May 6, 1930. E. J. BRANDT 1,757,613

COIN TRAY

Filed Sept. 24, 1927 3 Sheets-Sheet 1

Fig. 1.

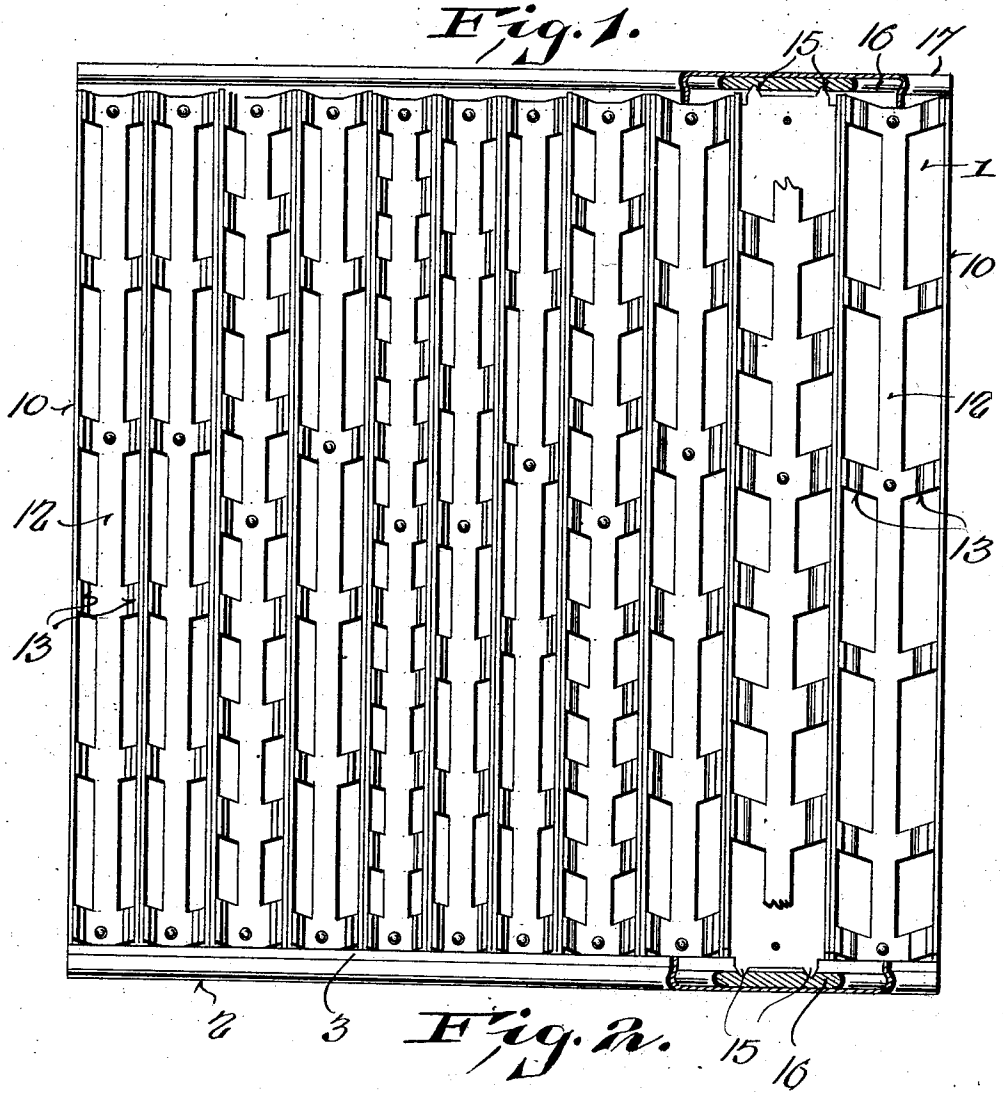
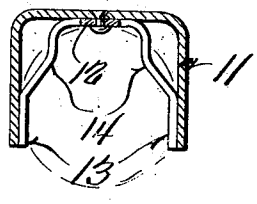


Fig. 2.



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Fig. 3.

