FINGER PULLS FOR SLIDING GLASS AND OTHER PANELS

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ABSTRACT OF THE DISCLOSURE

These finger pulls are applied to the panels with pressure sensitive adhesive having sufficient holding power to eliminate likelihood of displacement from a set position. Sufficient depth of depression for a good finger hold is assured regardless of the necessarily small height of the button or pad employed. If the area of contact with the panel must be increased to assure permanent fastening, that is easily accomplished with radial extensions or by elongating the pad. Designing buttons and/or pads with extensions for increased hold on the panel may incidentally improve the overall appearance of these finger pulls, and hence one style of plain buttons or pads may be used on the glass panels or showcases, while the plain ones or the more ornamental designs of buttons or pads may both be used on sliding glass or wooden panels in homes.

This invention relates to a new and improved construction for finger pulls for sliding glass and other panels, as, for example, glass panels used in display cases, and sliding glass or wooden panels in homes.

The provision of finger pull depressions in glass panels has long presented problems that, so far as I am aware, have not been satisfactorily solved heretofore. Such depressions have been ground into the end portions of the glass panels, but that is an expensive and risky method because of the danger of breakage or cracking. The only alternative heretofore has been to fasten a pull knob or the like to the end portion of the glass panel by first drilling one or more holes in the panel to receive screws for fastening the knob, but, there again, the risk of breakage or cracking is too great, and that construction is further more expensive and time consuming. It is, therefore, the principal object of my invention to provide the finger pull depression in a separate molded plastic button or pad having a broad, flat inner surface that can be easily cemented to the panel with a pressure sensitive adhesive, thereby giving a cheaper and much better finger pull without any attendant risk of breakage or cracking. Similar finger pulls are also applicable to wooden sliding panels to almost equal advantage, inasmuch as that avoids the necessity for routing out a recess to receive the conventional metallic finger pull.

The invention is illustrated in the accompanying drawing, in which:

FIG. 1 is a perspective view and FIG. 2 a vertical sectional view of a pair of sliding glass panels having applied thereto, by pressure sensitive adhesive, plastic finger pulls made in accordance with my invention;

FIG. 3 is a perspective view of one of the finger pull pads on a larger scale illustrating how the protective fabric covering for the pressure sensitive adhesive can be peeled off preliminary to the application of the finger pull to the panel;

FIG. 4 is an enlarged sectional detail on the line 4—4 of FIG. 3;

FIG. 5 is a perspective view illustrating the method of application of the finger pull pads shown in FIGS. 1—4;

FIGS. 6 and 7 are perspective views showing finger pull pads or buttons of circular form applied in the same way with pressure sensitive adhesive, FIG. 7 illustrating radial projections giving increased area of pressure adhesive in contact with the panels, which, taken together with the added radius, assures stronger holding power, while the design adds greatly to the appearance of the finger pull, and

FIG. 8 is similar to FIG. 6 but shows the finger pull applied to a wooden sliding panel.

Similar reference numerals are applied to corresponding parts throughout the views.

Referring to the drawing, the reference numeral 9 in FIGS. 1 to 4 designates finger pads of molded plastic material each having a coating of pressure sensitive adhesive 10 applied to the flat back face 11 thereof, which, up to the time the finger pull pad is to be used, is covered by a strip of flexible protective cloth material 12 that is adapted to be peeled or stripped off, as illustrated in FIG. 3. A finger pull depression 13 is provided in the flat face of each pad, and the outer edges of the pad are bevelled as shown at 14 for improved appearance and also to deflect anything that might come into contact with the edge of the pad accidentally in the sliding of a glass panel like those shown at 15 to 18 to which the finger pull pads are applied, usually near one end, as seen in FIG. 1. The panels, as seen in FIGS. 1 and 2, slide in abutting metallic channel tracks 17 and 18 with their bottom edges resting with line contact on top of rounded plastic strips 19 in said channels for reduced friction as well as smoother and quieter operation. The small space 20 between the panels is usually in the order of %215 or even less and hence these finger pull pads to insure adequate operating clearance must be not much over %215 thick, with the finger pull depression 13 therein of a depth equivalent to about two-thirds the thickness of the pad, as illustrated in FIG. 4, in order to afford enough of a shoulder for easy pulling of the panel without danger of breaking finger nails.

