April 7, 1942. T. L. PARKER 2,278,524

MEANS FOR AND METHOD OF PACKING ARTICLES

Filed July 15, 1939

Fig. 1

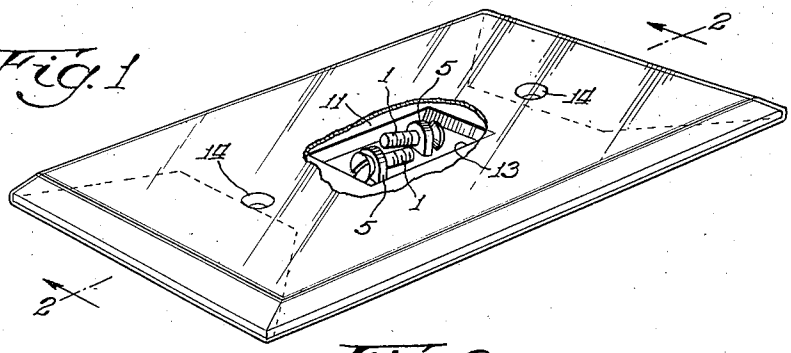


Fig. 2

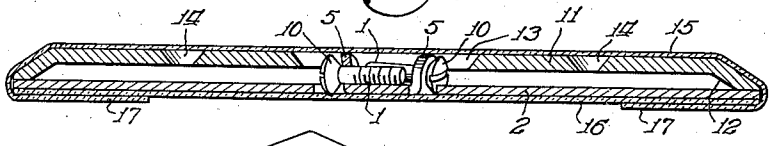


Fig. 3

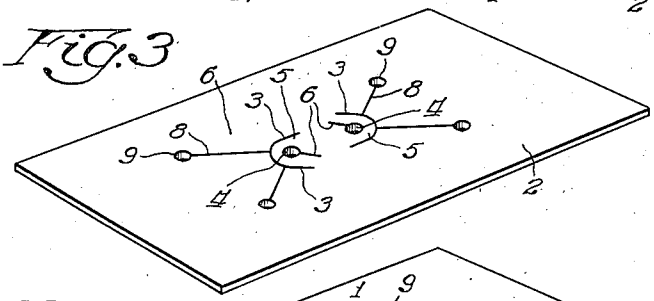


Fig. 6

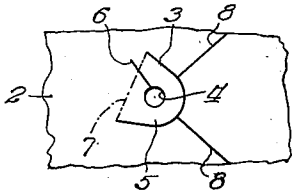


Fig. 4

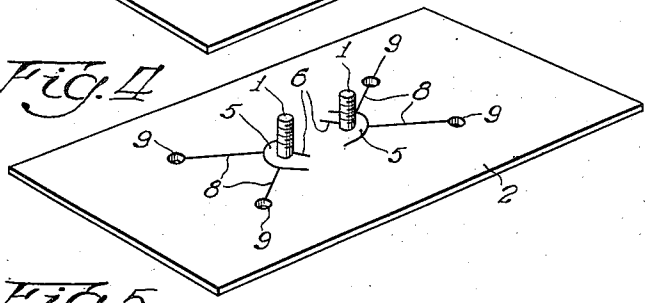
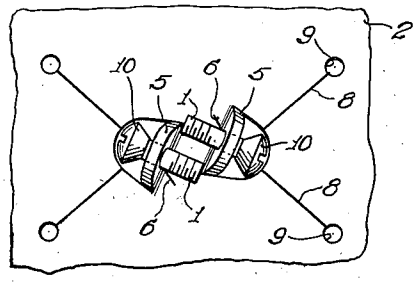


Fig. 5



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MEANS FOR AND METHOD OF PACKING ARTICLES

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Application July 15, 1939, Serial No. 284,603

4 Claims. (Cl. 206—80)

My invention relates to that class of devices designed for the packaging of fastening means or like articles, and particularly to the means and method of packing screws or similar fastening devices with the particular device or apparatus with which they are intended to be employed in the installation or assembly of parts.

