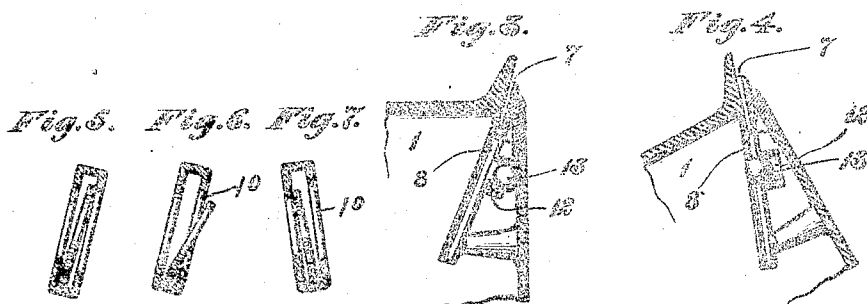
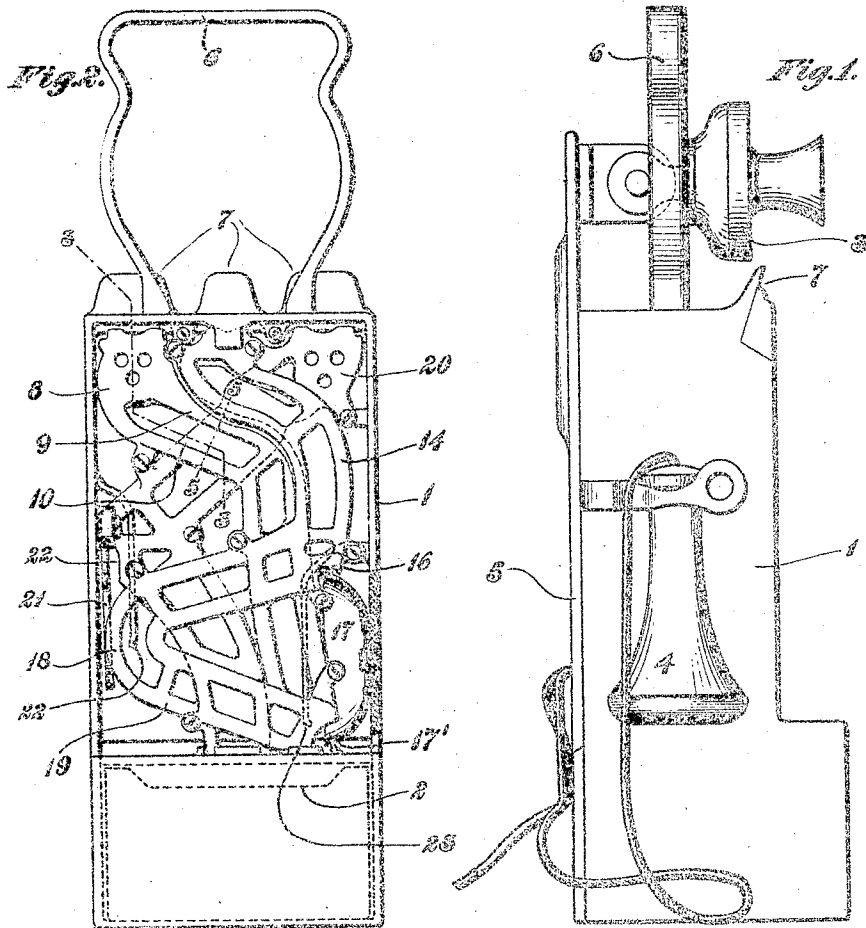


G. A. LONG.
 COIN CONTROLLED APPARATUS.
 APPLICATION FILED JULY 1, 1907.

932,408.

Patented Aug. 24, 1909.



Witnesses:

J. E. Anderson
J. E. Blodgett

Inventor:

Geo. A. Long
 By his Attorney,
Wm. F. Blodgett

UNITED STATES PATENT OFFICE.

GEORGE A. LONG, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE GRAY TELEPHONE PAY STATION COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF CONNECTICUT.

