

Nov. 21, 1933.

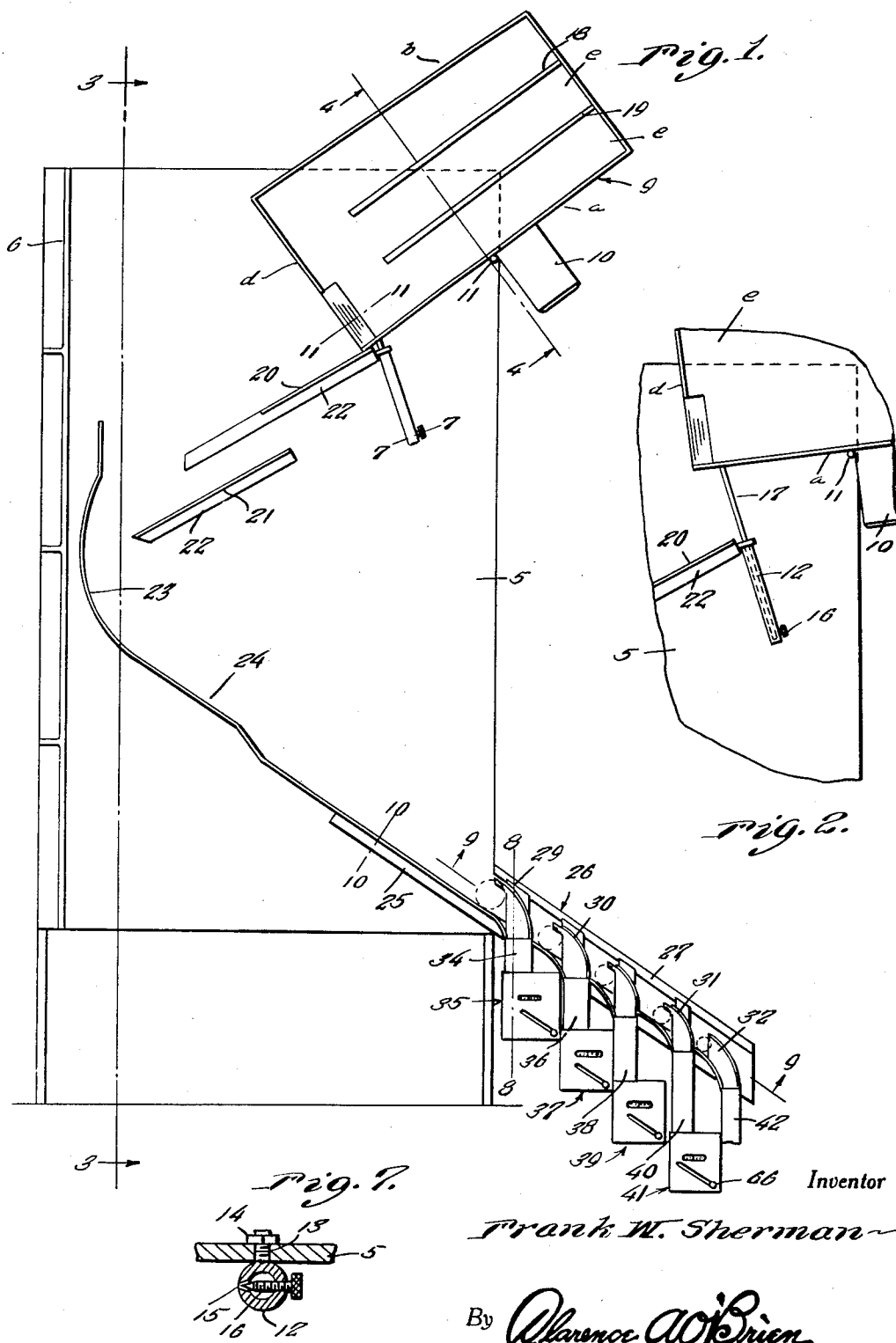
F. W. SHERMAN

1,936,035

COIN ASSORTING AND COUNTING APPARATUS

Filed July 25, 1929

4 Sheets-Sheet 1



Frank W. Sherman

By Clarence A. O'Brien
Attorney

Nov. 21, 1933.

