Jan. 29, 1957 W. W. JONES 2,779,534

COIN BOX FITTINGS

Original Filed Oct. 8, 1951

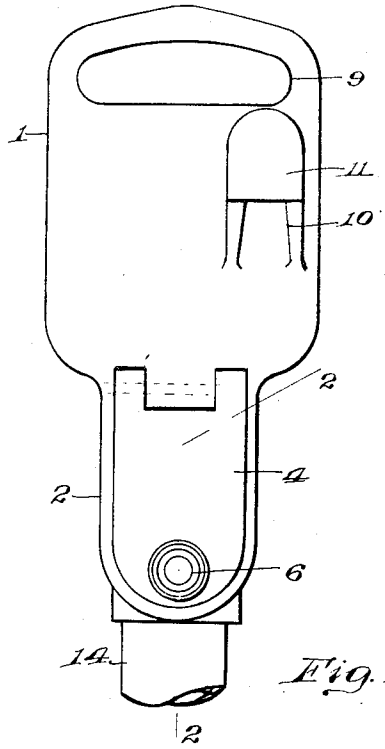


Fig. 1.

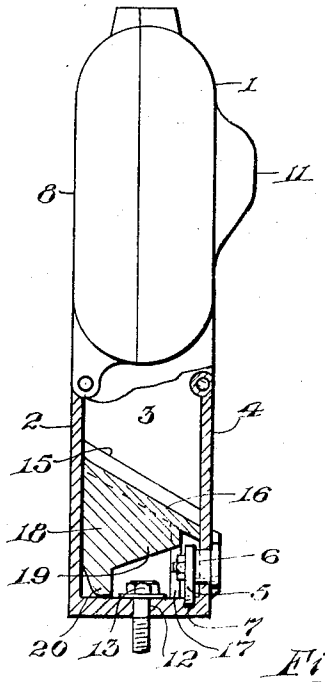


Fig. 2.

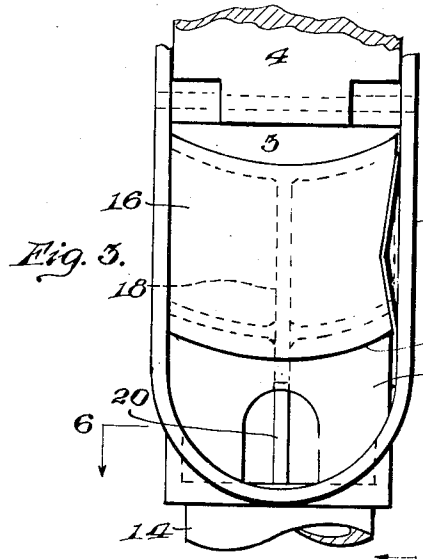


Fig. 3.

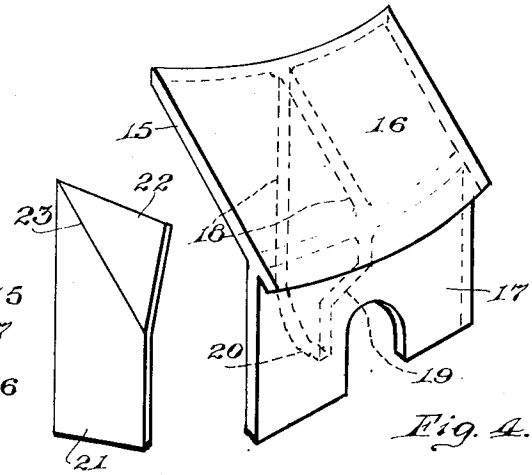


Fig. 4.

Fig. 5.

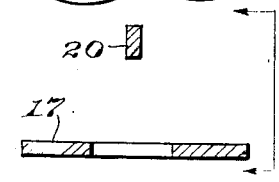


Fig. 6.

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COIN BOX FITTINGS

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1 Claim. (Cl. 232—15)

The object of the invention is to provide improvements in coin-controlled mechanisms, and particularly in means for increasing the efficiency with which coins may be collected therefrom. Whereas the invention is herein described and illustrated as being adapted to parking meters, it is to be understood that the broad description of the invention is intended to apply to all such mechanisms, in which there are spaces, chambers, compartments, or the like, designed to receive coins that have functioned in such devices, and which must be collected from time to time from such chambers, without requiring the use of one's hands and fingers to extract such coins, with consequent loss of valuable time and danger of failure to see or feel and extract all of the coins in a given chamber, this application being a division of co-pending application Serial No. 250,257, filed October 8, 1951.

Another and more specific object is to provide an embodiment of the invention, that comprises a construction that is adapted for use within and in conjunction with various types and constructions of parking meters, which may be already installed and in operation and from which it has previously been necessary to remove the coins either individually or in groups by hand, or collectively in receptacles into which they have previously fallen, and by which improved construction a deflector is operatively secured within a coin-receiving chamber, so that the coins when falling therein gravitate towards a usually upwardly swinging hinged closure, so that release and opening of such closure permits the coins resting against the inner surface thereof to fall into a bag, truck, or other form of receptacle, by which they may be transported to a receiving office, bank, or other depository.

A further object is to provide a fitting of this general nature, that may be substantially narrower than the interior width of the coin-receiving chamber of such devices, when designed to enter and equally well function within chambers of the proper size, and which fitting is applicable to such larger chambers by combining it with a spring plate, such that when said plate is positioned in the space to one side of said deflector, and between a side of said deflector and the adjacent side wall of the chamber, said deflector is held against vibration or shifting in fixed operative position, and said space is effectively filled so as to prevent coins from entering it, instead of gravitating more centrally of said chamber towards said closure.

