Jan. 18, 1966 J. T. PURDY 3,229,394

CARD HOLDER MEANS

Original Filed June 14, 1961

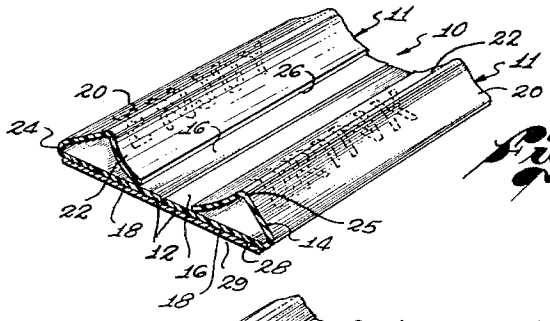


Fig. 1

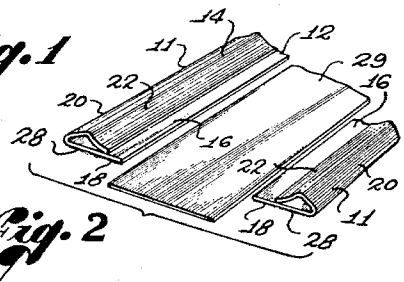


Fig. 2

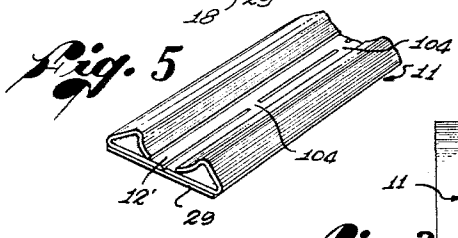


Fig. 5

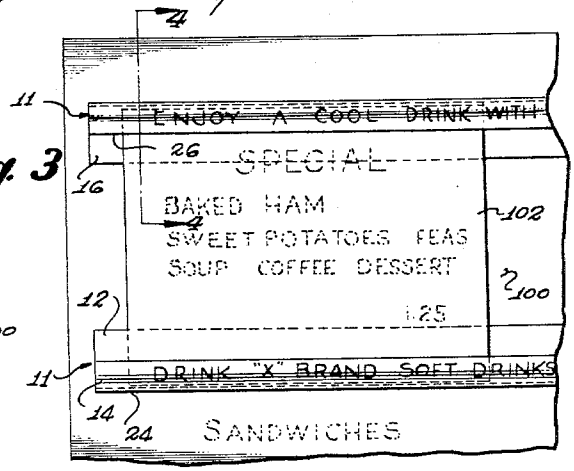


Fig. 3

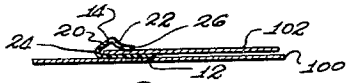


Fig. 4

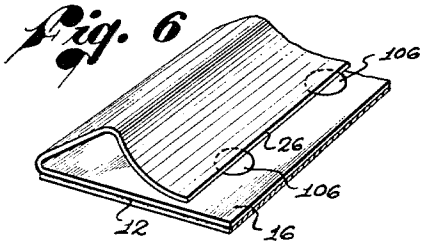


Fig. 6

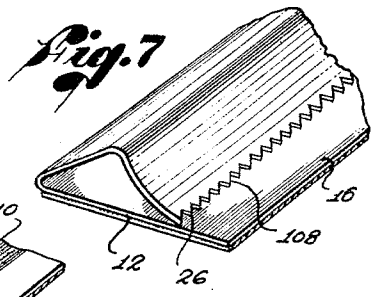


Fig. 7

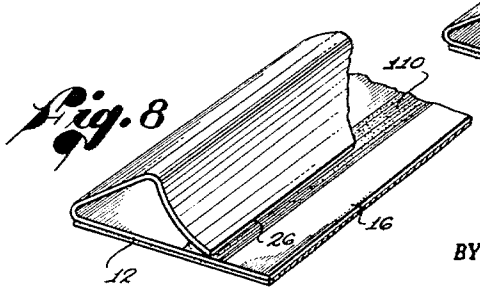


Fig. 8

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CARD HOLDER MEANS

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Original application June 14, 1961, Ser. No. 117,115, now Patent No. 3,183,136, dated May 11, 1965. Divided and this application Sept. 15, 1964, Ser. No. 396,539

2 Claims. (Cl. 40—11)

This invention relates generally to card holder means of the type which are adapted to be attached to a mounting surface for supporting a card, photograph, or the like, therein.

This application is a division of my prior copending application, entitled Card Holder Means and Method of Forming the Same, Serial No. 117,115, filed June 14, 1961, now U.S. Patent No. 3,183,136, issued May 11, 1965.

It is desirable in the case of holder means of this general type that they be provided in matched or cooperating pairs. This is true for the reason that normally they are most often used in that manner, one opposite the other to support a card or the like between them.

Further, it is desirable that the individual holder means or strips be provided with attaching means, such as pressure-sensitive adhesive, in order that they readily may be attached to an appropriate mounting surface.

Another desirable feature of card holder means of the present type is that printing, such as an advertisement, identification symbols, or designs be applied to the exposed marginal holding portions of the individual holder means.