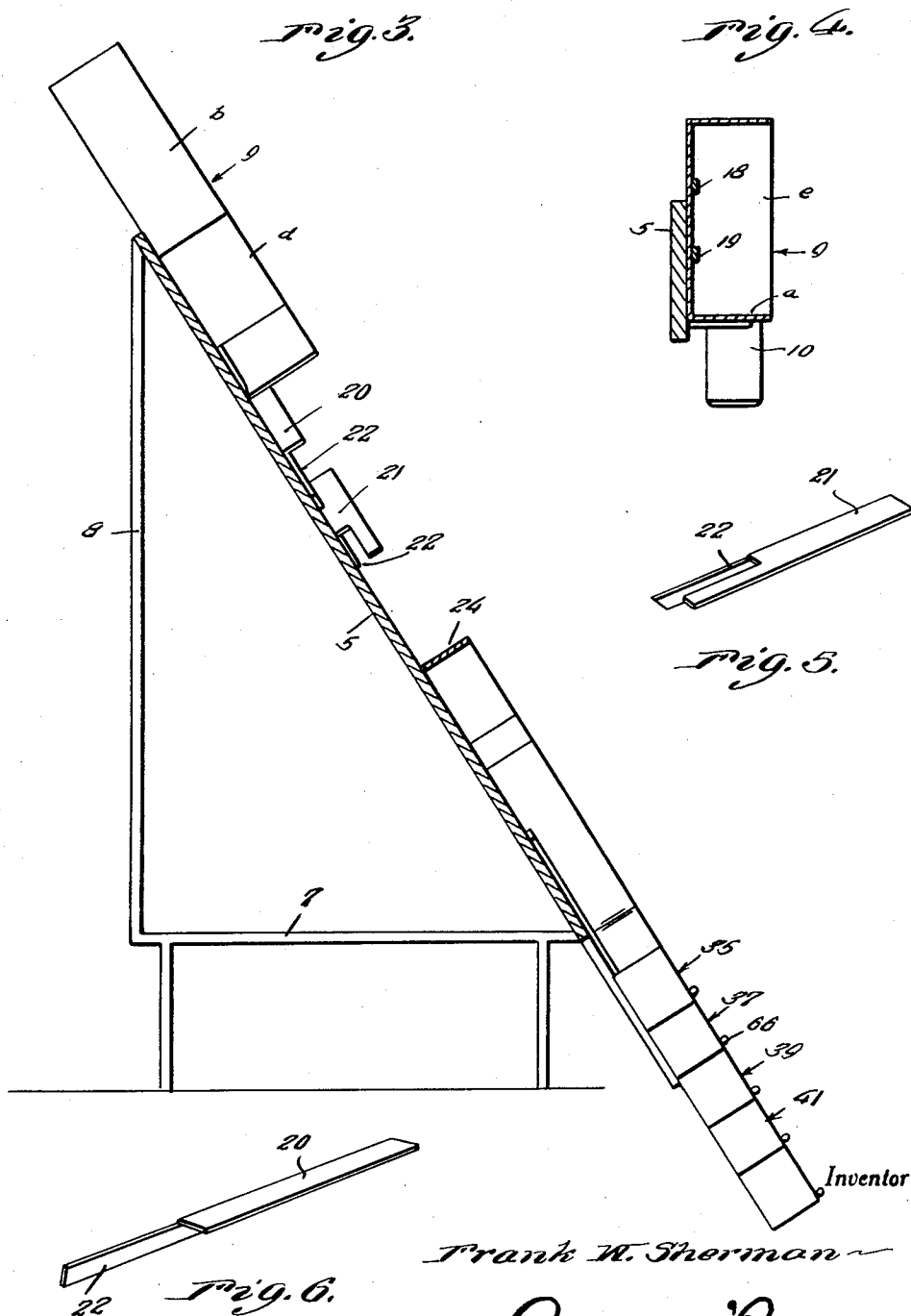
F. W. SHERMAN

1,936,035

COIN ASSORTING AND COUNTING APPARATUS

Filed July 25, 1929

4 Sheets-Sheet 2



Frank W. Sherman

By *Clarence A. O'Brien*
Attorney

Nov. 21, 1933.