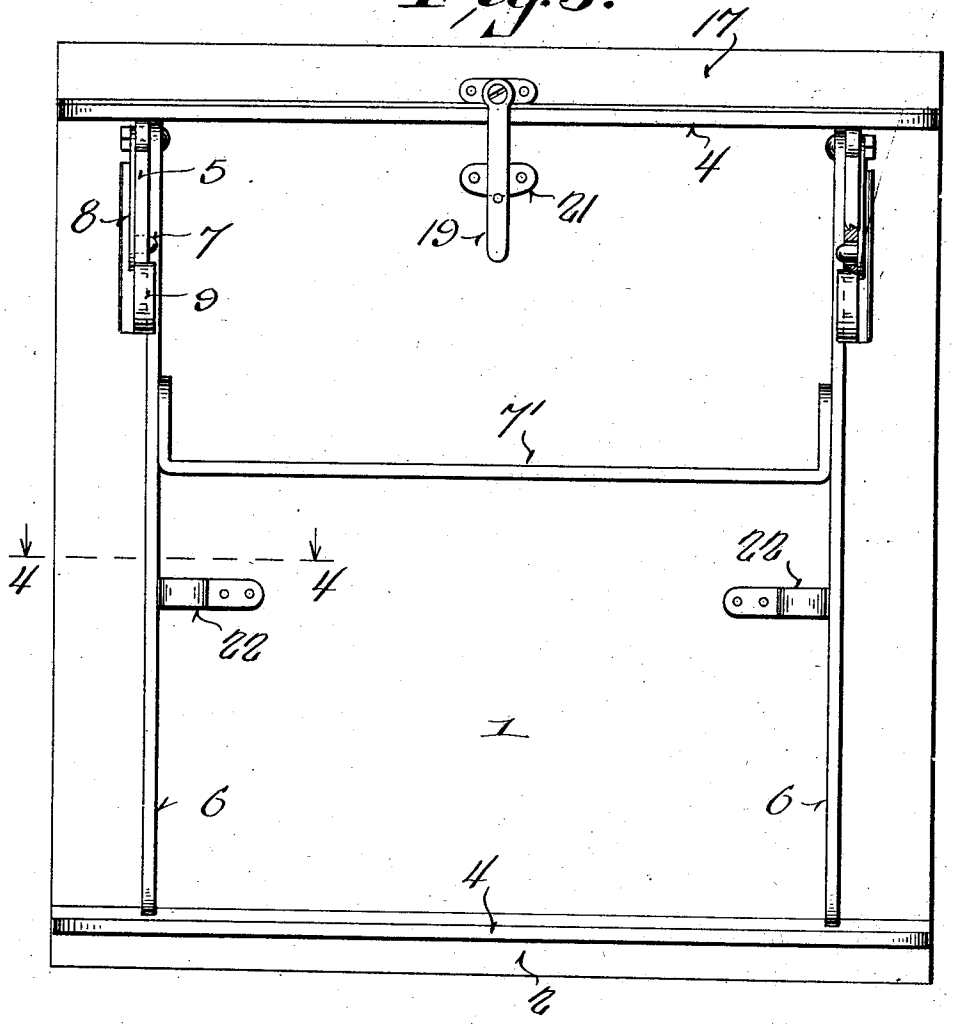
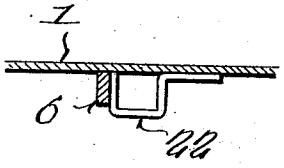


Fig. 4.



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Fig. 5.

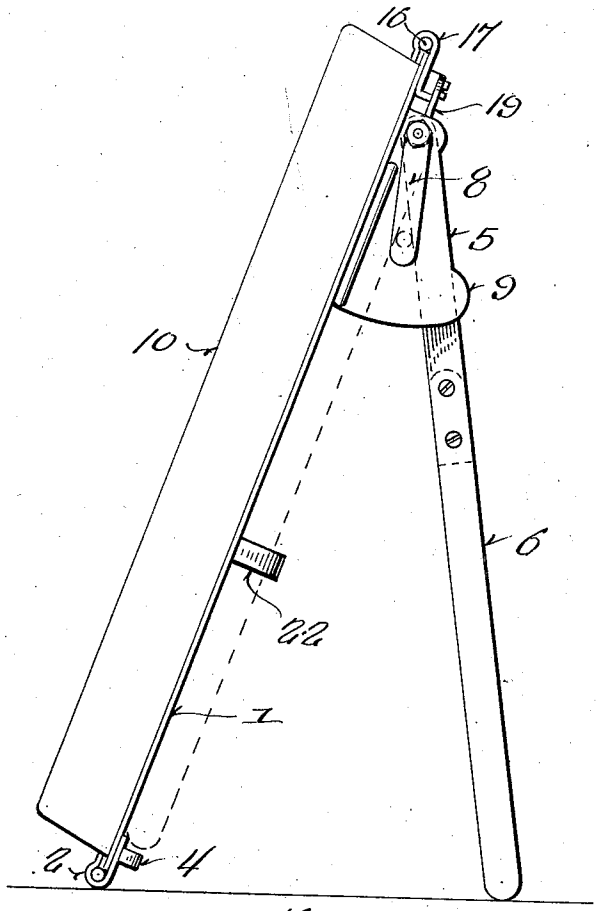
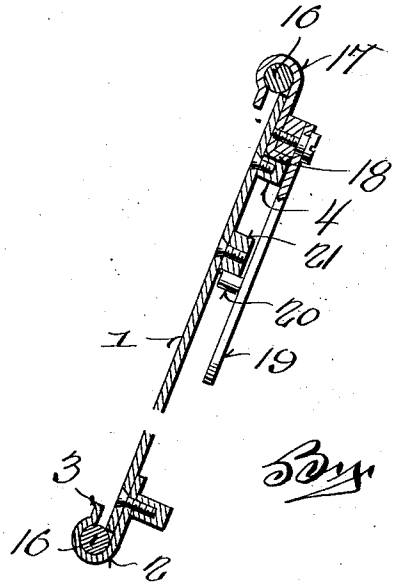


Fig. 6.



