hole in it opposite the mouth of the trough. In front of the gate is secured a plate or strip, *k*, having its lower edge project slightly over the upper edge of the hole in the slide or gate I, so that a coin which enters the hole will be prevented from falling through until the gate is depressed far enough to let the upper edge of the coin pass out under the plate *k*. To prevent the lower edge of the coin from accidentally slipping out, a small projection or lip is formed on the lower portion of the gate, so as to project up slightly in front of the hole, as represented by *p*, fig. 8. The gate will of course be made of a thickness corresponding with that of the coin, so that when a coin slides into the hole in the gate, it will just fill it and permit the gate to be depressed without catching on the next coin in the rear. As soon as the gate returns to its position opposite the mouth of the trough, another coin will slip into the hole, and thus the operation may be repeated until the supply of coin is exhausted.

In case it be desired to use the assorter with the device last described, it will be applied at the upper end of the troughs, and the followers being removed, the troughs may then be elevated to a nearly vertical position, and thus filled. While an apparatus constructed on these modified plans may be made to answer the desired purpose, still I prefer that previously described, as being best adapted to the uses intended.

For convenience, when paper money is to be used, I mount the coin-apparatus on a box, C, having a series of lids, *m*, pivoted at one end, their opposite end being pressed up against an overlapping piece, *u*, so that by depressing the loose end of the lid *m*, the end of paper bills may be inserted between it and the overlapping piece *u*, and thus be held securely in place. When wanted for use, the top one of the pile may be readily drawn out by taking hold of its loose end and giving it a sudden pull. Of course there will be as many of these lids as there are different denominations of bills to be used. Where paper money is not used, this part of the apparatus may be omitted, and the coin-device used alone.

My improved device may be made of any desired size, and is equally well adapted for coins of all kinds and denominations, whether gold, silver, or copper. It is especially adapted to the wants of banks and similar institutions, but may also be used in stores, railway and other offices, where money is to be paid out or change required to be made. By making a record of the amount in it at the beginning of the day's operations, and again at the close thereof—which amounts can be determined by a glance at the indexes or registers—the amount paid out during the day can be readily ascertained with absolute certainty. By having two of the holding and registering-devices, and arranging the assorter so that it can be shifted from one to the other, one may be used to receive the coin paid in and the other to pay from, and thus the two together will accurately register and indicate the receipts and payments during the day, the two being used alternately to receive and pay from.

By the use of my improvements much saving of both time and labor is effected, and the business more accurately as well as more speedily accomplished.

Having thus described my invention, what I claim, is—

1. A series of tubes, of varying diameters, to suit different-sized coins, and provided with graduations corresponding with the varying thickness of different coins, and numbers to indicate the amount contained in each tube.

2. A coin-assorter, consisting of an inclined way for the coin to pass down, with openings corresponding in size with the various-sized coins, said openings being arranged with the smallest at the upper end of the inclined way, and increasing in size in regular order towards the lower end, with partitions or guides to direct the various coins to their respective receptacles, substantially as described.

4. The yielding bed *m*, pivoted at one end, in combination with the stationary support *a*, arranged as and for the purpose set forth.

J. W. MEAKER.

Witnesses:
P. T. DODGE,
A. M. OLDS.