

C. S. TEETER & R. E. BIRD.
 COIN ACTUATED MECHANISM.
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1,011,272.

Patented Dec. 12, 1911.

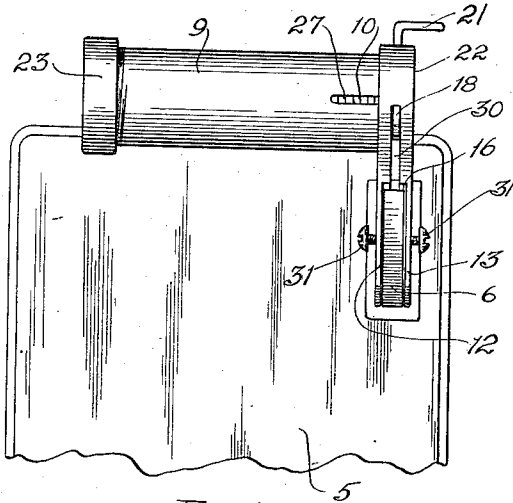


Fig. 1.

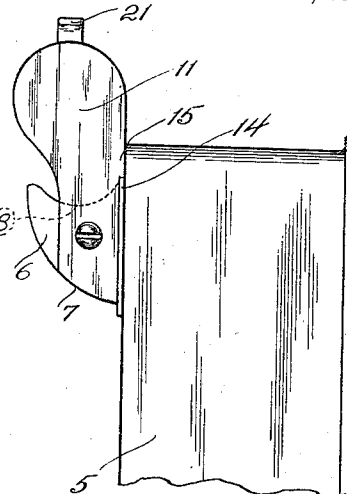


Fig. 2.

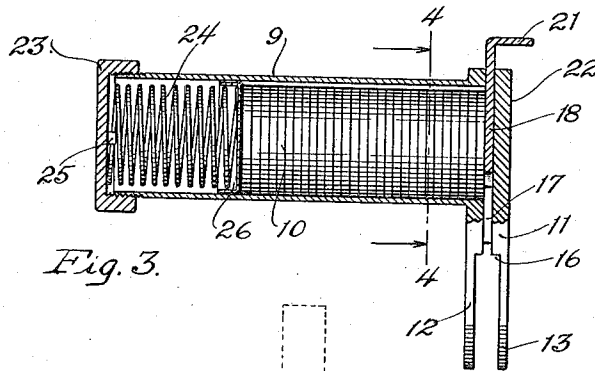


Fig. 3.

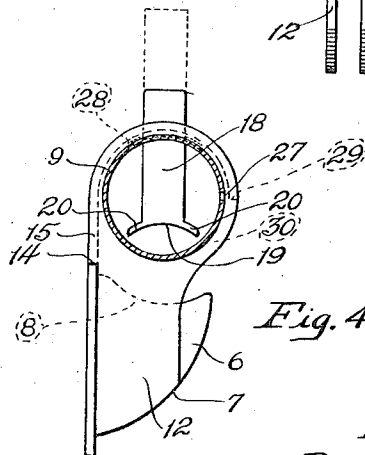


Fig. 4.

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UNITED STATES PATENT OFFICE.

CLYDE S. TEETER AND ROY E. BIRD, OF CHICAGO, ILLINOIS.

COIN-ACTUATED MECHANISM.

1,011,272.

Specification of Letters Patent.

Patented Dec. 12, 1911.

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To all whom it may concern:

Be it known that we, CLYDE S. TEETER and ROY E. BIRD, both citizens of the United States, and both residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Coin-Actuated Mechanisms, of which the following is a specification.

This invention relates to a device intended for use in connection with coin actuated mechanisms for the purpose of facilitating the operation of the same, particularly under certain circumstances.

The device is especially intended for use in combination with the coin or slug release mechanism of prepay telephones, although we do not limit its use to such mechanisms, and it will be evident from a study of the device, as herein set forth, that it can be used for other purposes.

