

Dec. 24, 1935.

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2,025,390

TELEPHONE PAY STATION EQUIPMENT

Filed Feb. 5, 1935

2 Sheets-Sheet 1

FIG. 1

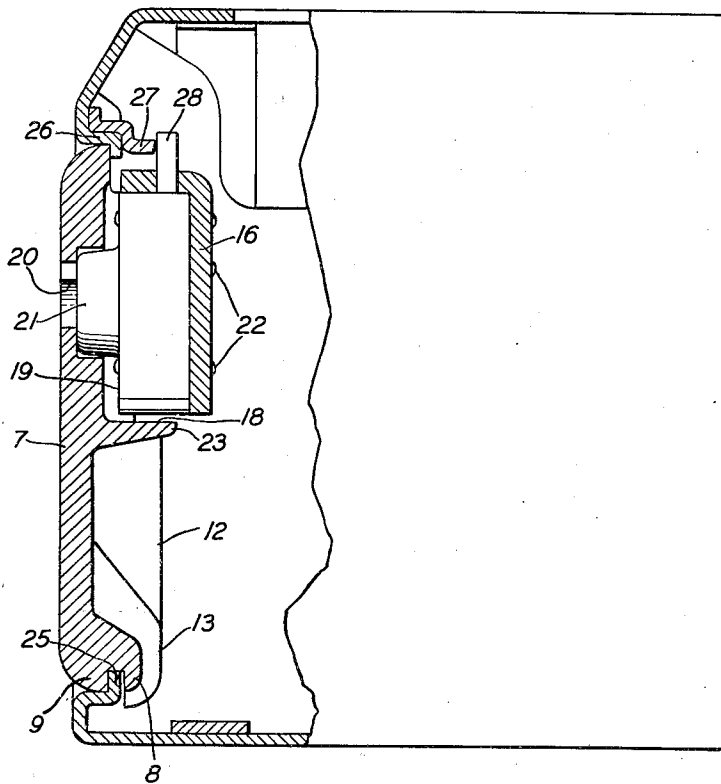
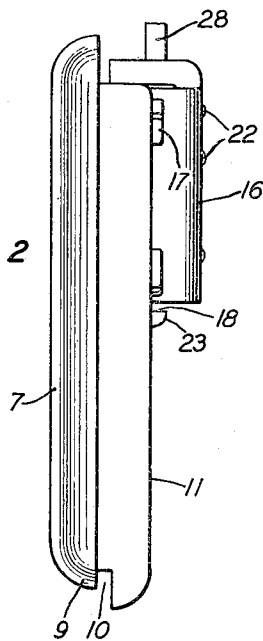