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UNITED STATES PATENT OFFICE

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COIN TRAY

Application filed September 24, 1927. Serial No. 221,832.

This invention pertains to coin trays or magazines adapted for the convenient and proper stacking of coins of various denominations of predetermined amounts.

Heretofore, trays of this general character have been permanently made up to accommodate various predetermined assortments of coins, and inasmuch as each tray is used under different conditions a great multiplicity of trays had to be made up and carried in stock in order to accommodate the various assortments of coins desired. Either that, or the trays had to be constructed special in numerous cases. For example, in some instances a tray is required for only two or three denominations of coins, while in others a tray may be desired to accommodate all denominations. In actual practice, it has been found that a great number of combinations is required to meet all conditions.

It is, therefore, primarily the object of the present invention to provide a simple and comparatively inexpensive coin tray or magazine which can be readily adapted to accommodate any desired combination of coin denominations.

Incidental to the foregoing, it is a further object to provide a tray in which the coin troughs are readily detachable to allow for assembling any desired arrangement of the troughs to accommodate various combinations of coin denominations.

Another object is to provide a tray of the foregoing character which may be detachably mounted upon conventional coin delivery machines for convenient use therewith.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawings is illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode so far devised for the practical application of the principles thereof.

In the drawings, Figure 1 is a front elevation of a tray constructed in accordance with the present invention;

Figure 2 is a detailed transverse section taken through one of the coin troughs;

Figure 3 is a rear elevation of the tray;

Figure 4 is a detailed section taken on the line 4—4 of Figure 3;

Figure 5 is a side elevation; and

Figure 6 is a vertical section.

Referring now more particularly to the accompanying drawings, the numeral 1 designates a back plate, which in the present instance, is preferably constructed from a fibrous composition for the purposes of appearance and lightness, but which may be formed of metal, if desired.

Secured to the rear side of the plate 1, adjacent its bottom edge is a channel strip 2, the front lip 3 of which projects above the lower edge of the plate 1 for the purpose to be hereinafter described. Transverse stiffening ribs 4, secured to the rear side of the plate 1, serve to reenforce the same and prevent warping.

In order to support the tray in an inclined vertical position, desirable for the most convenient view of the coins carried thereby and for the removal and insertion of the same, brackets 5 are secured to the rear of the back plate 1 adjacent its side edges. Pivotally secured to the brackets are a pair of supporting legs 6 connected by a transverse brace 7. Should it be desired to mount the tray upon the conventional type of coin delivery machine, the legs 6 are swung inwardly and retained in this position by means of the buttons 7 carried by the spring fingers 8 and projecting through openings in the brackets 5, the buttons 7 being rounded on their inner ends to yield as the supports 6 are swung in and out, but frictionally hold the same in either of their adjusted positions. Inwardly projecting ribs 9 carried by the brackets 5 serve to engage the supports 6 and limit their outward movement.

For the purpose of receiving stacks of coins of various denominations and of predetermined amounts, a plurality of coin troughs

10 are provided, consisting of channel members 11 preferably formed by stamping the same out of sheet metal. Obviously, these troughs are formed of various widths to accommodate coins of different denominations. Riveted or otherwise suitably secured within the channels 11 are longitudinal ribs 12 also preferably formed by stamping from sheet metal, and provided with laterally projecting arms 13, inclined upwardly and engaging the sides of the channels 11. As best shown in Figure 2, the arms 13 are provided with inwardly offset portions 14 adapted to engage the bottom coin in the stack for supporting the same.

In order to securely assemble the troughs 10 upon the back plate 1, the ends of the troughs are provided with projecting teeth 15, which at the lower ends of the troughs are received in the channel strip 2 and project into a core 16 positioned in the channel and formed of relatively soft material, such as leather, rubber, or fiber. Thus, it will be seen that the lower ends of the troughs are firmly held against lateral shifting in both directions.

