

July 2, 1968

R. B. NAWMAN

3,391,256

COVER GUARD FOR PAY TELEPHONE STATION

Filed July 19, 1965

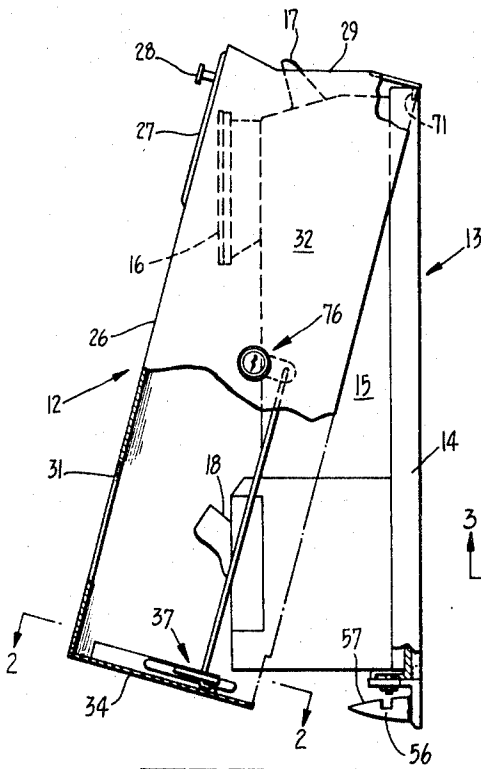


FIG. 1

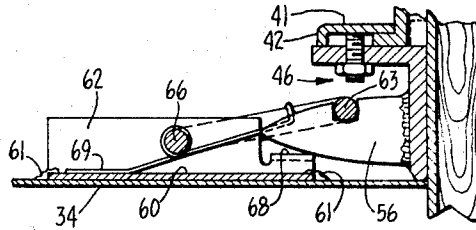


FIG. 3

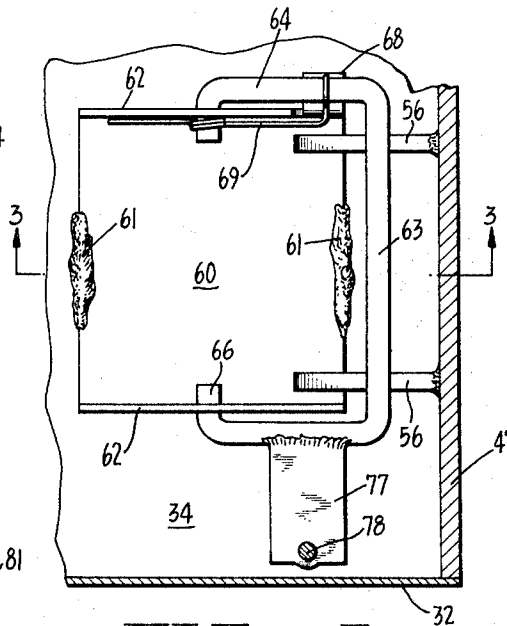


FIG. 2

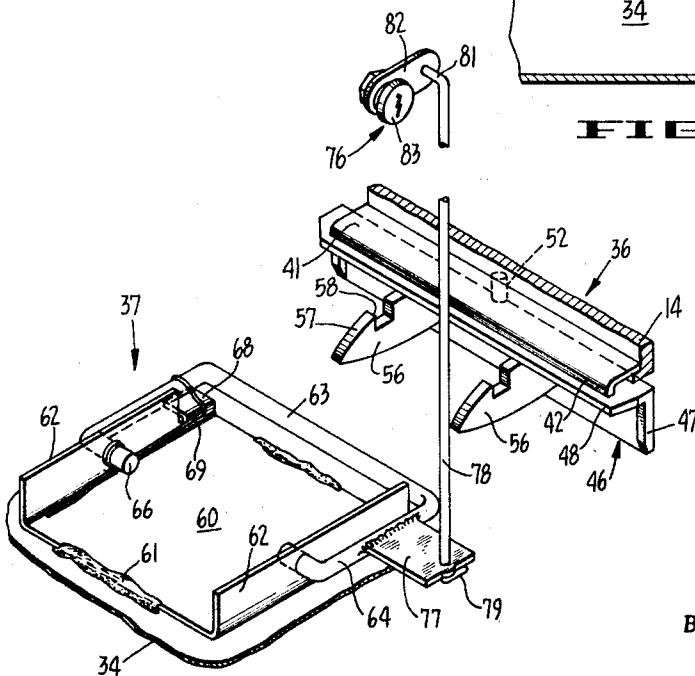


FIG. 4

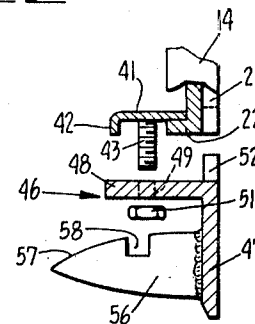


FIG. 5

INVENTOR.
ROLLIE B. NAWMAN

BY

Gardner & Zimmerman
ATTORNEYS

1

3,391,256

COVER GUARD FOR PAY TELEPHONE STATION
 Rollie B. Nawman, Piedmont, Calif., assignor to Benner-Nawman, Inc., Oakland, Calif., a corporation of California

Continuation-in-part of application Ser. No. 324,567, Nov. 18, 1963. This application July 19, 1965, Ser. No. 472,845

9 Claims. (Cl. 179-189)

This invention generally relates to pay telephone stations, and is more particularly directed to a cover guard which is adapted to be releasably secured over such pay station to not only improve the appearance of the latter, but to also serve to prevent the breaking into such station for theft of coins therefrom or other wrongful interference with its operation. This application is a continuation in part of my copending application, Ser. No. 324,567, filed Nov. 18, 1963, now Patent Number 3,317,674 and entitled, "Pay Telephone Station."

In the aforementioned application, there is disclosed conventional forms of pay telephone stations in which a cover or guard is provided, the latter being adapted to be releasably secured in position over the station so as to merely expose the dial, the coin receiving slots, the coin return chute, and the hand set cradle or hook. With the cover secured in position, access to the coin box through the normally provided hinged door on the station is effectively prevented since the unitary construction of the cover prevents such access in absence of removal of the cover from its mounting means.

It is an object of the present invention to provide a cover or guard as above described in which the cover may be secured to a pay telephone station without requiring any modification or alteration of the existing phone station or the mounting of the latter.

Another object of this invention is to provide a cover of the type described in which the cover may be readily and automatically snapped into locking position over the station, and which requires a key to permit removal of the cover from the station for collection of coins, servicing or the like.

A further object of the invention is to provide apparatus of the above character including a latch assembly in which there are a minimum number of parts, which may be constructed at a minimum of cost, and which may be installed on existing stations with a minimum of expense or difficulty.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

