March 26, 1935. R. J. ARDIFF 1,995,493

TOKEN RECEIVING DEVICE

Filed Feb. 4, 1933

Fig 2.

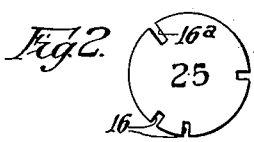


Fig 2a

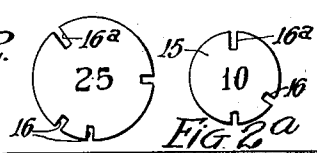


Fig 2b

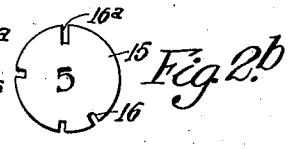


Fig. 1.

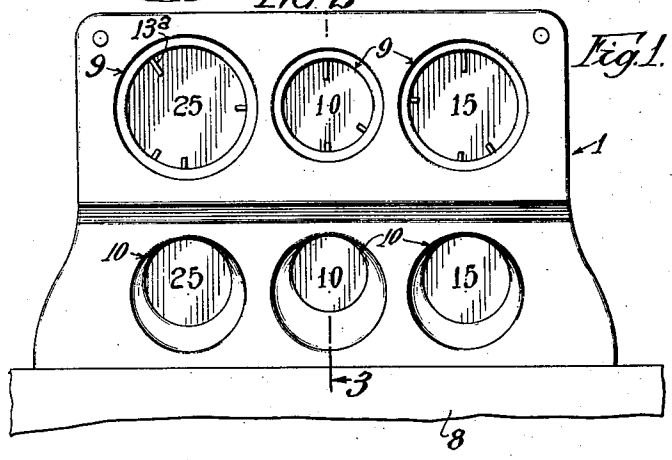


Fig. 3.

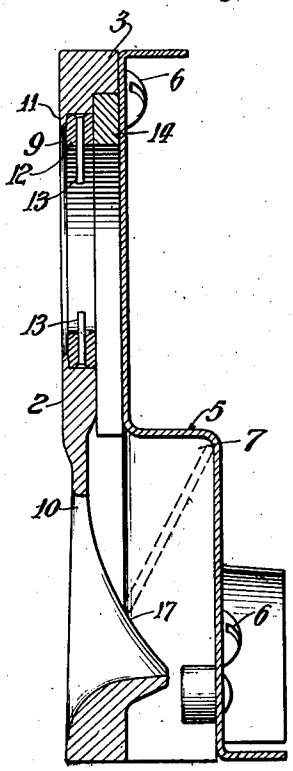
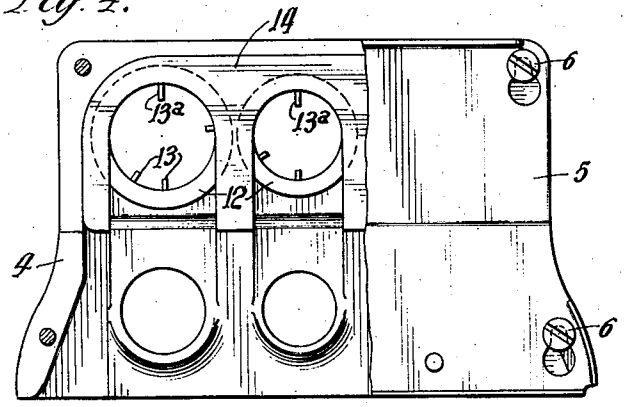


Fig. 4.



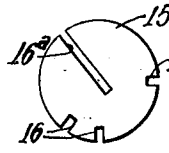


Fig. 5a

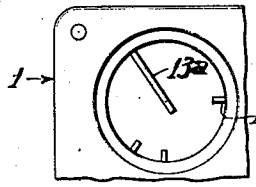


Fig. 5.

Inventor:
Robert J. Ardiff,
By: Arthur Wm. Nelson
Atty.

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TOKEN RECEIVING DEVICE

Robert J. Ardiff, Chicago, Ill.

Application February 4, 1933, Serial No. 655,156

7 Claims. (Cl. 194—4)

This invention relates to improvements in token receiving devices and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

The present invention is especially adapted for use in connection with prepayment apparatus requiring the deposit of a token or the like, prior to operation and a telephone pay station is mentioned as such an apparatus.

One of the objects of the invention is to provide a device of this kind wherein the token is inserted axially into a receiving opening therefor, the token and opening being so relatively formed that only the proper or authorized tokens will be accepted by the device.

Another object of the invention is to provide a device of this kind which by a minor change is susceptible of producing many combinations, permitting individual protection for each device so that each device will operatively receive only the tokens intended therefor, thus preventing the use of tokens in said device that are intended for other devices.

