

(No Model.)

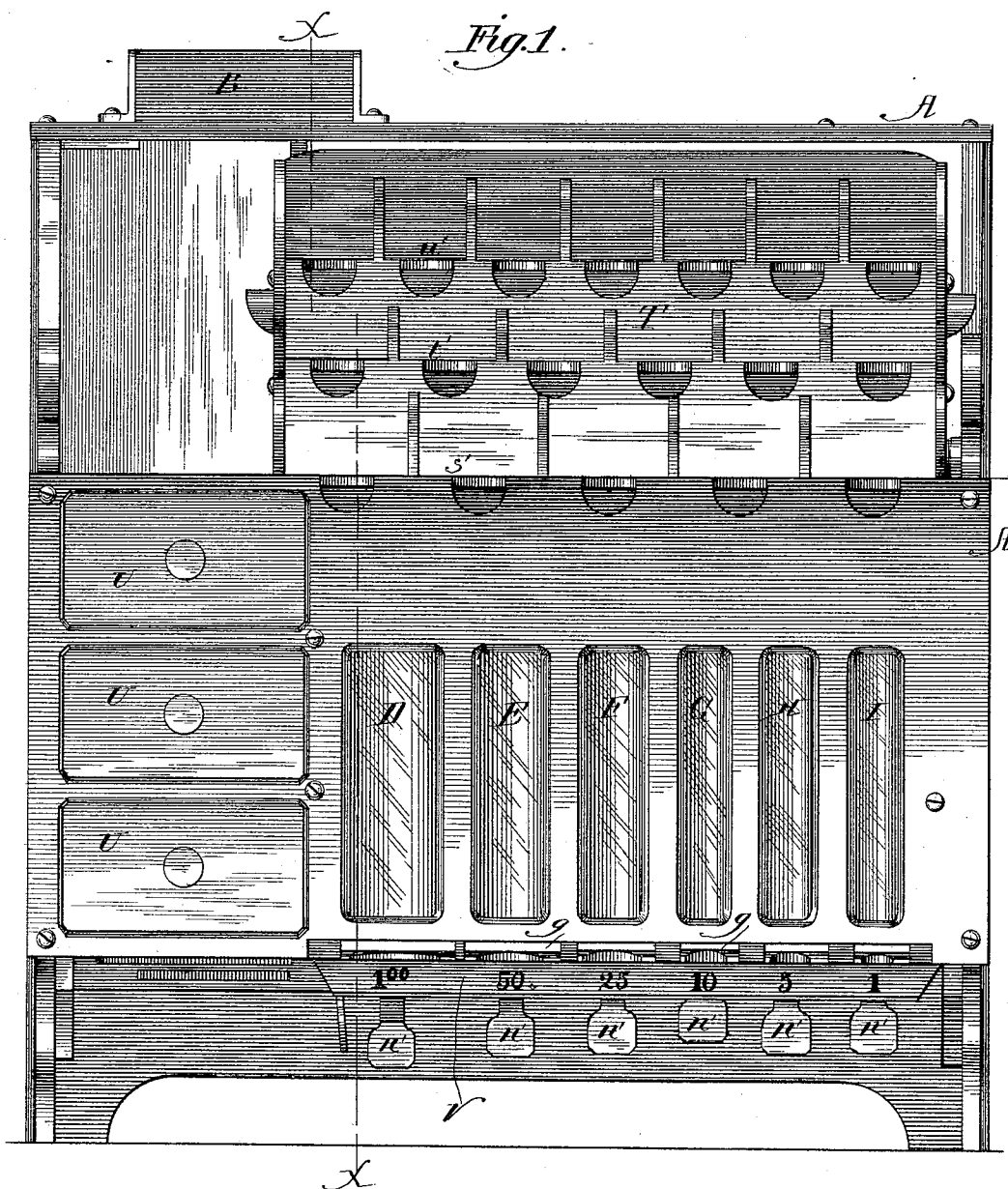
4 Sheets—Sheet 1.

T. CARNEY.

COIN ASSORTER AND DELIVERER.