Referring to said drawing:

FIGURE 1 is a side elevational view of a telephone pay station with the cover of the instant invention being operatively inserted thereover.

FIGURE 2 is a cross-sectional view on an enlarged scale, taken substantially in the plane indicated by the line 2-2 of FIGURE 1, but with the cover installed.

FIGURE 3 is a cross-sectional view taken substantially in the plane indicated by line 3-3 of FIGURE 2.

FIGURE 4 is an exploded perspective view of the operating portion of the latch assembly by means of which the cover is releasably secured to the telephone station.

FIGURE 5 is a vertical cross sectional view indicating the manner of assembling one portion of the latch assembly onto the telephone station.

2

As shown in the drawing, the cover of the present invention, generally indicated by the numeral 12 is adapted for operative installation in overlying relationship to a pay telephone station 13. The station 13 which of itself forms no part of the present invention, is of generally conventional form and consists of a back plate 14, side walls 15 extending forwardly from the back plate, a dial 16 on the front wall, a coin receiving mechanism 17, and a coin return mechanism 18. The particular form of casting used in such pay stations is not critical for an understanding of the instant invention, other than for the fact that the type of station particularly adapted for reception of the present cover includes a wire raceway 21 positioned centrally and rearwardly of the back plate 14, the latter being provided with a forwardly extending horizontal flange 22 at the bottom thereof. The manner in which such raceway and flange are utilized will be presently explained in more detail.

The cover member 12 is of generally rectangular configuration and includes a front wall 26 having an upper circular opening 27 for access to the dial 16, and may also include a coin release button 28 adapted to actuate the coin release mechanism conventionally provided on the pay station. The top wall 29 of the cover is provided with an aperture through which the coin receiving member 17 of the station extends when the cover is in operative position. Front wall 26 is also provided with a slot 31 adjacent the lower portion thereof through which the coin return mechanism 18 is adapted to extend. The cover is generally completed by side walls 32 and a bottom wall 34. As will be understood, the rear portion of the cover is open, so that the cover may be placed in overlying and encompassing relationship to the telephone station 13.