COIN-CONTROLLED APPARATUS.

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Specification of Letters Patent.

Patented Aug. 24, 1909.

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To all whom it may concern:

Be it known that I, GEORGE A. LONG, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Coin-Controlled Apparatus, of which the following is a specification.

This invention relates to coin-controlled apparatus especially designed for telephone pay-stations, although capable in some of its details of use with other devices, and in which coins of different value are employed for accomplishing various results.

Primarily the object of the invention is the provision of means for preventing fraud when a coin of a different value for the service rendered is inserted in a slot of the machine.

A further object of the invention is the provision of a coin-chute having a guide-way which is perforated or provided with a socket at its upper end to receive a ball which when the portable frame is in normal vertical position will permit of the ready passage of the coin, but which, when the frame is tilted or otherwise manipulated, will roll by gravity into said perforation or socket, and will prevent the passage of a coin of wrong denomination until the frame is brought to normal position when said coin will descend, slip through a trap of the chute and will fail to sound the signal.

A further object of the invention is the provision of a compound coin-chute in which, for instance, a bell-signal will be sounded once for a five-cent piece, twice for a dime, and once, by what is known as a "cathedral-gong," for a quarter.

Other objects of the invention will be set forth in the following description.

In the accompanying drawings, Figure 1 is a view in elevation of a portable telephone pay-station involving the features of the invention. Fig. 2 is a rear elevation, partially in section of the device with the back-plate or cover removed. Fig. 3 is a sectional detail on line 3-3 of Fig. 2, illustrating the normal position of the balls in the coin-chutes. Fig. 4 is a similar view, illustrating the action of the ball in obstructing the mouth of the chute when the frame is tilted. Fig. 5 is a section on line 5-5 of Fig. 2. Fig. 6 is a similar section showing how the trap in the chute permits of the discharge of

a coin of improper denomination; and Fig. 7 is a like view illustrating the action of the apparatus when the frame is tipped or tilted.

Like numerals designate similar parts throughout the several views.

Referring to the drawings, the numeral 1 indicates the frame of the portable apparatus, 2 the coin-drawer, 3 the transmitter, and 4 the receiver, all as usually constructed, and constituting no part of the present invention.

To the back of the frame is secured a removable cover 5, and at the top thereof is a handle 6, by which the device may be conveniently carried.

On the top of the frame are the mouths or openings 7 to the coin chutes hereinafter described, and located within the frame, said mouths or openings being respectively marked to indicate the various denominations of coin for which the apparatus is intended, for instance, 5 cts., 10 cts., 25 cts., etc.

Within the frame or casing are located the coin-chutes and signal devices of the machine, and, commencing with the lowest value of coin the chute therefor is designated by 8, and is provided with a downwardly-inclined upper part 9 having a trap 10 through which a coin of improper denomination and size will fall, as illustrated in Fig. 6.

Communicating with the top of the coin-chute 8 is one of the receiving-openings 7 in which the coin is primarily inserted, and in inclined portion of said chute is formed a pocket which is shown as consisting of a hollow boss or tube section 12 located approximately at right angles to and extending outward from said inclined portion and adapted for the reception of a ball 13, which when the apparatus is in normal position will remain in the location illustrated in Fig. 3, but should the device be tipped in the manner illustrated will prevent the passage of a coin through the chute 8. In this way fraudulent manipulation of the frame or standard of the machine by tilting it in the manner shown, in order that a signal may be sounded by a coin of improper value will be prevented.

The traveling roller or guard member 13 moves across the chute from the same side as that in which the escape slot to which allusion has been made, is located although

said guard member is situated between said slot and the entering or inlet end of the chute by reason of which when said guard member is in its effective or chute blocking position it will not permit a coin to travel as far as said slot.