FIG. 2



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FIG. 3

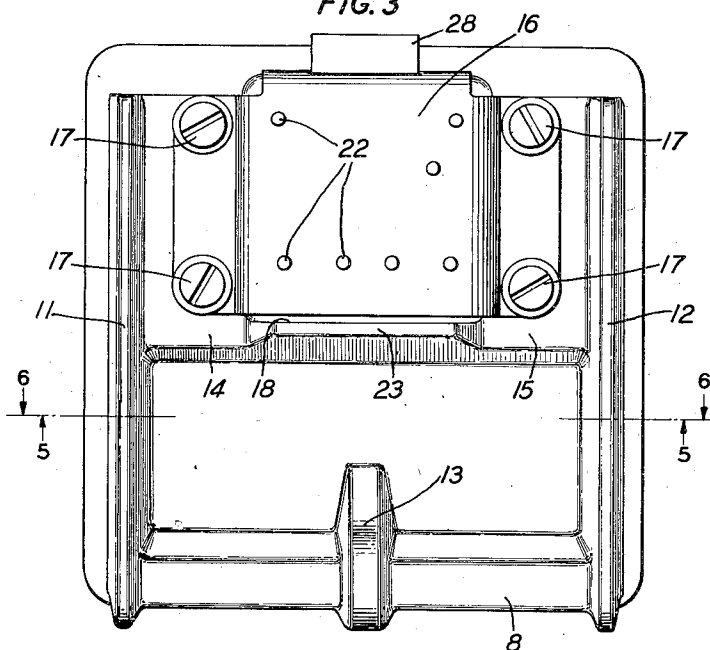


FIG. 4

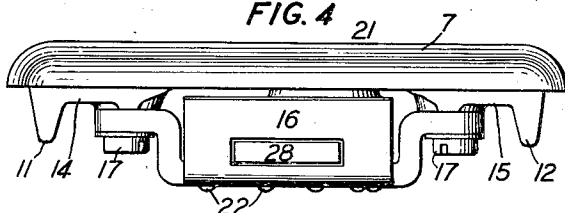


FIG. 5

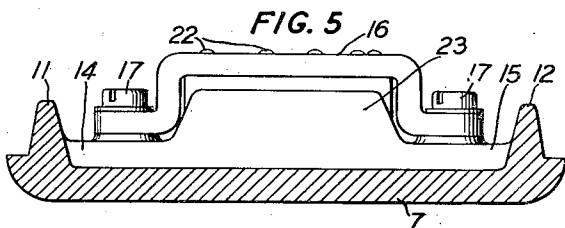
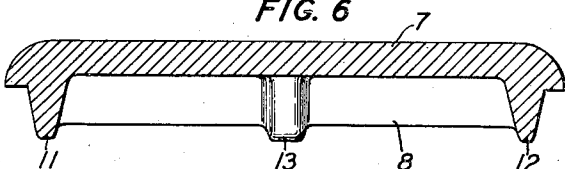


FIG. 6



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TELEPHONE PAY STATION EQUIPMENT

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Application February 5, 1935, Serial No. 5,015

2 Claims. (Cl. 70-14)

This invention relates to telephone pay stations and more particularly to covers or doors for coin receptacles or boxes therefor.

Telephone pay stations at which coins are deposited by the user in payment for completed calls are provided with receptacles for receiving the deposited coins. In some cases stations of this type are located in public places where there is no attendant. The door of the coin box is exposed and unscrupulous persons sometimes break into the boxes by prying off the door, drilling into it, or by other means. It is, therefore, desirable that this door be as strong as possible and so formed with respect to the opening into which it fits that it will be very difficult to pry the door loose from the receptacle.

The principal object of this invention is to improve the construction of the cover or door for telephone pay station cash compartments to increase the difficulty of access by unauthorized persons.

Heretofore it has been the practice not to use hinges for coin box covers but to use an L-shaped lug formed from a strip of steel welded to the back of the cover, the lug extending below the bottom edge of the cover and engaging the inside face of the bottom edge of the cash compartment opening. This steel strip has also been provided with vanes at its center and outer edges as described, for example in the U. S. patent to F. A. Hoyt and O. A. Shann 1,667,804, issued May 1, 1928. The top of such a reinforced door is usually held in position by the bolt of a lock which engages the upper edge of the cash compartment opening.

In accordance with this invention the cover, the L-shaped lug and the reinforcing vanes therefor comprise a single piece of drop forged steel suitably heat treated to give it a high degree of hardness and toughness. Also integral with the door are spaced bosses to which the lock casing may be attached by screws, for example. This construction forms a strong closure for coin boxes for telephone pay stations to render it difficult for an unauthorized person to gain entry to the coin box by prying the cover off or by drilling.

A subsidiary feature of the invention involves the possibility that unscrupulous persons by the use of a tool inserted through the key slot may damage the interior of the lock mechanism to such an extent that the lock with its bolt may drop below its casing and free the bolt from the edge of the cash compartment opening. In order to avoid this possibility this invention provides a transverse rib integral with the door and po-

sitioned to block any tendency of the lock to drop downwardly when damaged.

This invention will be better understood by reference to the following detailed description taken in connection with the accompanying drawings in which:

Fig. 1 discloses a side view of a cash compartment with certain parts of the door shown in cross-section;

Fig. 2 is an end view of the door of Fig. 1;

Fig. 3 is a view of the rear face of the door of Fig. 1;

Fig. 4 is a top view of the door; and

Figs 5 and 6 are sectional views of the door taken along the lines designated in Fig. 3.

