Jan. 29, 1929. 1,700,577

H. WILHELM

PUSH BUTTON AND CARD HOLDER BOX

Filed June 1, 1927

Fig. 1.

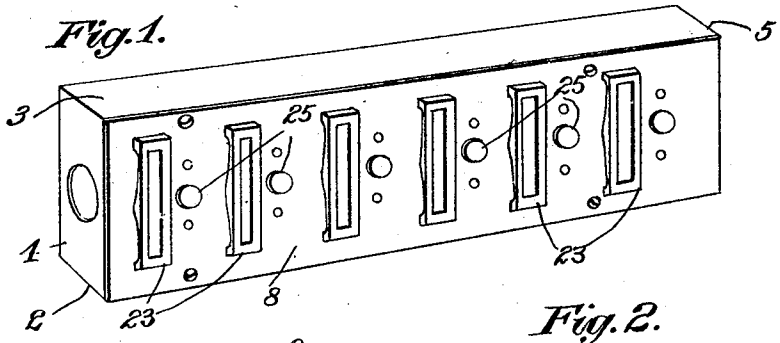


Fig. 2.

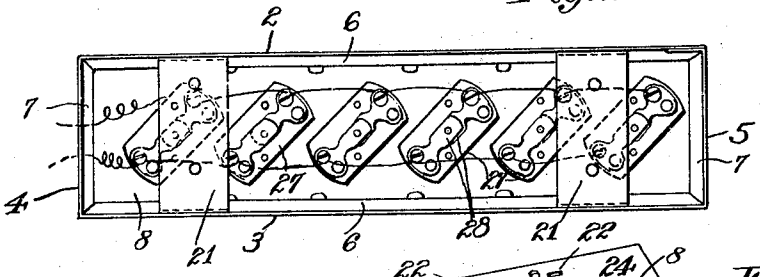


Fig. 3.

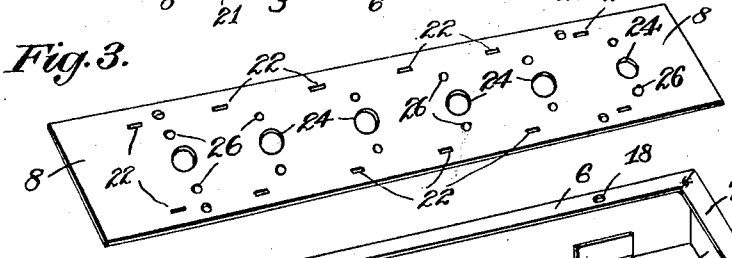


Fig. 5.

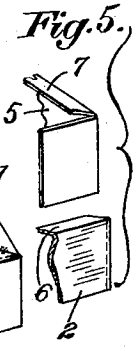


Fig. 4.

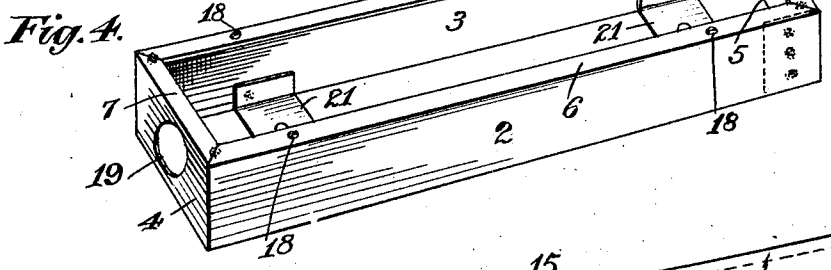
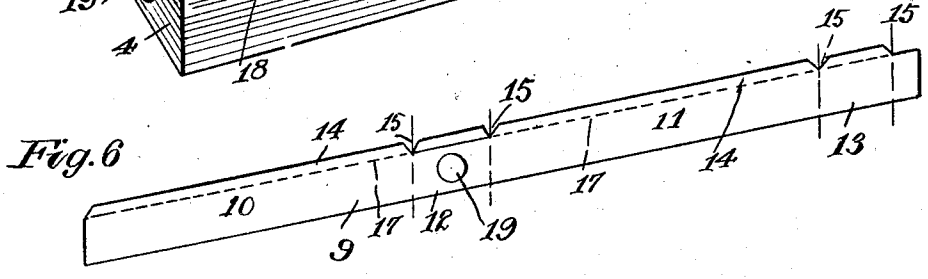


Fig. 6



Inventor
Henry Wilhelm

By his Attorney

Patented Jan. 29, 1929. 1,700,577

UNITED STATES PATENT OFFICE.

HENRY WILHELM, OF BROOKLYN, NEW YORK.

PUSH-BUTTON AND CARD-HOLDER BOX.

Application filed June 1, 1927. Serial No. 195,681.

This invention relates to a push button and card holder housing, particularly adapted for use in connection with dumb-waiters in the basements of apartments, an object of the invention being to provide an improved weather proof housing or box easily, quickly and inexpensively made from a single blank, of light weight and which can be easily attached and yet have a pleasing appearance, and which is so constructed that several of these boxes may be located side by side when necessary.

A further object of the invention is the provision of a push button and card holder box of skeleton form which may be readily attached without the necessity of providing projections or ears and which is not only light in weight but simple in its construction and inexpensive to manufacture, as well as durable in use.

In the drawings accompanying and forming part of this specification, Fig. 1 is a perspective view of this improved box with the push button and card holder plate attached thereto; Fig. 2 is an inside view thereof; Fig. 3 is a view of the front or face plate of the box provided with the openings for the insertion of the push buttons and the attachment of the card holders and push button contacts; Fig. 4 is a perspective view of the box with the face plate removed; Fig. 5 is a detail view illustrating the manner in which the corners of the box are made, and Fig. 6 is a blank from which the box is made.