A further object of the invention is to provide a device of this kind wherein the token may be inserted with a minimum of confusion and effort, so that it may be properly presented for insertion by the sense of feeling in the absence of good visibility.

Still a further object of the invention is to produce a device of this kind, each of which is individualized so that the mating tokens therefor may be readily identified and whereby the fraudulent use of unmated tokens is impossible.

The above mentioned objects of the invention, as well as others, together with the many advantages thereof, will more fully appear as I proceed with my specification.

In the drawing:

Fig. 1 is a view in front elevation of a token receiving device embodying my invention as applied to an associated prepayment apparatus;

Fig. 2 is a view in elevation of a token mated for insertion into that token receiving opening at the left hand side of Fig. 1.

Figs. 2*a* and 2*b* respectively, are views in elevation of tokens mated for insertion into the other two token receiving openings shown in Fig. 1.

Fig. 3 is a vertical sectional view through the device, on an enlarged scale, as taken on the line 3—3 of Fig. 1;

Fig. 4 is a view in rear elevation of the device on the scale of Fig. 1, with a part of the rear wall of the same broken away to more clearly disclose the interior construction thereof; and

Fig. 5 is a fragmentary view in front elevation of a slightly modified form of device.

Fig 5*a* is a view in elevation of a token mated for use in connection with the form of the device shown in Fig. 5.

The invention is herein illustrated and will be herein described as adapted for use in connection with a prepayment apparatus requiring the use of tokens having values corresponding to "quarters", "dimes" and "nickels". This, however, is to be considered only in an illustrative sense because as will be apparent, the invention may be used in connection with other kinds of prepayment apparatus where the peculiar characteristics of the invention, make it of advantage to do so. Also, in describing the invention, "tokens", are mentioned and this is to be considered in its broadest sense, so as to include slugs, checks, coins, or the like, regardless of their outline shape.

In general, my improved device includes a casing adapted to be attached to the desired part of an associated prepayment apparatus so that the tokens inserted into the device pass to the control mechanism of the apparatus. Said casing includes a front wall or face plate having one or more token receiving openings therein, according to the type of prepayment apparatus with which the device is to be used. Each opening is provided with a plurality of inwardly arranged projections and one of said projections has a dimension different from that of the other so that only a token having marginal recesses mating with said projections can be passed axially through said opening. When said front wall contains more than one of such openings, they are of different diameters and said projections are arranged in different manners so that each opening will take only that token specifically made and intended therefor.

Preferably in said casing wall and below each token receiving opening is a sight opening, defined in part on the rear side within the casing by a flange or lip that directs the inserted token into the associated apparatus. These openings are of course, of such size as to prevent the insertion of even the smallest token therethrough so as to prevent the fraudulent use thereof in this respect. Should the properly inserted token become lodged on the guide flange or lip, this condition is readily visualized through said opening and permits the insertion of the finger

so as to dislodge the token for a free passage into the apparatus.

Referring now in detail to that embodiment of the invention illustrated in the accompanying drawing, 1 indicates as a whole the casing of the device which includes a front wall 2, provided at its rear with top and side flanges 3 and 4 respectively. 5 indicates the rear wall of the casing that engages at its top and side margins upon said flanges and is secured in position thereon by any suitable means such as the screws 6. Said walls and flanges coact to provide a chamber 7, which is open at the bottom for communication with a suitable token chute (not shown) of an associated prepayment apparatus 8 such as shown in Fig. 1. Said prepayment apparatus may be a telephone pay station and the device is secured thereto in any suitable manner.

In the front wall 2 of the device is provided top and bottom horizontal rows of token receiving openings 9 and sight openings 10 respectively, there being an opening 10 arranged below and associated with each opening 9. As shown herein, the openings in each row are of different diameters and the openings 9 are of such diameters as to receive tokens corresponding to "quarters", "dimes" and "nickels" these being the usual toll charges as accepted by telephone pay stations.

Each opening 9 is defined by an annular shoulder flange 11 and engaged thereagainst from the rear is a ring 12 having an internal diameter substantially corresponding to the diameter of the token to be received thereby. Each ring carries a plurality of inwardly extending projections 13 in the form of short radial pins spaced suitable arcuate distances apart. One of said pins has one dimension greater than that of the others and in this instance, such a greater dimension is manifested by length rather than by thickness or diameter. Such a pin will hereinafter be referred to as a master pin and bears the numeral 13*a*. The rings 12 are all secured in place by a retainer 14 in turn held in position by the top end part of the rear wall 5 of the casing.

In Figs. 2, 2*a* and 2*b* respectively are shown tokens 15 each of which corresponds in diameter to the inner diameter of the rings 12 of the openings 9. Each token is in the form of a disc and has inwardly extending recesses 16—16*a* in its peripheral margin so arranged as to mate up with the pins 13—13*a* of its respective opening. Each token also bears upon one face a numeral "25"—"10" or "5" to indicate its value and the opening 9 with which it is associated and on the rear wall 5 of the casing in line with each opening 9 are similar numerals which identify each opening.