No. 386,453.

Patented July 24, 1888.



Witnesses:
Albert H. Adams.
Harry T. Jones

Inventor:
Thomas Carney

(No Model.)

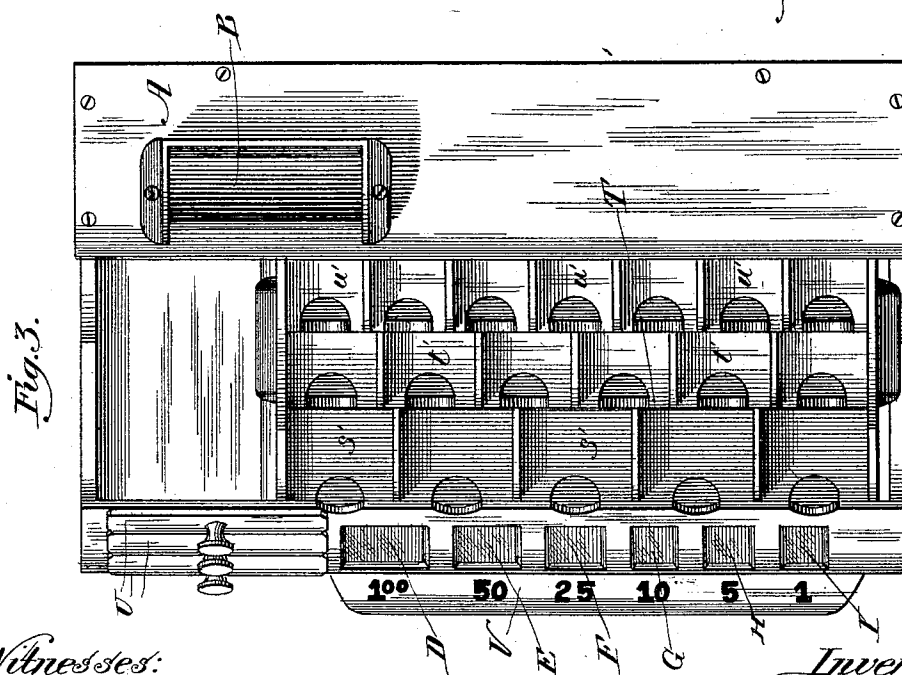
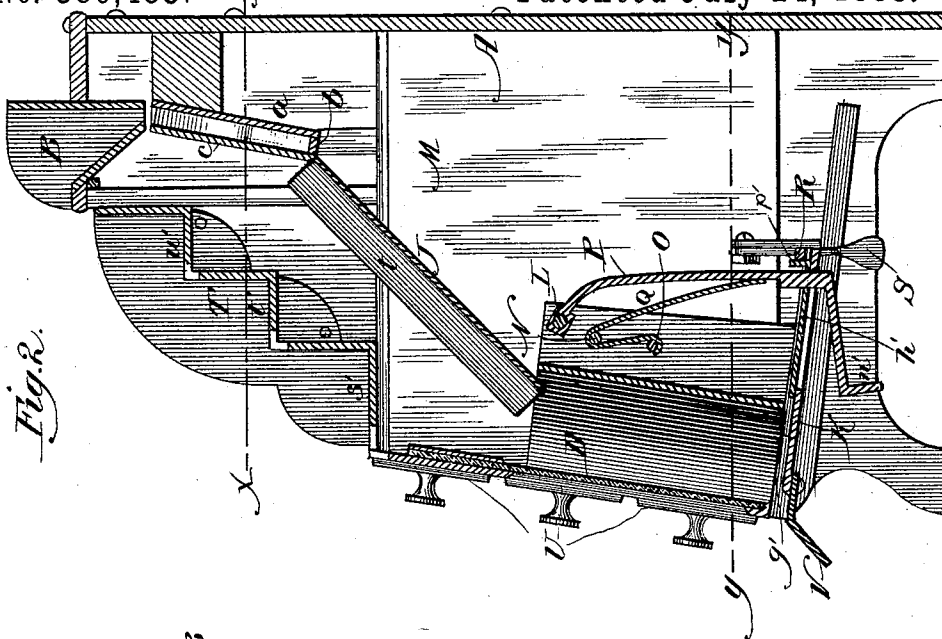
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Fig. 4.