The cash compartment door 7 of this invention comprises a square piece of drop forged steel with its corners rounded as shown in Figs. 1 and 2. On the rear face of the door is a lug 8 extending substantially across the bottom end of the door and forming with the main edge 9 of the door an elongated slot 10 adapted to fit over the lower edge of the cash compartment opening. This integral lug 8 is reinforced by integral ribs or vanes 11 and 12 near the side edges of the door, these vanes extending substantially the entire length of the door. The lug is also reinforced near its center by a short rib or vane 13. The upper part of the inside face of the door has two spaced raised portions 14, 15 due to the increased thickness of the door at the specified points, these portions serving as supports to which is fastened a U-shaped member 16 by screws 17, for example. This member 16 forms the rear casing of a lock 18 the bottom of which is shown at 19. The door is apertured at the point 20 to receive a projection 21 of the key barrel. The various component parts of the lock are held in place by a plurality of studs 22 some of which pass through to the opposite wall 19 of the lock.

The ends of the raised portions 14, 15 nearest lug 9 are joined by an integral transverse rib 23 which when viewed from the position of lug 9 serves as a supplementary closure member for the lock housing on the bottom side of the lock when the door is in place.

A sectional view of the door in locked position is shown in Fig. 1 where the lower end of the door is held in place by having the lower edge 25 of the cash compartment opening fit into slot 10 between lug 8 and the lower edge 9 of the door. At the top the upper edge of the door is against the upper outer edge 26 of the cash compartment and the lock bolt 28 is against the inner end of the lug 27. The side edges of the door

fit snugly against the side edges of the cash compartment opening, thereby guarding against any attempt to pry the door open.

The transverse rib 23 serves as an additional 5 protecting feature in case an attempt is made to pry the lock mechanism loose by the insertion of a tool through the key slot of the lock. In the absence of rib 23 such an attempt, if successful, might cause the lock mechanism to drop far 10 enough to free the lock bolt 28 and effectively unlock the door. The rib 23 will hold the lock mechanism and lock bolt in place even though damaged.

It is to be understood that the cover plate 7, 15 lug 8, reinforcing ribs 11, 12, 13, raised portions 14, 15, and transverse rib 23 are all integral with each other and made of one piece drop forged steel heat treated to give a very high degree of toughness and hardness. The door is preferably 20 made of S. A. E. 1045 steel.

Although the heat treatment of such a drop forging may be varied to suit the conditions encountered, the following treatment has been found advantageous for S. A. E. 1045 steel to produce the desired hardness and toughness. The 25 door is packed in bone dust in a suitable box and the box sealed with clay, for example. The box is placed in an electric furnace and heated for 6 or 7 hours at a temperature about 1550° F. The door is then removed from the box and quenched 30 in oil. The door is then reheated to about 650° F. to 700° F. for about one-half hour and then cooled such as by quenching in an oil bath. The first step of the heat treatment described above gives

the desired hardness to the door but it makes the steel brittle, that is, the steel lacks toughness. In order to give the steel the desired toughness while retaining the desired hardness the additional heat treatment described above is desirable. 5

What is claimed is:

1. In combination, a telephone pay station cash compartment having an opening therein, a door for said opening, a lock for said door, said 10 door on its inner surface and at one end being of increased thickness to receive fastening means for said lock, said door having a rib formed substantially at right angles to the face of said door and located in close proximity to the 15 lower side of said lock for supporting said lock when said fastening means are loosened.

2. In combination, a telephone pay station cash compartment having an opening therein, a door for said opening, said door at one end 20 having two spaced portions of increased thickness, a U-shaped frame extending between said portions and fastened thereto, a lock housing secured to said frame and fitting snugly within said frame and having a lock bolt projecting 25 externally of said housing, and a rib formed integrally with said door at right angles to the door face and located in close proximity to an end wall of said housing and substantially parallel to said end wall to provide a temporary 30 support for said housing when said housing is loosened from said frame.

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