Various attempts have been made in the past to provide card holder means having all of the aforementioned features. These attempts have been largely unsuccessful for several reasons. To begin with, no satisfactory method was developed prior to the present invention for economically supplying the holder means in matched pairs. It will be appreciated that supplying them in this manner becomes especially important when printing is applied to the exposed marginal holding portions. This is true as continuity is often required between the symbols on the individual holder means of a given matched pair.

Another problem with previous attempts to provide a suitable holder means involved the application of pressure-sensitive adhesive to a surface of the holder means and the protection of that adhesive once it was applied.

Problems were also encountered in the past in connection with applying printing to the exposed marginal holding portion of the holder means. Attempts were made to apply the printing both before and after formation of the holder means and both were unsuccessful. When the printing was applied prior to formation, it was so marred or scratched during the formation process that the end result was unsatisfactory. On the other hand, when the printing was applied after formation, the process was so costly as not to be economically feasible.

Still another problem encountered in the prior art was that cracks developed at the sharp bends in the holder means.

With the foregoing in mind, it is a primary object of the present invention to provide a holder means of the type described which obviates the above-discussed problems of the prior art.

Another object of the invention is to provide holder means in matched or cooperating pairs, the individual holder means or strips of a given pair being readily separable from one another for use at any desired spacing or orientation relative to one another.

Still another object is to provide holder means which has a positive gripping action, yet which has no tendency to break or crack either during or after the forming operations.

A further object is to provide holder means having printing on its exposed marginal holding portion, the printing being clearly visible yet effectively protected against scatching and marring during use of the holder means.

A still further object is to provide matched pairs of individual holder means formed from an elongated flat strip of thermoplastic material.

These and other objects and advantages of the invention will be better understood by referring to the following detailed description taken in conjunction with the accompanying drawings in which:

FIGURE 1 is a perspective view of the holder means of the invention;

FIGURE 2 is an exploded perspective view showing the individual holder means or strips of a matched or cooperating pair separated for use;

FIGURE 3 is a front elevational view of one application of the holder means of the invention;

FIGURE 4 is a partial section taken on the line 4—4 of FIGURE 3; and

FIGURES 5 through 8 are perspective views of modified forms of the holder means.

Referring to FIGURE 1, numeral **10** indicates generally the holder means of the invention. Preferably, it is constructed primarily of thermoplastic material which is transparent, resilient and relatively stiff. Thermoplastics readily lend themselves to forming or shaping by the method of the invention. One of their characteristics is that they may be softened by heat and then shaped or formed; and, when cooled, they retain their new shape. Moreover, such heating and forming in no way affects the desirable physical properties of the material.

One thermoplastic which is particularly well suited for the present use is cellulose triacetate, which softens at approximately 300 to 400° F.

The holder means of the invention, illustrated in FIGURE 1, includes a matched or cooperating pair of individual holder means or strips **11**. Each strip **11** comprises a planar mounting portion **12** and a marginal holding portion **14**. The mounting portions **12** of the cooperating strips **11** are arranged in coplanar relation with one pair of edges contiguous. For convenience of reference, the mounting portions **12** will be understood to have upper and lower surfaces **16** and **18**, respectively.

The holding portion **14** of each individual holder means or strip **11** includes, in series, a first flange or inner section **20** and a second flange or outer section **22**. The terms inner and outer are used with reference to the flat plastic strip material prior to formation of the holding portion **14**, and not with reference to the final product.

The first flange **20** is bent upwardly and inwardly from

the mounting portion **12** at an acute angle thereto. In order to prevent cracking or splitting at the bend **24**, the radius of curvature is preferably at least several times greater than the thickness of the plastic material.

The second flange **22** of the holding portion **14** is bent downwardly and inwardly at approximately a right angle bend **25** from the first flange **20**. The terminal edge or lip **26** of the second flange **22** normally rests contiguous the upper surface **16** of the mounting portion **12**. In order that the desired gripping action will be provided, the edge **26** is preferably maintained in pressural engagement with the surface **16**. Such pressural engagement is maintained by the spring action at the bend **24**. It has been found that even more positive gripping may be effected by making the second flange **22** just slightly longer than the first flange **20**, and, in addition, slightly concave toward the upper surface **16** of the mounting portion **12**.

It is desirable, as discussed above, that means be provided on the holder means adapted to adhere to a suitable mounting surface. To this end, adhesive **28** is applied to the lower surface **18** of the mounting portion **12** of each strip. In order to protect the adhesive prior to use of the holder means, a single piece of backing **29** (FIGURE 2) is applied to both strips. The backing **29** not only serves to protect the adhesive, but also to maintain the cooperating strips **11** in their relative positions shown in FIGURE 1 and described above.

It is often desirable that printing be applied to the exposed, marginal holding portions **14** of the strips. As suggested previously, such printing may be in the form of an advertisement, as illustrated in FIGURE 3. In the case of the holder means of the invention, the printing is applied in reverse to the inside surface of the holding portion **14**, i.e., the surface of the holding portion adjacent the upper surface of the mounting portion **12**. In such a position, the printing is clearly visible through the transparent plastic and protected against scratching or marring during use of the holder means.