Heretofore in packaging or packing switch plates and numerous other articles, it has been customary to place fastening means such as screws, small bolts or the like, in envelopes, the required number being placed in each envelope. This has required a supply of envelopes and the placing of the desired number of fasteners in each envelope, then assembling the envelope with the particular article on which the fastening means are to be applied. With the fastening devices in envelopes it has been impossible to satisfactorily wrap the articles and envelops on a wrapping machine, so that hand or manual wrapping has been required. It has also been found impossible to secure a satisfactory package wrapping when some of the modern wrapping materials are employed, such as that known by the trade name of "Cellophane" or similar materials.

My invention has among its objects the production of a new and novel method and means for assembling and packing screws or like fastening devices, which is simple, inexpensive, convenient, economical, efficient and satisfactory, and particularly the method of packing screws and switch plates or similar articles with which the screws are used in such a manner that the assembled devices to be packaged provide flat or uniform faces adapted to be wrapped by wrapping machines.

It has as a further object a construction of a carrier for the fastening devices which may be assembled with the switch plate or the like to provide a smooth faced substantially rectangular package adapted to permit the wrapping and sealing of the assembled articles in a covering or cover sheet of material known in the trade as "Cellophane" or like wapping material.

It also has as an object the production of a novel screw carrier or the like in which the screws may be mounted and automatically placed in the carrier in a position ready for packaging with the cooperating article with which the screws are to be used.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosure herein given.

To this end, my invention consists in the novel method and in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawing, wherein like reference characters indicate like or corresponding parts:

Fig. 1 is a perspective view of a packaged switch plate and fastening means enclosed in a wrapping of material such as "Cellophane" or the like;

Fig. 2 is a longitudinal sectional view through the package;

Fig. 3 is a perspective view of a carrier sheet illustrating the formation of tabs for retaining the fastening means;

Fig. 4 is a similar view showing the fastening means, such as screws, positioned at one step in the assembly;

Fig. 5 is a view of a portion of the carrier showing the tabs turned up and the screws disposed as shown in Figs. 1 and 2 preparatory to assembling with a switch plate and for wrapping; and

Fig. 6 is a fragmentary view illustrating a slitting of the carrier sheet to provide the tabs.

Referring to the drawing, it may be mentioned that while I have shown the invention as applied to a switch plate, the same has many applications, and hence the particular style of plate shown is merely illustrative of the method of packing and the resulting package. Switch plates, outlet plates and many other devices may be similarly packed.

Referring to the drawing, 1—1 are screws which are to be employed for securing a switch plate 11 in place. These screws are mounted on a card or sheet 2, preferably of cardboard or like material, which is slit or cut as indicated at 3—3 to provide a tab 5, the particular card shown being cut to provide two tabs and to adapt it to carry two screws. There is also provided in each tab 5 an opening or hole 4 of a size to more or less closely fit the shank of the screw 1 and a slit 6 which may be provided to facilitate the removal of the screws. There are also provided the additional slits 8 each connected with the slit 3 which although not essential, are desirable to facilitate the raising or turning of the tabs 5 so as to turn the screws 1 over on or parallel to the face of the card 2. Openings or holes 9 at the ends of the slits 8 tend to normally facilitate the even flexing of the material between the slits 8 at each side which flexing will occur if the head of the screw contacts therewith.

The card 2 is initially formed as shown in Fig. 3

and thereafter passed through a suitable machine apparatus, not shown, which inserts the screws 1 as illustrated in Fig. 4. After insertion the screws 1 may be turned down, thereby raising the tabs 5, as illustrated in Figs. 1, 2, and 5, so that the screws lie substantially flush with the face of the card and with the heads 10 of the screws disposed at the apertures in the cards formed by the pushing up of the tabs. It will be observed that the tabs 5 are shown as inclined to the axes of the opening and are substantially parallel. This echelon arrangement permits the tabs 5 to be closely spaced and the screws 1 carried by the tabs to overlap. In case more than one pair of screws 1 is to be used, as is frequently the case, the echelon arrangement is desirable since it permits a larger number of screws to be arranged in pairs in a limited space.