Similar characters of reference indicate corresponding parts in the several views.

Before explaining in detail the present improvement and mode of operation thereof, I desire to have it understood that the invention is not limited to the details of construction and arrangement of parts which are illustrated in the accompanying drawings, since the invention is capable of other embodiments, and that the phraseology which I employ is for the purpose of description and not of limitation.

The box body in its preferred form comprises a pair of sides 2 and 3 and a pair of ends 4 and 5, the front edges of which members is provided with inturned flanges 6 and 7 thereby forming a support for the face plate 8. This box is made in the preferred form thereof from a single strip of metal 9 of thin metal such as light tin or brass or any other suitable thin metal. The blank strip 9, see Fig. 6 comprises a single straight strip of metal, the longer portions of which 10 and 11 form the two longer sides of the box while the short portions 12 and 13 form the top and bottom or ends of the box, while the parts thereof that form the inturned flange portions are indicated at 14. This blank strip is notched as at 15 whereby when the blank is bent at these notched portions a rectangular skeleton box is provided with the part 16 overlapping the other end of the blank to which it may be riveted or soldered. By bending the flange portions 14 along the dotted lines 17 the box is provided with an inturned flange all around its front edge, having beveled joints. The flange is provided with suitable threaded openings 18 for the reception of screws whereby the face plate 8 may be attached thereto.

One end as the top is provided with an opening 19 for the reception of the pipe or gooseneck projecting from the wall of the buiding and which carries the several wires leading from the building and the ends of which are to be attached to the several contacts 20.

The rear edges of the box are suitably braced by sheet metal angle braces 21 riveted or soldered to the sides 10 and 11 of the box and these braces 21 not only act to brace the box but form a means for receiving fastening devices for securing the box to the wall, which can be readily done when the face plate 8 is removed. When this face plate 8 is attached the fastening means are not only out of sight but are of course inaccessible, so that these braces not only strengthen the box but also provide means for readily attaching the box to the wall thus avoiding the necessity of providing ears or projections on the box. The face plate 8 is attached to the box by means of suitable screws and therefore is readily detachable and is provided with suitable card holders, push buttons and contacts and for this purpose the plate is provided with sets of openings 22 for the reception of clips of the card holders 23 and with a series of circular openings 24 for the reception of the push button 25. Suitable openings 26 diametrically opposite the push button openings 24 are provided for riveting or otherwise securing the insulating members 27 carrying the spring contacts 28. The insulating plates and their contact members or springs, card holders and push buttons, may be all assembled on its plate in readiness to be attached to the boxes before the same is at-

tached to the wall of the building. This plate 8 is usually made of brass while the skeleton box itself may be made of cheaper material if desired and consequently the skeleton box may be attached in readiness to have the plates attached thereto at a later date, if desired, although the plate and the boxes may be attached at the same time if preferred.

When it is necessary to have a greater number of push buttons and card holders than can be accommodated by a single skeleton box, several of these boxes may be located side by side, it then being merely necessary to punch a hole or cut out a piece in the side walls of the adjacent boxes for certain of the wires to pass from one box to the other. In this improved box, the card holders and contact devices can be assembled on the face plate at any time prior to the attachment of the plate to the box, so that in the erection of a building the skeleton box may be attached by the workman and the face plate subsequently attached by the electrician to the boxes. It will also be seen that this face plate is provided with a series of parallel sets of openings, the openings of each set being located in alignment across the plate so that the card holders and the rivets for securing the contact members are in spaced parallel relation throughout the length of the plate while the contact members on the rear side of the plate and the insulating blocks carried thereby are located diagonally or inclined. This arrangement permits a uniform front plate to be provided while still permitting a greater number of contact devices and card holders to be used.

From the foregoing it will be observed that I have provided a compact, simple, inexpensively produced box, which can be easily assembled and which box can be quickly attached to the wall of a building, and which may be of suitable size to carry any desired number of push buttons or card holders and which boxes are also so constructed that a series thereof may be located side by side as occasion requires and in which the card holders, push buttons and contact members can all be readily assembled upon the plate prior to the attachment thereof to the body of the box, and the structure of which box is such that it may be readily fastened at the rear thereof from the inside when the face plate is removed without the necessity of providing any ears or projections on the outside of the box.

It is to be understood that by describing in detail herein any particular form, structure or arrangement, it is not intended to limit the invention beyond the terms of the several claims or the requirements of the prior art.

Having thus explained the nature of my said invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made, or all of the modes of its use, I claim:

1. A skeleton push button and card-holder box comprising a single strip of metal bent to rectangular form to provide box end and side walls, said strip having one edge formed with a series of flanges, the edges of which substantially join to provide a substantially continuous panel plate supporting flange, a panel plate of sufficient width to overlie and conceal said strip flange, said panel plate being formed with a series of aligned push button openings and a series of pairs of rivet openings, each pair of rivet openings being disposed adjacent a push button opening, and a bracing strip extending between said walls at the opposite edge of the wall strip and having means for receiving wall attaching devices.

2. A skeleton push button and card-holder box comprising a single strip of metal bent to rectangular form to provide box end and side walls, said strip having one edge formed with a series of flanges, the edges of which substantially join to provide a substantially continuous panel plate supporting flange, a panel plate of sufficient width to overlie and conceal said strip flange, said panel plate being formed with a series of aligned push button openings, a series of pairs of openings for receiving card holder lugs disposed intermediate the push button openings, and a series of pairs of rivet openings, each pair of rivet openings being disposed adjacent a push button opening, and a bracing strip extending between said walls at the opposite edge of the wall strip and having means for receiving attaching devices.

Signed at #70 Frost St., Brooklyn, N. Y., this 25th day of May, 1927.

HENRY WILHELM.