F. W. SHERMAN

1,936,035

COIN ASSORTING AND COUNTING APPARATUS

Filed July 25, 1929

4 Sheets-Sheet 3

Fig. 12.

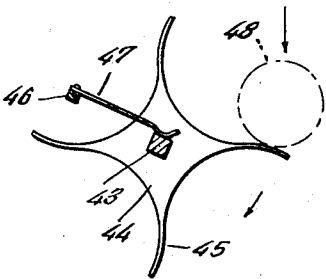


Fig. 8.

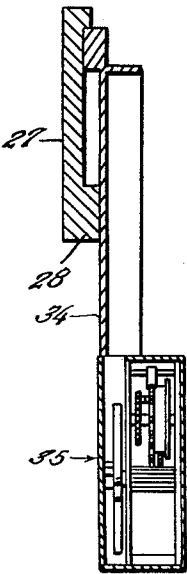


Fig. 13.

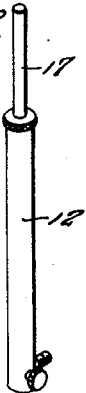


Fig. 10.

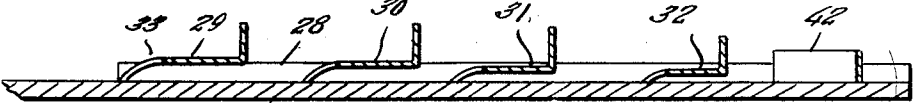
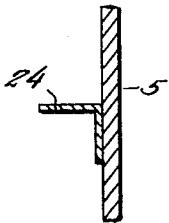


Fig. 9.

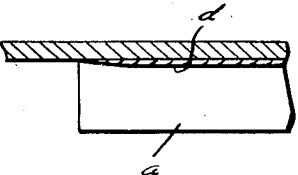


Fig. 11.

Inventor

Frank W. Sherman

By *Almon W. Brien*
Attorney

Nov. 21, 1933.

F. W. SHERMAN

1,936,035

COIN ASSORTING AND COUNTING APPARATUS

Filed July 25, 1929

4 Sheets-Sheet 4

Fig. 14.

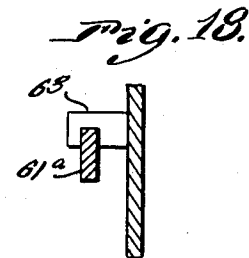
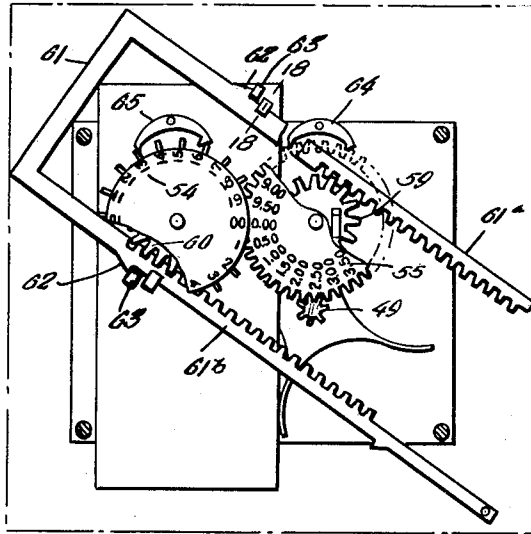


Fig. 15.

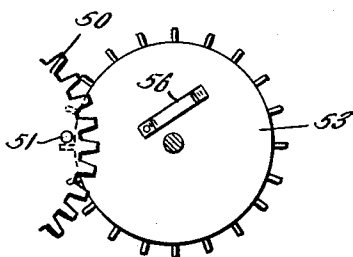
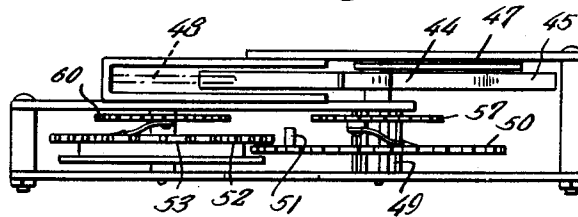


Fig. 16.