The ordinary so-called nickel telephone is usually provided with a release mechanism into which a nickel or slug can be inserted at the proper time to complete the connection. It is customary to place this release mechanism at a convenient point with respect to the telephone so as to facilitate the insertion of the coins. However, it is sometimes found inconvenient or even difficult to properly insert the coin. This difficulty arises largely from the fact that the person using the telephone must hold the receiver in one hand and occupy a particular position with respect to the telephone, thus making it inconvenient and difficult to find the coin and insert the same when requested to do so by the telephone operator. Moreover, telephones are often placed in poorly lighted locations so that it is difficult to find the coin slot, even after the coin is in the hand. In order to overcome the first of these difficulties receptacles are often provided near the telephone in which are kept a number of nickels or slugs, but the difficulty of properly inserting the latter at the proper instant still exists and is often a serious one.

The present invention is particularly intended for use in connection with private telephones and especially those in residences, although it will be apparent that it is not restricted to such use.

Objects of the present invention are, to provide a magazine which shall hold a number of coins or slugs; to properly locate and support the same with respect to the coin aperture of the telephone mechanism; to

provide means for releasing a coin and delivering it into the aperture at the proper instant; to provide a mechanism of extremely simple construction; one which is particularly adapted for use in connection with the customary type of nickel telephone; one which may be quickly attached to or removed from the same; one which will accurately deliver one coin into the aperture at the proper instant, and only one coin; one which may be refilled from time to time without difficulty; and to so design and construct the device with respect to the coin mechanism of the telephone as not to interfere with the operation of the same in the manner now customary, when that is desired.

Other objects will appear from a detailed description of the invention which consists in the features of construction and combination of parts hereinafter described and claimed.

Referring now to the drawing, Figure 1 shows a front view of the top portion of the coin release mechanism of a nickel telephone having our coin magazine and associated parts attached thereto; Fig. 2 shows a side view of the mechanism of Fig. 1; Fig. 3 shows a longitudinal cross section taken through the central part of the magazine and gate; and Fig. 4 shows a cross section taken through the magazine on line 4—4 of Fig. 3 looking in the direction of the arrows, all of the coins being removed from the magazine, and the device being shown in position on the coin chute of a nickel telephone to show more in detail the relative forms of the parts.

In the embodiment of our invention we provide a coin magazine and to one end of the same we attach a gate or release mechanism. The latter is suitably attached above the coin chute of the telephone mechanism, so that the coins will be properly delivered therinto, and means are provided for insuring a proper movement of the coins in the magazine toward the gate.

Referring now to the drawing, the upper portion of the nickel mechanism is designated by the numeral 5. In the customary construction, a coin chute or receptacle 6 is provided which extends out from the front wall of the mechanism. This is generally curved inward on its lower edge 7 and its upper edge 8 is usually rounded to conform in a general way to the shape of the coin. The width of the coin chute is sufficient to

provide room for the slot which extends downwardly therein.

In the illustrated construction of our invention, which is the preferred form, we provide a chamber or magazine 9 of proper diameter and length to accommodate a number of coins or slugs 10. This magazine is suitably attached at one end to a bifurcated member 11, the fingers 12 and 13 of which are suitably spaced so that they may be inserted down over the sides of the coin chute 6. Their lower ends are preferably rounded back to conform in a general way to the shape of the lower edge of the coin chute and they are preferably offset in their rear edges at 14, so that the upper portion 15 of this member may be set snugly against the telephone mechanism. The upper portions of the bifurcations are shouldered at 16 to provide between them a slot 17 of width approximately equal to that of the slot in the coin chute, and this slot 17 is properly located to register with that in the coin chute when the bifurcations are straddled over the latter.

A vertically movable gate 18 operates in the upper portion of the slot 17 to control the delivery of coins therinto. This gate is of a thickness substantially equal to the width of the slot and is preferably rounded on its lower face 19 to conform in a general way to the curvature of the edge of the coin. Its edges 20 extend out a distance such that the curvature 19 will effectually grip the coin to prevent it from moving sidewise and to insure its proper delivery into the coin chute.

The gate extends up and out through the upper portion of the mechanism and terminates in a finger piece 21 which extends out beyond the face 22 a distance such that it can be easily gripped even when the gate is in lowered position.

In the preferred construction a cap 23 is threaded into the other end of the magazine 9. A spring 24 is attached to the cap at 25 and serves to force the coins toward the gate mechanism through the medium of a disk 26. When the magazine has been emptied, it may be easily refilled by removing the cap, spring, and disk.

A slot 27 (see Fig. 1) is provided in front of the magazine adjacent the gate mechanism so that the person using the telephone can easily see when the coins have all been used.