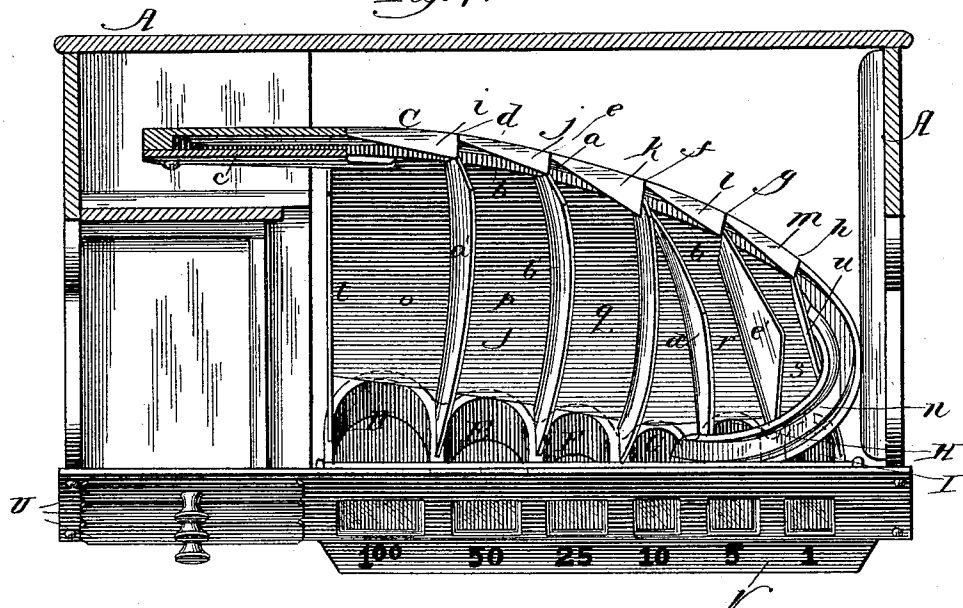
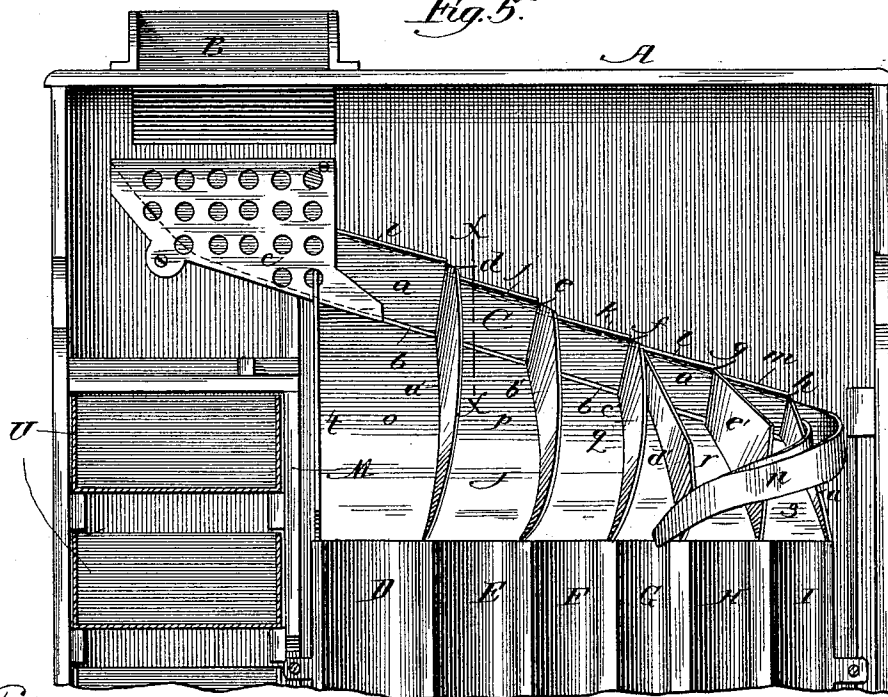


Fig. 5.