In operation, these finger pull pads or buttons are adapted to be applied by finger pressure, as shown in FIG. 5, after the protective backing strip 12 has been removed to expose the pressure sensitive adhesive 10 that eliminates the grinding operation otherwise required in the production of finger pull depressions, and eliminates chipped edges and cracking of the glass, and eliminates the alternative of fastening pull knobs by first drilling holes in the panels to receive screws or bolts, either of which method frequently meant the necessity of replacement of panels that were cracked or broken in a grinding or drilling operation. Any suitable plastic like styrene or ABS plastic may be used and, of course, these are available in various colors, which is an added feature of attraction.

While I have shown generally rectangular pads 9, it is obvious that the pads or buttons may be molded in any desired shape as, for example, the circular button 9a in FIG. 6 or the circular button 9b shown in FIG. 7 adding radial or other extensions 20 with pressure sensitive adhesive on the backs thereof to give increased area of adhesion, where that is considered desirable, or where a special ornamental design effect is desired, there being then very little, if any, danger of these finger pull pads or buttons shifting in ordinary usage.

The invention is not limited to application to glass panels, because, as shown in FIG. 8, these finger pull pads or buttons may also be applied to sliding wooden panels like that shown at 15a, used generally in clothes closets and sometimes also as doors. It is believed the foregoing description conveys a good understanding of the objects and advantages of my invention. The appended claims have been drawn to cover all legitimate modifications and adaptations.
I claim:

1. A finger pull for a slidable vertical panel reciprocably mounted in guides, said pull comprising a suitably shaped body of small thickness in relation to length and width and having a flat attaching face on one side with a coating of pressure sensitive adhesive thereon enabling the same to be stuck firmly onto a panel to serve as the pull therefor, there being a shallow finger depression provided in the other face.

2. A finger pull as set forth in claim 1 including a flexible protective covering for said adhesive which is readily removable from said adhesive by peeling the same off.

3. A finger pull as set forth in claim 1 including a substantially central body portion of a certain size wherein the finger depression is provided, said body having outward extensions of suitable form having flat attaching surfaces in coplanar relation with the other attaching face and coated also with pressure sensitive adhesive.

4. A finger pull as set forth in claim 1 including a substantially central body portion of a certain size wherein the finger depression is provided, said body having outward extensions of suitable form having flat attaching surfaces in coplanar relation with the other attaching face and coated also with pressure sensitive adhesive, each extension having a flexible protective covering for said adhesive which is readily removable from said adhesive by peeling the same off.

5. Finger pulls adapted for application to the outer faces of a pair of closely spaced slidable vertical panels reciprocably mounted in parallel guides, said pulls each comprising a suitably shaped body of small thickness in relation to length and width, and also in relation to the space between said panels, whereby to assure adequate operating clearance, each pull body having a flat attaching face on one side with a coating of pressure sensitive adhesive thereon enabling the same to be stuck firmly onto a panel to serve as the pull therefor, there being a shallow finger depression provided in the other face.

6. Finger pulls as set forth in claim 5 including a flexible protective covering for said adhesive which is readily removable from said adhesive by peeling the same off.

7. Finger pulls as set forth in claim 5 including a substantially central body portion of a certain size wherein the finger depression is provided, said body having outward extensions of suitable form having flat attaching surfaces in coplanar relation with the other attaching face and coated also with pressure sensitive adhesive.

8. Finger pulls as set forth in claim 5 including a substantially central body portion of a certain size wherein the finger depression is provided, said body having outward extensions of suitable form having flat attaching surfaces in coplanar relation with the other attaching face and coated also with pressure sensitive adhesive, each extension having a flexible protective covering for said adhesive which is readily removable from said adhesive by peeling the same off.

9. A finger pull as set forth in claim 1 wherein the body of said finger pull is of molded plastic material.

10. Finger pulls as set forth in claim 5 wherein the body of said finger pulls is of molded plastic material.

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