Jan. 15, 1924. 1,480,983

A. BECK

AUXILIARY COIN SUPPORT FOR COIN TUBES

Filed Oct. 13, 1921

FIG. 1

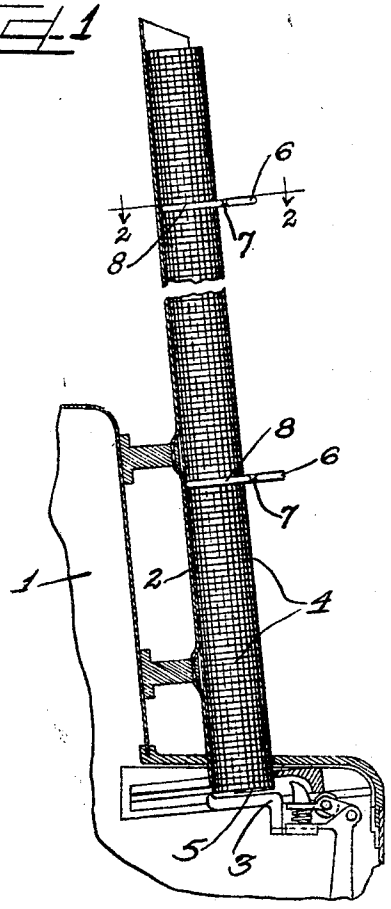


FIG. 2

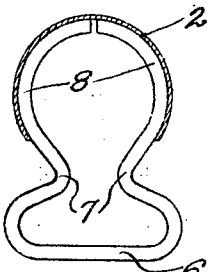


FIG. 3

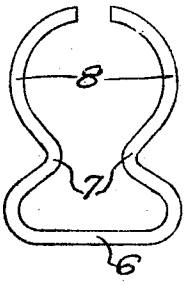


FIG. 5

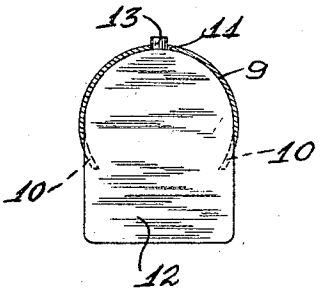
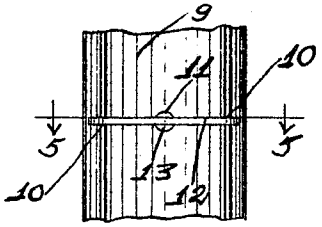


FIG. 4



Witnesses

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Inventor

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By Charles W. Wells Atty.

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UNITED STATES PATENT OFFICE.

ALBERT BECK, OF CHICAGO, ILLINOIS, ASSIGNOR TO McGILL METAL PRODUCTS COMPANY, A CORPORATION OF ILLINOIS.

AUXILIARY COIN SUPPORT FOR COIN TUBES.

Application filed October 13, 1921. Serial No. 507,580.

To all whom it may concern:

Be it known that I, ALBERT BECK, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Auxiliary Coin Supports for Coin Tubes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

In change making machines wherein coin tubes are used for stacking coins, trouble is sometimes experienced in the delivery of coins due to the excessive weight carried by the lowermost coins when the stack of coins in the tube is high.

To overcome the above difficulties this invention affords means whereby the excess weight of a stack of coins in a coin tube may be distributed by removably inserting supports in the coin tube at different intervals in the stack of coins to remove the excess weight from the lowermost coins in the tube.

It is an object of this invention to provide means for relieving the excess weight on the lowermost coin in a coin tube.

It is also an object of the invention to provide a coin tube with removable coin supports adapted to be inserted into position at different elevations in a coin tube to afford auxiliary supports for the coins in the tube, thereby removing the weight of the upper coins from the lower coins.

Another object of the invention is to provide a coin holding tube having removable coin supports therein at different elevations.

It is an important object of this invention to provide a coin tube with simple and inexpensive means adapted to afford a plurality of supports for the coins in said tube.

Other and further important objects of this invention will be apparent from the disclosures in the specification and drawings.

The invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

On the drawings:

Figure 1 illustrates a fragmentary section of a change making machine the coin tubes of which are equipped with removable auxiliary coin supports embodying the principles of this invention.

Figure 2 is an enlarged section taken on line 2—2 of Figure 1.

Figure 3 illustrates one of the auxiliary coin supports removed from the coin tube.

Figure 4 is a fragmentary front view of a modified form of coin tube provided with a modified form of coin support.