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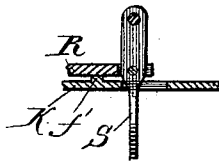
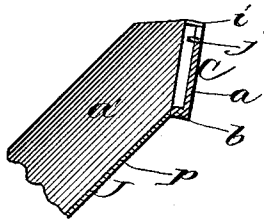


Fig. 8.



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Inventor:
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UNITED STATES PATENT OFFICE.

THOMAS CARNEY, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND
MOSES BENSINGER, OF SAME PLACE.

COIN ASSORTER AND DELIVERER.

SPECIFICATION forming part of Letters Patent No. 386,453, dated July 24, 1888.

Application filed May 4, 1887. Serial No. 237,145. (No model.)

To all whom it may concern:

Be it known that I, THOMAS CARNEY, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented new and useful Improvements in Coin-Sorters, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation. Fig. 2 is a longitudinal section at line *x x* of Fig. 1. Fig. 3 is a top or plan view. Fig. 4 is a horizontal section at line *x* of Fig. 2, looking down, the tray for holding the coins being removed. Fig. 5 is a front view of such parts as are shown, the front of the case and the tray being removed and some parts being shown in section. Fig. 6 is a section at line *y* of Fig. 2, looking down. Fig. 7 is a detail, being a front view of the locking-lever, showing also the plate through which the lever passes and the locking-slide in section. Fig. 8 is a detail, being a section of the parts shown, taken at line *x* of Fig. 5, looking to the left.

The leading objects of my invention are to provide improved devices by means of which coins of different sizes can readily be separated from each other and delivered into separate compartments, and to provide improved devices for delivering the coins one by one from the several compartments, including some minor combinations, all of which I accomplish as illustrated in the drawings, and as hereinafter described. Those things which I claim as new will be pointed out in the claims.

The drawings show devices for sorting the following United States coins: silver dollars, half-dollar, quarters, and dimes, and also nickels and pennies.

In the drawings, A represents a suitable case.

B is a hopper to receive the coins to be sorted.

C is an inclined and curved way, down which the coins pass from the hopper, and it is inclined both downward and backward. The main portion of this way consists of a back piece, *a*, and a ledge, *b*, at the bottom thereof. The upper end of this inclined way extends up as far as the hopper.

c is a plate in front of the upper end of the

inclined way and at a little distance therefrom. The greater portion of the back piece, *a*, of the inclined way is not straight on its upper edge, but is shouldered, as shown at *d*, *e*, *f*, *g*, and *h*.

i, *j*, *k*, *l*, and *m* are short pieces of metal secured to different parts of the upper edge of the back piece, *a*, of the inclined way, each of which has its front edge inclined, as shown in Fig. 4. The lower or right-hand end, *n*, of the inclined way is curved around and carried to the left, as shown in Figs. 4 and 5, and is provided with a double wall.

D, E, F, G, H, and I are receptacles for coins of different sizes.

o p q r s are channels down which coins pass from the inclined way to the receptacles D, E, F, H, and I. These channels are formed by an inclined back piece, J, extending from the lower edge of the principal part of the inclined way to the top and rear of the several compartments, end pieces, *t u*, and partitions *a'*, *b'*, *c'*, *d'*, and *e'*. The upper ends of these partitions do not extend to the back piece of the inclined way, but there is a space between such upper ends and back piece for the passage of the coins. (See Fig. 8.)

K is a metal plate, which, as shown, is provided with a series of upwardly projecting ribs, *f'*. The rear ends of the coin-receptacles rest upon these ribs, leaving a little space, *g'*, through which the coins can be delivered one by one.

h', *i'*, *j'*, *k'*, *l'*, and *m'* are sliding pieces of metal of sufficient thickness to engage with the edge of a coin. They are located between the ribs *f'*, and can slide beneath the lower ends of the receptacles.