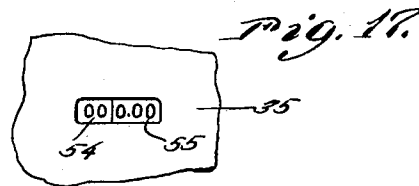


Fig. 17.

Inventor

Frank W. Sherman

By *Clarence A. O'Brien*
Attorney

UNITED STATES PATENT OFFICE

1,936,035

COIN ASSORTING AND COUNTING APPARATUS

Frank W. Sherman, Jacksonville, Fla.

Application July 25, 1929. Serial No. 381,048

1 Claim. (Cl. 133—3)

This invention appertains to new and useful improvements in coin sorting and counting apparatus, and more particularly to an apparatus which is substantially portable and which is of such simple construction as to make its cost low and its upkeep slight.

The principal object of the invention is to provide a coin sorting and counting apparatus in which coins can be conveniently placed and properly sorted and subsequently counted.

Another important object of the invention is to provide a coin assorting and counting apparatus which is substantially fool-proof.

Still another important object of the invention is to provide an apparatus of the character stated which will be capable of being repaired and its parts replaced easily due to its unique construction.

These and various other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:—

Figure 1 represents an elevational view looking at the front side of the apparatus.

Fig. 2 represents a fragmentary elevational view showing the money box in elevated position.

Fig. 3 represents a vertical sectional view taken substantially on line 3—3 of Fig. 1.

Fig. 4 represents a sectional view through the money box substantially on the line 4—4 of Fig. 1.

Fig. 5 represents a perspective view of the lower money track.

Fig. 6 represents a perspective view of the upper money track.

Fig. 7 represents a fragmentary enlarged detailed sectional view taken substantially on line 7—7 of Fig. 1.

Fig. 8 represents a sectional view taken substantially on line 8—8 of Fig. 1.

Fig. 9 represents a sectional view taken substantially on line 9—9 of Fig. 1.

Fig. 10 represents a sectional view taken substantially on line 10—10 of Fig. 1.

Fig. 11 represents a sectional view taken substantially on line 11—11 of Fig. 1.

Fig. 12 represents a sectional view disclosing the trip wheel for the counter.

Fig. 13 represents a perspective view of the dash pot.

Fig. 14 represents a cross sectional view disclosing the construction of one of the counters.

Fig. 15 represents a top plan view of one of the counters.

Fig. 16 represents a fragmentary elevational

view disclosing side means between the wheels of one of the counters.

Fig. 17 represents a fragmentary outside elevational view disclosing the indicating characters.

Fig. 18 represents a sectional view taken substantially on line 18—18 of Fig. 14.

In the drawings wherein like numerals designate like parts, it can be seen that numeral 5 represents an inclined plate having one edge portion reinforced by the flange 6. This plate 5 is supported upon the base 7 and the upright 8 on the base 7.

Numeral 9 generally refers to the money box. This box 9 is in the nature of a box. However, in use, one side *a* is used as a bottom (see Fig. 1), and while its opposite side forms the top as at *b*. Reference character *c* represents one end wall, while *d* represents the opposite end wall.

From the bottom *a* depends a handle 10 which with the bottom *a* forms a crotch which rests upon the pin 11 outstanding from the plate 5 adjacent the upper portion of the plate.

Fig. 13 shows a dash pot, which as is further shown in Fig. 7, consists of a barrel 12 having a threaded section 13 disposed through an opening in the plate 5 and having a nut 14 thereon whereby the barrel can be clamped to the plate 5. Numeral 15 represents an air inlet opening which can be closed by the threaded needle valve 16.

Operative in the barrel 12 is a plunger having the stem 17 extending outwardly of the barrel 12 and upon the upper end of this stem 17 the money box 9 rests when it is first positioned upon the pin 11.

