T. I. POTTER.

COIN TRAY.

APPLICATION FILED JUNE 12, 1914.

Patented Dec. 8, 1914.

1,120,081.

Fig 1

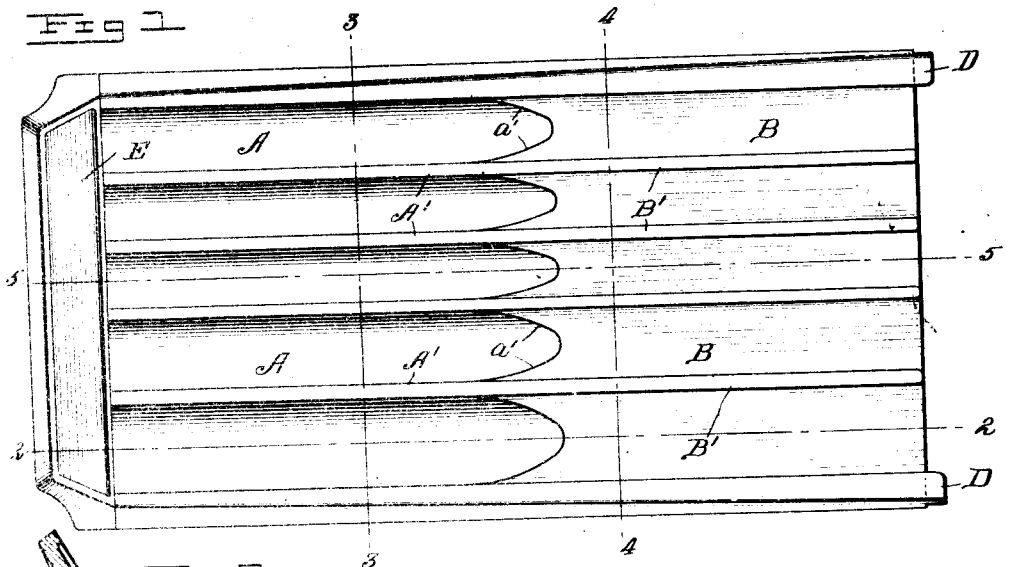


Fig 2

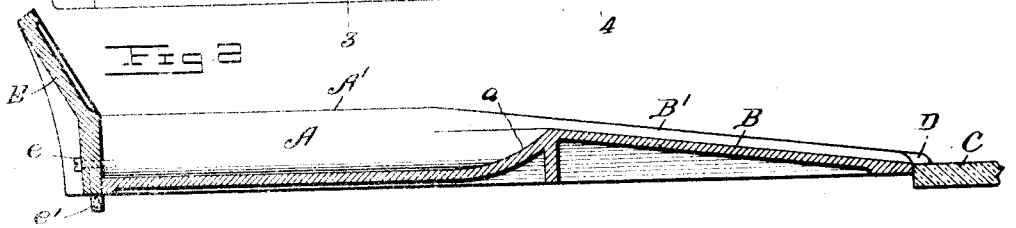


Fig 3

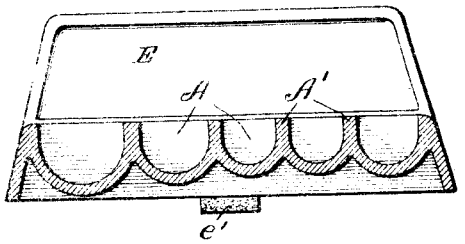


Fig 4

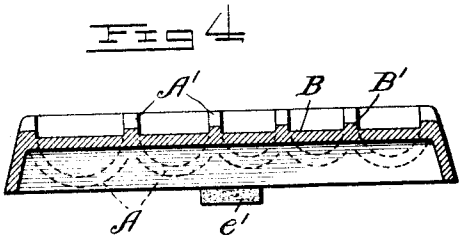
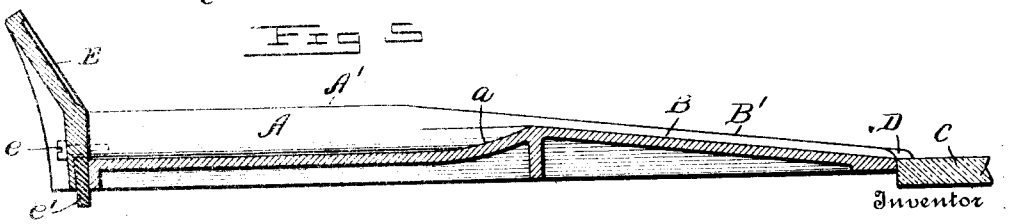


Fig 5



Inventor

Witnesses

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COIN-TRAY.

1,120,081. Specification of Letters Patent. Patented Dec. 8, 1914.

Application filed June 12, 1914. Serial No. 844,724.

To all whom it may concern:

Be it known that I, THOMAS IRVING POTTER, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Coin-Trays; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and to the figures and letters of reference marked thereon.

This invention relates to devices for facilitating the storage of coins of various denominations and their separation and distribution in a convenient manner for making change in ordinary commercial transactions.

The objects of the invention are to provide a device which will have a relatively large capacity for the storage of coins and with which the user by a single movement of the hand either moves coins from the storage portion of the device into the distributing channels or from the distributing channels onto the distributing plate in preparing for the delivery of coins of any particular denomination or denominations.

A further object of the invention is to provide a device in which coins may be shoved into place either in the distributing channels or from the distributing channels into storage channels in a most convenient and effective manner without necessitating the handling of individual coins more than once.