Means are provided for releasably securing the cover to the station, and in this connection there is provided a novel form of latch assembly with one portion 36 of such assembly adapted to be secured to the station, and a cooperating latch portion 37 which is carried on the bottom wall 34 of the cover. As will be presently described in more detail, when the latch portion 36 is secured to the station, the cover may merely be brought into position over the station, and the latch portions will be automatically locked in position without further attention or assembly requirements on the part of the installer. Thereafter, by means of a key mechanism, the latch portions 36 and 37 may be released so as to provide access to the station by swinging or pivoting the cover away from the station.

Referring first to the latch portion 36, the same is best illustrated in FIGURES 4 and 5 of the drawing, and will be seen to include a horizontally disposed retaining plate 41 having a downwardly extending lip 42 along the front edge portion thereof. A pair of bolt members 43 extend downwardly from spaced portions of the plate. An angle member 46 is positioned subjacent the plate 41 and includes a vertical web 47 and a horizontally disposed flange 48 extending forwardly therefrom. The flange has a pair of apertures 49 to receive the bolts 43. In order to install these members on the existing telephone station, it is merely necessary to place the rear edge portion of plate 41 over the station flange 22, insert the bolt portions 43 of the plate through the flange apertures 49, and by means of nuts 51, secure the angle member 46 to the plate and consequently to the pay station. It will be noted that a pin 52 extends upwardly above flange 48 from a central portion of web 47, and such pin is insertable into the wire raceway 21 of the station. It will also be noted that the web 47 of the angle member lies against the common wall with the back plate of the station, and thus, with the pin 52 inserted into the raceway and the nuts 51 tightened on the bolts 43, the angle member 46 will be rigidly

3

secured to the station 13 with the web 47 extending across the rear surface of the unit.

It will be noted that a pair of catches 56 are provided which extend forwardly from spaced portions of web 47. Each catch has a forwardly extending curved cam surface 57 and a downwardly directed notch 58 provided in such surface for a purpose presently to be explained.

With the latch portion 36 operatively installed on the telephone station as best illustrated in FIGURE 3 of the drawing, the cooperating latch portion 37 which is carried on the bottom wall 34 of the cover may be operatively secured thereto.

As best shown in FIGURES 2 and 4 of the drawing, the latch portion 37 includes a flat plate 60 secured to the wall 34 such as by welding 61. The plate is provided with flanges 62 at the ends thereof with the flanges generally parallel to the cover side walls 32. A rod 63 positioned forwardly of the plate and normal to side walls 32 is journaled in the flanges 62 by means of rearwardly extending rod portions 64 having inwardly extending stub shafts 66 extending inwardly through aligned apertures provided in the flanges. Such stub shafts may be secured in the flanges by means of cotter keys or the like. The rod 63 is normally maintained in the horizontal position shown in FIGURE 4 with one rod portion 64 resting on a lug 68 disposed above the plate 60. A torsion spring 69 is provided with a portion of the spring wound around one of the stub shafts 66 and an end thereof overlying a portion of one of the rod portions 64 so as to keep the rod normally in engagement with the supporting lug 68. The rod 63 is free to pivot upwardly about the horizontal stub shaft axis and against the resistance of spring 69 for a purpose presently to be explained.

With the latch portion 36 attached to the telephone station 13 as above described, and with the latch portion 37 mounted in the bottom wall of the cover 12, the latter may be secured in place in overlying relationship to the station in the following manner. First, the top wall 29 of the cover is provided with a lug 71 extending downwardly and such lug is first positioned in the upper portion of the raceway 21 of the pay station. Next, the cover 12 is pivoted downwardly in the direction of the arrow in FIGURE 1 and the rod 63 will first engage the catches 56. As the cover is pushed towards the rear wall of the station, i.e., in a counterclockwise position as viewed in FIGURE 1, the rod will ride up on the cam surfaces 57 against the action of the spring 69 until reaching the notches 58. The spring will then cause the rod to snap into locking engagement with such notches. In this position it will be seen that clockwise movement of the cover is effectively prevented and consequently the cover will be locked in place.