L is a rod, one end of which is secured in the right-hand outer wall of the case and the other in the partition M.

N O are two other rods similarly secured.

P are arms or levers, one for each of the slides *h'*, *i'*, *j'*, *k'*, *l'*, and *m'*. The upper ends of these arms are hinged upon the rod L. Their lower ends extend through slots in the slides and then are carried forward, and each is provided with a finger-piece, *n'*.

Q are springs, one for each of the arms P, for the purpose of returning them and the

slides after they have been drawn forward to deliver coins.

R is a sliding bar provided with a number of hooks, *o'*, each adapted to engage with a projection, *p'*, one of which extends upward from each of the slides.

S is a lever by means of which the sliding bar R is operated. *g'* is a guide for the bar R, the right-hand end of which, as shown, is made round and passes through a hole in the support *r'*.

T is a tray or rack of the usual form and construction, having, as shown, three ledges or shelves to receive and hold coins, and provided with partitions, and open in front and at the top. The ledge or shelf *s'* is designed to receive dollars, ten in each pile. The second shelf, *t'*, is designed to receive half dollars, ten in each pile. The third shelf, *u'*, is designed to receive quarters, twenty in each pile. This tray rests on proper supports, is made separate from the other parts of the device, and can be readily removed therefrom, if desired.

U are drawers, which may or may not be used.

V is a ledge, on which figures may be placed beneath and in front of the coin receptacles, as shown in Figs. 1, 4, and 6.

In use, coins to be sorted will be thrown into the hopper and will fall down between the two pieces *a c*, their edges coming in contact with the ledge *b*. The distance between this ledge *b* and the angular piece *i* is less than the size of a silver dollar, so that dollars cannot pass under the piece of metal *i*; but one of the faces of the dollar will come in contact with the front inclined edge of *i*, which will deflect the coin from the ledge *b*, and it will pass down the channel *o* to the receptacle D. Smaller coins will pass under the piece of metal *i* and behind the partition *a'*, and the fifty-cent pieces will be deflected from the ledge *b* by the piece of metal *j*, and will pass down to the receptacle

E. Quarters will be deflected by the piece *k* and will pass down to the receptacle F. Nickels will be deflected by the piece of metal *l* and will pass down to the receptacle H. Pennies will be deflected by the piece of metal *m* and will pass down to the receptacle I. Dimes,

being smaller than any of the other coins, will pass under the strip of metal *m* and will be carried around in the channel *n* and be delivered to the receptacle G. Coins in these several receptacles can be removed one by one by drawing forward the proper slide, which can be done by taking hold of the proper finger-piece *u* and pulling the same forward, which will move the lower end of the proper arm P forward, carrying with it the slide and pushing out the coin. When the finger-piece is released, the spring Q will take the arm P and the slide connected therewith to the position shown in Fig. 2.

By moving the lever S to the left the sliding bar R will be carried along and the hooks *o'* will engage with the upward projections *p'* on the rear ends of the slides, and then the slides will be locked, so that they cannot be drawn forward until the bar R has been returned to the position shown in Fig. 6.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a coin-sorter, a number of coin-receptacles with openings *g'*, for the delivery of the coins from the bottoms of the receptacles, in combination with a number of slides, as *h' i' j' k' l' m'*, one for each receptacle, and hinged arms P, one for each slide, substantially as and for the purposes specified.

2. In a coin-sorter, a number of coin-receptacles, a slide for each receptacle, each slide being provided with a projection, *p'*, at its rear end, and pivoted operating-arms P, one for each slide, and having handles *n'*, in combination with a sliding bar, R, provided with hooks *o'*, adapted to engage with a projection, *p'*, in the slide, substantially as and for the purposes specified.

3. A coin-sorter having a number of coin-receptacles and channels leading thereto, and a rearwardly-inclined way curved around at its lower end for conveying the coins to said channels, all arranged and operating to sort the coins in the order of their values, substantially as described.

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Witnesses:

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HARRY T. JONES.