On the inside of the back wall *e* of the box are the guide rails 18—19. Arranged in inclined position on the plate 5 are the tracks 20 and 21, the upper track 20 terminating at its lower end above the upper end of the lower track 21, these tracks 20 and 21 being secured to the plate 5 by flanges 22 and the additional fastening means.

The lower end of the track 21 terminates adjacent the curved portion 23 at the upper end of the inclined runway 24 which extends downwardly and has its lower end secured to the plate 5 by a flange 25 and any other supplemental securing means.

The lower end of this runway 24 terminates at the mouth of the sorter generally referred to by numeral 26. As is clearly shown in Fig. 9, this sorter consists of an elongated bar 27 having a horizontally outstanding ledge 28 thereon. This bar 27 and ledge 28 are inclinedly disposed and substantially aligned with the runway 24.

Numerals 29, 30, 31 and 32 are assorting ele-

ments. Each of these elements 29 to 32 inclusive consists of a plate having an inwardly curved finger 33 which bears against the bar 27. As is clearly shown in Fig. 1, the finger 33 of the sorting element 29 is sufficiently high to permit 5 dimes, pennies, nickels, and quarters to pass thereunder. The finger of the element 30 is sufficiently high to pass dimes, nickels and pennies. The element 29 therefore passes all coins except 10 half dollars which are guided by the finger 33 into the chute 34 leading to the counter 35 which counts half dollars. The finger of the element 30 while passing dimes, pennies and nickels will deflect quarters by way of the chute 36 to the 15 sorter counter 37. The finger of the element 31 will pass dimes and pennies but will deflect nickels by way of the chute 38 to the nickel counter generally referred to by numeral 39.

The finger of the element 32 will deflect all 20 pennies into the chute 40 which will discharge into the penny counter 41. Dimes passing beyond the elements 29 to 32 inclusive will pass down the chute 42 to a suitable counter.

These counters shown in Figs. 14 and 15 each 25 consist of a casing. In each casing is a polygonal shaped shaft 43 on which is the wheel consisting of the hub 44 and outstanding curved fingers 45, which fingers are curved slightly in the same direction.

30 Numeral 46 represents a cross bar in the casing from which extends a leaf spring 47 which has its free end bearing against a flat side of the polygonal-shaped shaft 43. Thus, this spring 47 always maintains one of the fingers 45 in the 35 path of a coin 48 discharging from its corresponding chutes 34, 36, 38, or 40.

On the shaft 43 is a pinion 49 meshing with 40 the gear wheel 50. This gear wheel 50 carries a laterally extending pin 51 adjacent its periphery which is capable of engaging the radially

disposed pins 52 on the periphery of the disk 53 which carries numerals 54. It can also be seen, that the gear 50 also carries numerals 55 and these numerals 54 and 55 are visible through the sight openings in the casing 12 of the aforementioned counters. 80

Numeral 56 represents a leaf spring extending from the gear 50 and at its outer end wipes against the gear 57. On the shaft with the wheel 53 is a gear 60. Numeral 61 represents a U-shaped resetting member the leg portions of 85 which are toothed to form racks meshing with the gears 57 and 60, the racks being denoted by reference characters 61a and 61b respectively. The racks aforementioned are each provided with 90 a shoulder 62 for abutting engagement with the lugs 63 located on the casing and which act as stops to limit the downward motion of the resetting member 61. Each of the counter casings is provided with a slot parallel to the member 61 95 and slidable in each of these slots is a knob projecting from the corresponding member 61, at its rack 61b.

While the foregoing specification sets forth the invention as described, it is to be understood that 100 numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed.

Having thus described my invention, what I claim as new is:— 105

A coin feed device for coin counters comprising an inclined plate, a money box, said money box being provided with an outlet, a handle on the bottom of the money box, an outstanding 110 pintle on the plate for engaging the bottom of the box at the handle, and a dash pot device for supporting the inner end of the money box when the latter is supported upon the pintle for gradually permitting the descent of money.

FRANK W. SHERMAN. 115

45 120

50 125

55 130

60 135

65 140

70 145

75 150