For the purpose of locking the upper ends of the troughs 10 in their assembled position on the back plate, a detachable channel strip 17, similar to the channel 2, is provided. This is fitted over the upper edge of the back plate 1, and a lateral flange 18, carried by the rear lip of the channel, engages the top transverse stiffening rib 4 to limit the downward movement of the strip 17. Like the lower channel 2, the top channel strip 17 is provided with a soft core 16 for engaging the teeth 15 projecting from the upper ends of the channels 11. To lock the strip 17 in assembled position on the back plate, a latch 19 is pivoted thereto and carries a lug 20 adapted to engage the cam plate 21 secured to the rear of the back plate 1. Thus, as the latch 19 is swung to its operative position, as shown in Figure 3, a cam action results which binds the strip 17 upon the top stiffening rib 4. In this position the latch is frictionally held by a notch formed in the cam plate 21, which notch receives the lug 20.

It will be noted that the arms 13 which support the stacks of coins are of a substantial width, thus allowing sufficient space between the stacks of coins for finger room in removing or inserting the stacks of coins.

In order to facilitate attachment of the tray to coin delivery machines, a pair of spaced brackets 22 are secured to the rear of the plate 1, which brackets may be received by any suitable projections carried by the machine.

From the foregoing description taken in connection with the drawings, it will be readily seen that a comparatively simple and inexpensive structure has been provided wherein the coin troughs are readily detachable to permit troughs for any denomination of coins to be readily assembled on the tray for arrangement of any combination desired. Because of this, it is quite obvious that it is only necessary to carry in stock troughs for the different denominations of coins, and for predetermined numbers of coins in a stack, which troughs may be readily assembled on the back plate to meet the specific requirements encountered in every instance, and should conditions change, the arrangement of the troughs may be easily varied, thus eliminating the expense to the consumer, of purchasing an entire new tray.

It will further be appreciated that the specific manner of constructing the individual trays by means of stampings further simplifies and eliminates machine work, thus reducing the cost of manufacture.

In use, the tray may be positioned either upright, supported upon its legs, or laid horizontally, in which position one end is supported upon the brackets 5 to slightly incline the tray. Also, as previously described, the tray may be readily attached to a coin delivery machine, if desired.

I claim:

1. A coin tray comprising a plate, a plurality of readily detachable individual troughs for receiving stacks of coins of predetermined number, and means carried by said plates for detachably locking said troughs in various assembled positions on the plate.

2. A coin tray comprising a plate, a plurality of readily detachable individual troughs for receiving stacks of coins of predetermined number, and means carried by said plate adjacent its edges for receiving the ends of said troughs for detachably locking the same in assembled position on said plate.

3. A coin tray comprising a plate, a plurality of readily detachable individual troughs for receiving stacks of coins of predetermined number, means carried by the plate adjacent one of its edges for receiving the ends of said troughs, and means carried by said plate for detachably locking the opposite ends of said troughs to said plate.

4. A coin tray comprising a plate, a plurality of readily detachable individual troughs for receiving stacks of coins of predetermined number, means carried by the plate adjacent one of its edges for receiving the ends of said troughs and retaining said ends against lateral movement, and means carried by said plate for engaging the opposite ends of said troughs for detachably locking the troughs in assembled position.

5. A coin tray comprising a plate, a plurality of readily detachable individual troughs for receiving stacks of coins of predetermined number, said troughs being provided with projecting teeth on their opposite ends, means carried by the plate adjacent one of its edges for receiving the teeth carried by the ends of

said troughs, means for receiving the teeth carried by the opposite ends of said troughs, and means for locking said last mentioned means to said plate.

6. A coin tray comprising a plate, a plurality of readily detachable troughs for receiving stacks of coins of predetermined number, means carried by the plate adjacent one of its edges for receiving one of the ends of each of said troughs, means for receiving the opposite ends of said troughs, and means carried by said plate for detachably locking said last mentioned means to said plate.

7. A coin tray comprising a plate, a plurality of readily detachable individual troughs for receiving stacks of coins of predetermined number, a channel carried by the plate adjacent one of its edges for receiving one of the ends of each of said troughs, a second channel for receiving the opposite ends of said troughs, and means carried by said plate for detachably locking said last mentioned channel on said plate.

8. A coin tray comprising a plate, a plurality of readily detachable individual troughs for receiving stacks of coins of predetermined number, said troughs being provided with projecting teeth on their opposite ends, a channel carried by the plate adjacent one of its edges for receiving one of the ends of each of said troughs, a relatively soft core positioned in the channel for receiving the teeth carried by said ends of said troughs, a second channel for receiving the opposite ends of said troughs, a relatively soft core positioned in said second channel for the receiving teeth carried by said ends of said troughs, and means for locking said second channel on said troughs.

In testimony that I claim the foregoing I have hereunto set my hand at Watertown, in the county of Jefferson and State of Wisconsin.

EDWARD J. BRANDT.