As the nickel descends through chute 8 it will sound the bell 17 once, and will, therefore, indicate to the ear of the receiving operator that a coin of the proper value has been placed in the machine. It is important in this class of apparatus to indicate aurally the reception of the coin of a certain value, for example, a ten cent piece, and, therefore, in this connection a chute 14 is provided with one of the openings 7 for the reception of a dime which is in diameter the smallest coin capable of use in the machine, and this chute is of skeleton-frame, and is constructed with a rabbet 16 which will enable the coin to strike the top of a bell 17 on its passage downward. Further on the chute is curved at 18 and has an angular portion 19 through which the coin passes and strikes against the lower portion 17' of the bell before it enters the coin-box of the receptacle 2.

Coming now to the quarter-chute it is designated by 20, is also of skeleton-form, and is provided with a socket 12 similar to the socket illustrated in Fig. 3, and in said socket is placed a ball 13 for accomplishing a like purpose.

Designated by 21 is a coiled wire or cathedral gong 21 positioned adjacent an opening 22 in chute 20 so that a quarter inserted in the 25-cent slot or mouth of the machine while passing through said chute will cause the gong to be sounded, thereby indicating that a coin of the proper value has been placed in the machine for the service to be rendered. These chutes are so arranged that they overlap each other, and each chute is provided with a trap or escape-opening for permitting the discharge of a coin of improper value. By the variance of the signals and the difference in the sounding of the same the operator at receiving headquarters can readily detect whether or not a coin of proper value has been inserted in the mouth of the chute for which it is intended. To illustrate,—when a 25 cent coin is placed in the mouth of chute 20 it will under ordinary circumstances, descend and strike the cathedral gong 21 when a dime is inserted in the mouth of the chute 14 it will strike the bell 17 twice, and when a nickel is inserted in the mouth of chute 8 it will strike the bell once, thereby giving positive assurance that the correct coin for the receiver's record has been employed.

As illustrated by Fig. 5 when a coin of the proper value is inserted it will not escape through the trap in the chute, but should a coin of inferior value be inserted it will

under normal conditions fall out of the trap 10 as illustrated in Fig. 6.

Guards 22 and 23 protect gong 21 and bell 17 respectively from being sounded by improper coins which may be deflected by the traps of the chutes. Were not means provided to prevent the passage of any coin while the apparatus is tilted or otherwise manipulated an improper coin could be made to pass the trap in the chute.

From what has been stated it will be obvious that positive means for preventing the passage of a coin except when the frame is in vertical position is provided, and that should said frame be tilted to obtain a fraudulent sounding of the signal by an inferior coin the ball 13 will assume the position illustrated in Fig. 4, and will prevent the passage of said coin.

Changes may be made in the various details of the invention without departure therefrom, and the invention is not limited to the precise construction shown and described. So too, other devices may be substituted for the rollers or balls for automatically preventing the insertion of a coin when the apparatus is thrown out of normal position.

Having thus described the invention, what I claim is:

1. A telephone pay station comprising a chute, a coin-operable signal, and a bodily-movable member automatically movable into position to prevent a coin reaching said signal when said chute is moved out of its normal position.
2. A telephone pay station comprising a chute, a coin-operable signal, and a ball in cooperative relation with said chute and adapted to roll into position to prevent a coin reaching said signal when the chute is moved from its normal position.
3. A telephone pay station comprising a chute having an opening in its side for the escape of an improper coin, a signal, and a bodily movable member in cooperative relation with said chute and adapted to be projected into the path of a coin above said opening to hold the coin and prevent it reaching said signal when the station is moved from normal position.
4. A telephone pay station comprising a chute having an inclined portion the latter being provided with an opening on one side for the escape of a coin of improper size and being provided on the opposite side with an outwardly-extending hollow boss, a coin-operable signal disposed below said boss and opening, and a ball in said boss adapted to be projected into the path of the coin when the station is tipped out of its normal position.

5. A telephone pay station comprising a chute having a slot in one side for the escape of a coin of improper size, a coin-operable

signal disposed below said slot, and a bodily-movable member in coöperative relation with said chute and projectable across the same above said signal and from the side of said chute opposite that having said opening, when the station is tipped out of its normally upright position.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. LONG.

Witnesses:

F. E. ANDERSON,
FRANCES E. BLODGETT.