The cards with the desired number of screws disposed as shown or described are then assembled with the article on which they are to be used, as for example, a switch plate 11 which has the usual cut-out portion or opening 13. When the plate 11 is ready to be installed or used, the screws are removed from the card and inserted in the holes 14 for securing the plate to a cooperating part. When assembled as shown in Fig. 2 with the tabs 5 and screws 1 at the back of the plate 11, they will lie in the opening 13 if the card 2 and plate are in complete contact, or if the plate is recessed by providing it with flanges 12 as shown in Fig. 2, the screws may lie partially in the recess and partially in the plate opening 13 if the space between the plate and the card is not sufficient to contain them. It will be observed that the heads 10 of the screws are positioned partially within the card apertures adjacent the tabs, it being understood that the distance between the outside or opposite faces of the card 2 and plate 11 is sufficient to permit the screws to be positioned completely within such faces so that there are no portions of the tabs or screws projecting from the opening 13 or the card apertures. The device may then be passed through a wrapping machine and a cover applied as indicated at 15 and 16, the same enclosing the sides and edges with either side portions or, as illustrated, end portions 17 turned over and secured to the adjacent top or bottom sheet—as shown, bottom sheet 16. Obviously, when packed as shown some pressure may be put on the plate or rather on the ends 17 to afford good adhesion.

As was before mentioned, while the device is primarily intended for packing screws, bolts or other fastening devices in connection with cooperating devices, such as plate 11 or the like, it may be employed as a substitute for envelopes or other containers for the display or distribution of various articles, such as screws, bolts, nails and the like. While the card shown is adapted to carry two screws, of course it is obvious that it may be constructed to carry one or more than two, this being immaterial. Some plates might require a number of screws, as for example, a gang switch plate. In this instance the card would be varied accordingly to provide the carrying of the additional fastening means.

In use the device is not only a time and labor saver, but enables a neater package to be provided, avoids the loss of envelopes since the plate and screws are carried together, and avoids the sending out of devices with less or more fastening devices than are required.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence, I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described, or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. A package of the kind described and in combination consisting of a plate provided with an opening and having a flanged edge on one face, a sheet of cardboard or the like disposed on said edge, said sheet having a severed portion providing a tab in registry with and extending towards said opening, a screw extending through the tab, the latter and said screw being positioned entirely between the opposite or outside faces of the plate and sheet, and a wrapper enclosing the plate, the sheet and the screw for maintaining them in a unitary package.

2. A package of the kind described and in combination consisting of a plate provided with an opening, a sheet of cardboard or the like disposed on and corresponding in lateral and longitudinal dimensions with one face of the plate, said sheet having a laterally extending partially severed portion providing an integral tab positioned in said opening and an aperture corresponding to said partially severed portion positioned to register with said opening, a screw extending through the tab and so disposed that they are positioned entirely within the opposite or outside faces of said sheet and plate, and a wrapper enclosing the plate, the sheet and the screw for maintaining them in a unitary package.

3. A package of the kind described and in combination consisting of a plate provided with a window opening, a sheet of cardboard or the like having lateral and longitudinal dimensions similar to and disposed on one face of the plate, said sheet having a plurality of laterally extending partially severed portions each providing an integral tab positioned in said opening, said sheet having a plurality of apertures each corresponding to a tab and each positioned to register with said opening, a plurality of screws each having its body portion extending through a tap and disposed entirely within said opening and with its head projecting into the adjacent aperture, and a wrapper enclosing the plate, the sheet and the screws for maintaining them in a flat unitary package.

4. A package of the kind described and in combination consisting of a plate provided with a rectangular opening, a sheet of cardboard or the like disposed on one face of the plate, said sheet having a plurality of laterally extending partially severed portions providing corresponding flat parallel tabs each positioned in said opening, in echelon relative to the other and inclined to the axis of said opening, said sheet having a plurality of apertures each adjacent to and corresponding in size to said tabs, a plurality of screws each extending through a tab and disposed in said opening with its body portion extending in overlapping parallel relation to the body portion of a screw mounted in an adjacent tab and having its head positioned entirely within said opening and adjacent aperture, and a wrapper enclosing the plate, the sheet and the screws for maintaining them in a unitary package.

THOMAS L. PARKER.