In order to release the cover such as for servicing of the station, or to obtain access to the coin box of the station, a key operated mechanism 76 is provided. This mechanism is extremely simple and may merely consist of a horizontal plate 77 extending outwardly from one rod portion 64 of the latch mechanism with such plate being apertured to receive a lift rod 78 which extends upwardly along a side wall 32 of the cover. The lower end of the rod is bent as indicated at 79, so that upon raising of the rod the plate 77 and consequently the rod 63 will likewise be raised so as to release the rod from the notches 58. The upper end of rod 78 is bent as shown at 81 and journaled in an arm 82 which is mounted on a key actuated lock 83. Thus, when a key is inserted and turned in the lock 83, the arm 82 is raised, likewise raising rod 78, plate 77 and shaft 63, thereby releasing the latter from the notches 58 and permitting the cover to be swung in a clockwise position and released from station.

What is claimed is:

1. A cover guard including a first latch portion adapted to be secured to a telephone pay station installation, said cover guard having a front, side, top and bottom walls with an open back portion adapted to be placed in over-

4

lying relationship to such station, a cooperating latch portion on said cover including a resilient member releasably engageable with said first latch portion upon movement of the cover into said overlying relationship and key actuated means for releasing said member from said first latch portion for releasing the cover from the station.

2. Apparatus as set forth in claim 1 in which said cooperating latch portion includes a rod normally and resiliently maintained in a depressed position, said first latch portion including a notch for receiving said rod, and said key means having a keyhole extending through a side wall of said cover for raising said rod out of said notch upon actuation of said key means.

3. Apparatus as set forth in claim 2 in which said first latch portion includes an upwardly sloping surface terminating in said notch whereby said rod, upon movement of the lower portion of said cover toward said station will ride upwardly on said surface prior to snapping engagement with said notch.

4. A latch system for releasably securing a cover to a fixed telephone pay station installation including a first latch member having a horizontally extending curved surface terminating in a downwardly extending notch, said first member being attached to said fixed installation, a second latch member mounted on said cover and including a horizontally disposed rod pivotally mounted about a horizontal axis, spring means yieldably urging said rod into a downward position, and said rod, upon movement of said cover towards said fixed installation riding upon said curved surface and then snapping into said notch for releasably locking the cover to the installation.

5. Apparatus as set forth in claim 4 in which key means are provided extending exteriorly of said cover for raising said rod out of said notch.

6. Apparatus for releasably locking a cover onto a pay telephone station in which said station is provided with a lower forwardly extending flange and a vertical raceway, the combination therewith of a cover having a top, side, bottom and front walls and an open back adapted to be positioned in overlying relationship to said station, said cover having a downwardly extending lug adapted to be pivotally engaged with the upper end of said raceway for swinging motion of said cover from and towards said station, a latch mechanism including a first portion releasably attachable to said station flange, said member having a forwardly extending projection including a forwardly and downwardly directed cam surface having a downwardly directed notch adjacent an upper portion thereof, said cover having a second latch portion including a horizontally positioned rod journaled for pivotal movement about a parallel spaced axis, means resiliently urging said rod into a lowermost position, and said rod upon movement of the cover into closing engagement with said station riding on said cam surface and urged by said last named means into snapping into said notch for securing the cover over said station.

7. Apparatus as set forth in claim 6 in which said first portion includes an upwardly extending lug positioned in the lower end of said raceway.

8. Apparatus as set forth in claim 6 including a vertically extending lift element attached to said rod, and a key mechanism having a key opening extending from a side wall of said cover for raising said element and moving said rod out of engagement with said notch for releasing the cover from said station.

9. Apparatus for releasably locking a cover onto a pay telephone station in which the cover includes a front, top, bottom and side walls and an open back and said cover is pivoted to the station at the upper end thereof for swinging movement of the bottom of the cover from and towards the station, a first latch portion attachable to the bottom portion of said station and including a pair

of spaced catches each having an upwardly and rearwardly directed cam surface terminating in a downwardly directed notch, a second latch portion secured to the bottom wall of said cover and including spaced bearings, a horizontally disposed rod having extensions thereof journaled in said bearings, spring means normally urging said rod downwardly, said rod upon movement of said cover into closing position engaging said cam surfaces and sliding

upwardly along the same against the resistance of said spring means and then snapping into said notches.

No references cited.

⁵ KATHLEEN H. CLAFFY, *Primary Examiner*.
LAWRENCE A. WRIGHT, *Examiner*.