With the objects thus briefly stated, the invention comprises further details of construction and operation, which are hereinafter fully brought out in the following description, when read in conjunction with the accompanying drawings, in which Fig. 1 is a representative type of parking meter, which it will be understood is intended to represent any and all types of coin-controlled devices to which the invention is applicable; Fig. 2 is a side elevation of the same with the lower portion broken away to show in section the interior of the coin-receiving chamber, the closure therefor and the deflector insert; Fig. 3 is an enlarged front elevation of the lower portion of the same with the chamber's closure removed; Fig. 4 is a perspective view of the deflector element that is applicable to existing meters and similar coin-controlled mechanisms; Fig. 5 is a perspective view of the angular spring plate by which said deflector may be removably secured in operative position in a chamber that within a certain range is wider than said deflector; and Fig. 6 is a section on the horizontal plane represented by the line 6—6 of Fig. 3.

Referring to the drawings, a representative type of parking meter is represented by a housing that comprises an upper portion 1, in which is located the usual time-measuring mechanism (not shown), and a depending portion 2 containing a coin-receiving chamber 3, that is bounded by rear, side and bottom walls, and forwardly by a hingedly supported door or closure 4. Said closure is supported from its upper edge, so that when raised outwardly there is in any case a minimum of difficulty in withdrawing coins from within said chamber, said closure being normally secured in its lower closed position by means of a keeper 5, controlled by a lock mechanism 6, and with its free end extending into a groove 7 in the bottom wall of said chamber, said lock having an integral shoulder engageable by a door-opening element (not shown).

The upper portion of such a meter is also provided with a hinged closure 8 for gaining access to said mechanism, normally retained in closed position by a suitable lock (not shown). In the front face of the upper portion of said housing, whether in said upper closure or upon the opposite side of said meter, is a window 9 for viewing the time-indicating elements, and also with a coin-receiving passageway 10, that is provided with an overhanging sheltering hood or the like 11, to protect the sheltered opening (not shown) from rain, sleet and snow.

This coin-controlled device, being shown as a parking meter, is provided with a bore 12 in its bottom wall to receive a bolt or the like, topped by a nut 13 by which it is normally secured to the upper end of a suitable post 14 or other type of supporting standard, or instead may be in threaded engagement with said standard, if preferred.

Heretofore, when using a device of this general type, upon opening the closure 4 it has been necessary to remove the coins previously collected in the chamber 3 by means of one's fingers, with a resulting loss of time, chance of the coins falling upon the ground, and the temptation of the operator to pocket at least a portion of them, or to remove them in a box or other suitable form of container that is extracted as a unit, and which must in each instance be replaced by another such unit, that has previously been emptied following an earlier collection, thus entailing the additional expense incident to a stock of empty boxes and storage and transportation of the same. It is with these and related facts in mind, that the deflector herein described has been developed, and which has proved efficient wherever used.

This deflector (Figs. 2, 3, 4 and 6) primarily comprises a sloping portion 15, that is preferably but slightly narrower than the width of the chamber 3 between the inner surfaces of the side walls thereof, and it is provided with a concavely curved preferably substantially cylindrical upper surface 16, that especially when only a few coins are in the meter causes such coins to gravitate towards the transverse center of such surface, as they slide downwardly and forwardly upon opening said closure 4. Said deflector is also provided with a depending plane forward portion 17, centrally recessed or cut away to provide free clearance for the keeper and lock mechanism 5—6, while the lower edge of said depending

portion rests upon the bottom wall of said chamber, to positively support and prevent downward movement of said deflector as a unit, the sloping and depending portions thereof being rigidly connected integrally by means of a centrally positioned, depending rib or web **18**, that also cooperates with the rear wall of said chamber, to prevent rearward motion and/or tipping of said deflector as a unit. It will be noted that a lower forward portion **19** of said web is broken away, to provide a recess above the nut **13** and attached bolt, but rearwardly extends downwardly at **20** towards and preferably in contact with the bottom wall of said housing, so that it cooperates with said unit to prevent said deflector from being removed, either accidentally or intentionally from within said housing without first lifting it free from said bolt and nut.

In designing said deflector, it may be advisable in some cases to make it sufficiently narrower than the interior width of said chamber, to adapt it to various meters having slightly different widths, wherefore in order to prevent coins from entering the space that would be created between said deflector and one of said side walls in such cases, and at the same time prevent said deflector from vibrating loosely within said chamber, a spring plate (Fig. 5) is provided said plate comprising a lower portion **21**, that slideably engages and substantially uniformly contacts one side of said deflector, and an upper angularly deflected portion **22** that similarly engages the adjacent inner side wall surface, the line of union **23** between said lower and deflected portions being as nearly as possible coincident with the sloping edge of said deflector, so that said upper portion is operative to direct coins falling against it towards and upon the sloping curved surface of said deflector, instead of permitting some of

them to enter the space between said deflector and the side wall of said chamber.

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

The combination of a coin-receiving mechanism having a coin chamber provided with an opening in one of its walls, a closure for said opening, a removable coin-deflecting chute within and narrower than the width of said chamber and provided with a continuously sloping, transversely concavely curved surface adapted to receive coins entering any part of said chamber from above, and operative to direct such coins towards the bottom of said opening and against said closure, and a separate transversely resilient metal plate having a lower portion positioned in the space between a side of said element and the adjacent wall of said chamber, and having an upper inwardly convex portion overhanging the concavely curved surface of said chute and terminating in an edge portion in resiliently binding frictional engagement with said chamber wall, to yieldingly position said element against the opposite chamber wall, while said convex portion operates to deflect falling coins towards said sloping surface.

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