In order that the holder means may be used to mount any size card or the like, it is normally provided in separable strips, as illustrated in FIGURE 1. In such condition, the central portion (of the material forming the holder means) is slit centrally along its length. Rather than slitting clear through the plastic material, it may be advantageous in certain instances to merely produce a zone of weakness in the central portion of the material. This may be achieved by slitting just partially through the plastic at some stage of the manufacturing process. When it is desired to separate the strips, they are simply flexed to complete the slit.

The holder means are put to use by separating the individual strips **11** from the backing **29**, as illustrated in FIGURE 2. A feature of the invention is that the individual holder means or strips may be quickly and easily separated from the backing **29** by applying force to one of them to peel the backing off the other. It will be appreciated that this is a considerable advantage over prior holder means where backing is provided on a single piece and a tab or corner must be turned up with the fingernail in order to remove the backing.

Once the backing **29** is removed, the individual strips are pressed onto a mounting surface, such as the menu **100**, illustrated in FIGURE 3, at the desired spacing from one another. A card **102**, or the like, is then inserted between the terminal edge **26** of the holding portion **14** and the upper surface **16** of the mounting portion **12** of each strip **11**. By virtue of the spring action at the bend **24**, the card **102** is resiliently gripped in its mounted position in the manner illustrated in FIGURE 4. Although this one application has been chosen by way of illustration, it will be apparent that there are many ways in which the card holder means of the invention can be used to advantage.

In some applications it may be desirable to use the holder means in their unseparated condition, that is in the positions the individual holder means or strips **11** occupy in FIGURES 1 and 5. In order that this spacing may be maintained even when the backing **29** is removed, the central portion of the material forming the holder means is slit only intermittently, rather than continuously, during the forming process. When the central portion is slit in this manner, tabs **104** extend between the mounting portions of the respective strips **11** in the manner illustrated in FIGURE 5. An advantageous feature of this embodiment of the holder means is that if it should be desired to separate the idividual strips **11** to a wider spacing, they are simply bent relative to one another to break the tabs **104**, whereupon they are free to be arranged at any desired spacing or orientation to one another.

In a situation where a relatively thin and flexible card is to be supported by the holder means, or where that card is to be inserted and removed frequently it is desirable to provide means for facilitating the insertion of the card. As is evident, the terminal edge **26** of each holding portion **14** necessarily pressurally engages the upper surface **16** of the mounting portion **12** if the required gripping action is provided. Because of the pressural engagement with the flat surface **16** of the mounting portion **12**, it is somewhat difficult to get a relatively thin and flexible card started between the edge **26** and the opposed surface **16**. The modified forms of the invention illustrated in FIGURES 6 and 7, are intended to facilitate this operation.

The embodiment of the holder means illustrated in FIGURE 6 incorporates a plurality of upwardly projecting dimples **106** formed at longitudinally spaced positions on the mounting portion **12**. These dimples **106** are in registry with the edge **26** of the holder portion **14** and are adapted to space that edge away from the surface **16**. A card to be supported in this case is entered between the gripping edge **26** and surface **16** by inserting its corner between them at a location intermediate adjacent dimples **106**. After this initial insertion, the card can be passed between the gripping edge **26** and the upper surfaces of the dimples **106**.

Another embodiment of the holder means for accomplishing the same result is illustrated in FIGURE 7. In this latter case, the terminal edge **26** is serrated as at **108**. The card is inserted into the space provided by one of the cutaway sections of the serrations **108** so as to start it between the cooperating edge and surface.

In some instances even more positive gripping than is afforded by the preferred embodiment of the holder means is desired. This may be achieved by roughening the surface **16**, as at **110**, in FIGURE 8, in the region opposite the terminal edge **26** of the holding portion **14**. Such roughening serves to increase the coefficient of friction of the surface **16** and, hence, to reduce the tendency of a card or other object being gripped from inadvertently slipping from its held position. Roughening of the surface **16** may be accomplished prior to forming the holder means.

Although certain embodiments of the invention are described in detail, it will be understood that this is by way of example and various changes in the construction and arrangement of the holder means may be made without departing from the spirit and scope of the invention.

I claim:

1. Card holder means adapted to be affixed to a mounting surface, comprising: a cooperating pair of thin and separable strips formed of resilient, plastic material positioned adjacent one another, each of said strips having a mounting portion with upper and lower surfaces, the mounting portions of the respective strips being arranged in coplanar relation with one pair of edges contiguous, and a marginal holding portion, said holding portion including, in series, a first flange bent upwardly from said mounting portion at an acute angle to said upper surface,

the radius of curvature at the bend being at least several times greater than the thickness of said material, and a second flange bent back toward said upper surface, the terminal edge of said second flange normally pressurally engaging said upper surface and being adapted to be sprung away from said upper surface to receive a card therebetween; pressure-sensitive adhesive on the lower surface of said mounting portion, said adhesive being adapted to adhere to the mounting surface; and a single piece of protective backing on the lower surface of both of said mounting portions removably attached to said adhesive so as to maintain said strips positioned as aforesaid.

2. Card holder means, as in claim 1, wherein said second flange is longer than said first flange and is slightly concave toward said upper surface.

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