Referring to the accompanying drawings,—Figure 1 is a plan view of a coin tray embodying the present improvements. Fig. 2 is a section in a vertical plane substantially on the line 2—2 of Fig. 1. Fig. 3 is a section in a transverse plane substantially on the line 3—3 of Fig. 1. Fig. 4 is a section corresponding to the section of Fig. 3, taken on the line 4—4 of Fig. 1. Fig. 5 is a longitudinal section in a vertical plane on the line 5—5 of Fig. 1.

Like letters of reference in the several figures indicate the same parts.

The coin tray of the present invention is preferably formed mainly of metal, and conveniently of cast metal, whereby it is given a sufficient weight to maintain its position on a counter or cashier's desk, without liability of being displaced in the ordinary use of the device. It embodies in its construction a series of parallel coin storage channels A, which in cross section are substantially semi-cylindrical with the partition walls between the channels extending upwardly a sufficient distance to effectively retain coins resting in the channels edgewise transversely of the channels and in substantially vertical position. The channels are of varying width to receive coins of various denominations, the maximum width of any channel being but slightly greater than new coins of the denomination to be held therein, whereby the natural tendency of the coin in the channel will be to tip up into more or less vertical position when it is pushed along the channel in either direction and to retain such position if not withdrawn from the channel. At their forward ends the channels A are narrowed and inclined upwardly at the bottom, as shown, for example, at the points a in Figs. 2 and 5, and at a' in Fig. 1, and at these ends the said channels merge into the upper ends of distributing channels B, preferably slightly inclined downwardly toward their discharge ends. Said last named channels are provided with substantially flat floors or coin supporting surfaces on which the coins will rest in position to be moved up or down the channels at will by the fingers of the hand of the user. Continuations of the partitions A′ between the storage channels form the partition walls B′ between the distributing channels, but the walls B′ are of less height than the walls A′ and may be only slightly higher than the thickness of coins in the channels. They are provided with vertical sides whereby the coins will be retained in the channels and the channels are of the width which corresponds to the width of the storage channels into which they merge.

At their lower ends the distributing channels are adapted to discharge directly onto a distributing plate C which is conveniently of glass and which may extend any desired distance in front of the tray. The proper alinement of the front edge of the tray and the distributing plate is preferably maintained by providing projections D forming continuations of two or more of the side walls of the channels as shown in Figs. 1, 2 and 5, which projections overlie the edge of the distributing plate, and their bottom surfaces being in line with the floor of the channels, the edges of the plate and channels are kept flush with each other so as to

overcome liability of a coin being caught thereby.

In the preferred construction, the rear ends of the storage channels are closed against the escape of coins therefrom and the closure may conveniently constitute a name-plate E which is secured to the upper end of the tray by screws *e*—and is adapted to hold in place a rubber strip *e'* to rest on the desk or counter so as to prevent marring the latter and so as to prevent the tray from sliding about thereon.

In using the device, coins may be stacked one in front of the other in the storage channels in sufficient quantities to supply change to start the day's work, and the user or cashier desiring to make change will, by a single movement of the finger over such coins in the storage channels, draw some of the coins forwardly, whereby they will tip down into horizontal position in the distributing channels and be spread therein in orderly sequence. To facilitate this, the coin supporting surfaces of the distributing channels are preferably slightly roughened, or sufficiently roughened to permit one coin to be drawn off of another, should two or more coins be piled in the channel. Having distributed the coins in the manner described, it is a simple matter to select the coins necessary for making change either from the distributing channels or from the distributing plate in front of the channel, and with the fingers of one hand draw the said coins off of the distributing plate into the other hand where they will be gathered together and passed to the customer in the ordinary way. Coins received by the cashier may be placed on the distributing plate, and at opportune moments pushed into the appropriate distributing channels. When so pushed into the channels they will cause the other coins therein to be pushed rearwardly into the storage channel, and as this continues the coins reaching the storage channels will gradually turn up into vertical position and be pushed back against the coins already in the channels.

By providing storage and distributing channels which merge into each other, a comparatively small tray may be made to have a very large capacity, and at the same time it dispenses with the necessity of the cashier having to pick coins out of the storage trays and then lay them on a distributing plate, as is now the ordinary practice.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. A coin tray embodying a series of parallel substantially semi-cylindrical channels closed against the escape of coins at one end and at the opposite end merging into a corresponding series of shallow channels having substantially flat coin supporting surfaces, the several channels being of a width to accommodate respectively coins of different denominations.

2. A coin tray embodying a series of parallel substantially semi-cylindrical channels closed at one end to prevent the escape of coins and at the opposite end merging into the upper ends of a corresponding series of inclined, shallow channels having substantially flat coin supporting surfaces, the several channels being of a width to accommodate respectively coins of different denominations.

3. A coin tray embodying a series of parallel, substantially cylindrical channels arranged in a substantially horizontal plane and closed against the escape of coins at one end, the coin supporting surfaces at the opposite end of the channels being narrowed and merged into inclined channels having substantially flat coin supporting surfaces with low partition walls between them whereby coins pushed in one direction or the other from one part of a channel into the other will be turned from a vertical into a horizontal position or vice versa.

4. A coin tray embodying a series of slightly inclined parallel distributing channels having substantially flat coin supporting surfaces forming the floors of the channels with low walls between said channels, and a corresponding series of storage channels into which the distributing channels merge with walls between said storage channels of greater height than the walls separating the distributing channels.

5. A coin tray embodying a series of parallel semi-cylindrical storage channels, a series of inclined distributing channels communicating at their upper ends with the storage channels and a plane distributing plate onto which the distributing channels discharge at their lower ends.

THOMAS IRVING POTTER.

Witnesses:
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