The normal operation of the device is as follows: After having been previously used, the gate will be in lowered position as shown in Fig. 3. Under these conditions, the spring forces a coin against the gate so that when the latter is raised sufficiently the extreme coin will be thrown against the wall and immediately over the slot 17. However, the spring compression will be sufficient at all

times to provide a friction of the coin against the wall, such that the former will not of its own weight fall into the slot. However, by depressing the gate the coin will be forced down into the slot so that the spring pressure will no longer act upon it, and it will then drop down through the slot 17 and into the slot of the telephone mechanism. The gate will then be normally left in lowered position.

In order to provide a clear passage way to permit the coins to be forced forward when the gate is raised a groove 28 should be provided into which the fingers 20 may rise to permit the edge 19 to clear the upper edge of the magazine.

In order to permit the telephone mechanism to be operated without the use of our magazine, the slot 17 is extended up to a point 29 sufficient to provide a clear opening at 30 sufficiently large to permit a coin to be inserted from the front of the device when the gate is partly raised. A set screw 31 may be provided on each of the fingers of the bifurcation to clamp the mechanism in place on the coin chute without the necessity of injuring the same in any way and without the use of special tools.

By making our mechanism in substantially the form illustrated, that is, by extending the magazine out sidewise from the gate mechanism, we are able to provide a construction which may be attached to the coin chute in a manner to occupy the least amount of space with respect to the telephone mechanism, and in a manner to present the most pleasing appearance.

We claim:

1. In combination with the coin chute of a coin actuated mechanism, a coin magazine, and a bifurcated coin control mechanism straddling the coin chute and provided with a coin delivery slot in register with the slot of the coin chute, means for holding the bifurcated member in position on the coin chute, and means for controlling the movement of coins from the magazine into the slot of the coin chute, substantially as described.

2. In combination with the coin chute of a coin actuated mechanism, a coin magazine, and a coin-control mechanism at one end of the same, provided with a downwardly extending bifurcated member adapted to straddle the coin chute, and provided with a coin delivery slot between the bifurcations, means for securing the bifurcated member in position on the coin chute, and means for adjusting the same to bring the coin delivery slot into register with the slot of the coin chute, substantially as described.

3. In combination with the coin chute of a coin actuated mechanism, a coin magazine, a bifurcated coin-control mechanism having its bifurcations spaced apart a distance

greater than the width of the coin chute, and provided with a coin delivery slot between the bifurcations, and means for maintaining the bifurcated member in straddled position on the coin chute and for adjusting the same sidewise with respect to the coin chute to bring the coin delivery slot into register with the slot of the coin chute, substantially as described.

4. In combination with the coin chute of a coin actuated mechanism, a coin magazine and a coin delivery mechanism at one end of the same, provided with a bifurcated portion having the legs thereof spaced apart a greater distance than the width of the coin chute and straddling the same, and provided with a coin delivery slot between the bifurcations, and suitable means for maintaining the bifurcated portion in straddled engagement with the coin chute and for adjusting the same laterally to bring the coin delivery slot into register with the slot of the coin chute, substantially as described.

5. In combination with a coin chute of a coin actuated mechanism, having its coin opening upwardly facing, a coin magazine, and a coin delivery mechanism at one end of the same, the latter being provided with a vertical coin slot adapted to register with the upwardly facing coin slot of the coin chute, and being further provided with an outwardly extending continuation of said

coin slot, whereby coins may be inserted sidewise into the coin slot of the coin delivery mechanism to gain access to the coin slot of the coin chute, substantially as described.

6. In combination with a coin chute of a coin actuated mechanism, having its coin slot upwardly facing, a magazine, and a coin delivery mechanism at one end of the same, the latter being provided with a vertical coin slot adapted to register with the coin slot of the coin chute, and being further provided with an outwardly extending continuation of the coin slot, and a vertically movable actuating finger within the coin slot of the coin delivery mechanism, and having its lower face arced in substantial conformity to the edge of a coin, and whereby coins may be sidewise inserted into the coin slot of the coin delivery mechanism to gain access to the coin slot of the coin chute, and whereby coins from the coin magazine may be guided downwardly past the sidewise continuation of the coin slot of the delivery mechanism, by reason of the arced contour of the coin finger, substantially as described.

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