Figure 5 is a section taken on line 5—5 of Figure 4.

As shown on the drawings:

The reference numeral 1 indicates a fragmentary portion of a change maker provided with a longitudinally slotted coin tube 2 and with a coin ejecting mechanism 3. A stack of coins 4 is supported on the tube 2 with the lowermost coin resting on supports 5.

To relieve the lowermost coins in the coin stack of the excess pressure due to the weight of the tall stack of coins, a partition or auxiliary coin support is provided. The auxiliary coin support comprises a heavy wire handle or yoke 6 having arms which are curved inwardly toward one another at 7, while the outer portions of said arms are curved to form substantially semi-circular spring members 8. The arms 8 are normally sprung apart, as illustrated in Figure 3. In order to distribute the weight of the coins 4 in the tube 2, the curved arms 8 of the auxiliary support are inserted into the tube vertically and are then turned by the handle or yoke 6 into horizontal position wherein the arms 8 are compressed and clamp tightly against the walls of the tube. The auxiliary support is then forced downwardly into a position directly above the uppermost coin of the coin stack section therebelow. A second section of coins may now be placed in the coin tube to rest on the arms 8 of the auxiliary support. In a like manner any desired number of auxiliary coin supports may be inserted into the tube 2 to relieve the lower stacks of coins of the weight of the upper stacks of coins.

When the coins of the lower section of coins have been ejected, the auxiliary support supporting the next section of coins is pushed downwardly with the coins resting thereon and is then removed by turning the support by means of the handle 6 to permit the curved arms 8 to be withdrawn from the

tube. The coins of the second section are thus permitted to drop a short distance into the lower portion of the coin tube to rest on the stationary coin supports of the tube ready to be discharged. Each section of coins may be lowered in a similar manner. A number of coin sections may be pushed downwardly at one time before the lowermost auxiliary support is turned and removed from the tube.

Figures 4 and 5 illustrate a modified form of the device. In this case a coin tube 9 is provided open at the front and having oppositely disposed slots 10 in the margins of the tube and an aperture 11 in the back wall of the tube in the same plane as said slots. An auxiliary supporting plate 12 is provided, one end of which is rounded to conform to the curvature of the inner surface of the coin tube 9. A pin or lug 13 is formed on the middle portion of the curved end of the supporting plate 12. The auxiliary support 12 is inserted into the tube by projecting the curved end through the slots 10 and the lug 13 through the aperture 11, as illustrated in Figure 5. A second stack of coins may then be placed in the tube to rest on the plate 12, which relieves the lower stack of coins of the weight of the upper coins. The outer end of the plate 12 serves as a handle to permit the auxiliary support to be inserted into the tube and removed therefrom. The tube 9 may be arranged to receive any desired number of auxiliary coin supports.

I am aware that numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted otherwise than necessitated by the prior art.

I claim as my invention:

1. The combination with a longitudinally slotted coin tube adapted to carry a stack of coins, of auxiliary coin supports adapted to be positioned in a plane longitudinal of the tube and inserted through said slot and then rotated to permit the inner portions of said supports to frictionally engage the inner surface of the tube and be supported thereby to remove the weight of the coins above said auxiliary supports from the coins below said supports.

2. The combination with a coin tube adapted to carry a stack of coins, of removable members supported at spaced intervals in said tube for distributing the weight of the stack of coins in said tube, said members adapted to be rotated in said tube to permit removal therefrom.

3. A longitudinally slotted coin tube, and coin supporting members distributed in said tube, said member having resilient arms adapted to spring against the inner peripheral surface of said tube to support stacks of coins in said tube independently of one another.

4. The combination with a coin tube, of an auxiliary coin supporting member therefor comprising a handle portion, and curved resilient arms integral therewith adapted to be inserted into the tube and frictionally engage the same.

5. The combination with a tube having a longitudinal slot therein, of a coin support comprising a wire handle, the ends of which are bent to afford resilient curved arms adapted to be inserted into the tube in a plane parallel to said slot and then turned by means of said handle to cause the arms to frictionally press against the inner surface of the tube with the arms positioned in a plane transversely of said tube.

6. The combination with a coin tube having a longitudinal slot therein, of a spring coin support in said tube and projecting therefrom, said support adapted to have the inner portion thereof compressed to permit the support to be raised or lowered in said tube.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

ALBERT BECK.

Witnesses:
FRED E. PAESLER,
JAMES M. O'BRIEN.