In inserting a token into an opening 9, it is inserted axially therein and unless the token is arranged so that the recesses 16—16*a* match up with the pins 13—13*a* it cannot be passed through said opening. By making the master pin of a greater length, the token may be positioned by feeling, as well as by sight.

It is apparent that by providing the rings 12 with pins arranged in different relative positions a great many combinations may be provided and thus each device as a whole has an individual protection and this individual protection can run to a great number of devices or installations. This arrangement prevents the use of tokens intended for one device, in some other device and thus fraud is prevented and each owner is assured of the fact that no token intended for use in a single other device can be used in any other but said other device.

It is to be noted from Figs. 1 and 2, that no one of the pins and recesses extend to or past the center of the opening or disc. To prevent any one from cheating the device by changing the recesses with intent to defraud, I may employ the arrangement shown in Figs. 5 and 5*a* respectively wherein the master pin 13*a* and the master recess 16*a* are of a length greater than the radius of the token. Thus if some person tries to cut a new master recess in a token to make it fit a particular set of pins, then the token becomes destroyed.

When a mated token is inserted in an opening 9 it will pass the pins and will enter the casing chamber 7 and will fall by gravity into the bottom part of the casing to be directed into the token chute of the prepayment apparatus 8. To assist in properly directing the token, toward the prepayment apparatus, I provide on the rear side of each sight opening 10, a flange 17 as best shown in Fig. 3. Should said token so engage upon said flange as to lodge thereon in the position shown in dotted lines in Fig. 3, the depositor may insert a finger through said opening to dislodge said token which then passes on to the prepayment apparatus. By means of the sight opening, the depositor can tell whether or not the deposited token has passed into the prepayment device.

The device is simple in construction and by changing either the positions of the pins and recesses or by changing one dimension thereof, an infinite number of combinations may be afforded, whereby each device will receive only the mated token made especially therefor. The device is simple in construction and consists of but a few parts which cannot readily get out of order.

While in describing my invention, I have referred in detail to the form, arrangement and construction of the various parts thereof, the same is to be considered merely as illustrative of one embodiment of the invention, so that I do not wish to be limited thereto, except as may be specifically set forth in the appended claims.

I claim as my invention:

1. In a token receiving device, the combination of a wall having an opening therein and an annular seat on the rear side of said wall about said opening, a ring removably engaged upon said seat and having an opening communicating with the opening in said wall and a plurality of members extending radially through said ring and into the opening therein and one of said members having a dimension greater than that of the other whereby a mated token may be passed axially through said communicating openings.

2. In a token receiving device, the combination of a wall having an opening therein and an annular seat on the rear side of said wall about said opening, a ring removably engaged upon said seat and having an opening communicating with the opening in said wall, a plurality of pins extending radially through said ring from the outer periphery and having heads on one end engaged on said periphery and held against displacement by reason of said seat, the inner end of said members extending into the opening in said ring and the inner end of one of said members being of a dimension different from that of the other where-

by a mated token may be passed axially through said communicating openings.

3. In a token receiving device, the combination of a casing embodying therein front and rear spaced walls and one of said walls having an opening therein defined by a shouldered flange, and a member engaged against said flange and provided with inwardly extending projections, one of said projections having a dimension different from that of the others, whereby a mated token may be passed axially through said member.

4. In a token receiving device, the combination of a casing embodying therein front and rear spaced walls and one of said walls having an opening therein defined by a shouldered flange, a member engaged against said flange and provided with inwardly extending projections, one of said projections having a dimension different from that of the others, and a token provided with marginal recesses mating with said projections so that said token may be passed axially through said member.

5. In a token receiving device, a casing including a wall having a token receiving opening and a sight opening of a lesser diameter therebeneath, the latter opening being defined in part at the rear thereof by a token directing flange and through which opening said token may be digitally engaged when lodged upon said flange to dislodge the same therefrom.

6. In a token receiving mechanism, the combination of a wall having an opening therein, a member seated against one side of said wall and having an opening therein communicating with said opening in said wall and a pin disposed in said member with its inner end extending into the opening thereof and with its outer end secured in place between a part of said member and a part of said wall whereby said pin is held against movement in the direction of its length.

7. In a token receiving mechanism, the combination of a wall having an opening therein, a member seated against one side of said wall and having an opening therein communicating with said opening in said wall and a plurality of pins disposed in said member, each with its inner end extending into the opening thereof and each with its outer end secured in place between a part of said member and a part of said wall whereby said pins are held against movement in the direction of their length, one of said pins having a dimension different from that of another pin.

ROBERT J. ARDIFF.