July 11, 1972 W. M. SWARTZ 3,676,248

METHOD FOR APPLYING LETTERS TO PLAQUES AND THE LIKE

Filed Sept. 11, 1969

FIG. 1

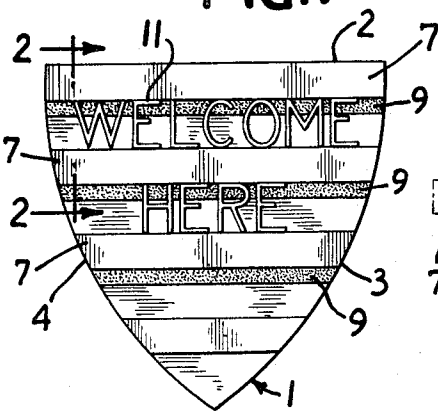


FIG. 2

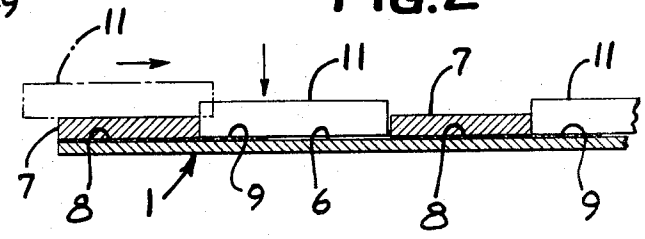


FIG. 3

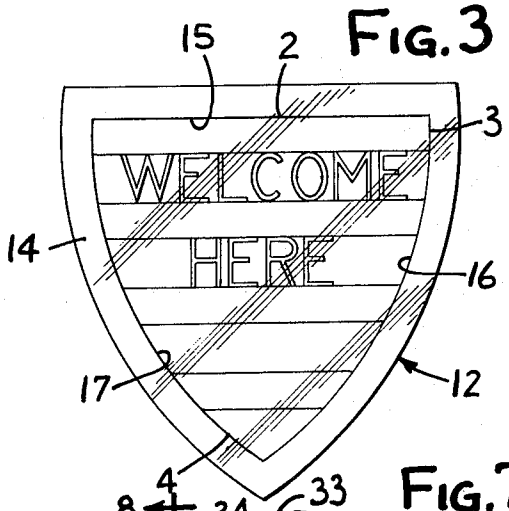


FIG. 4

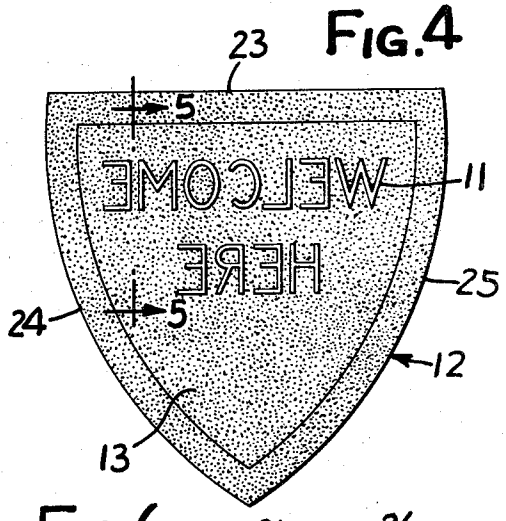


FIG. 7

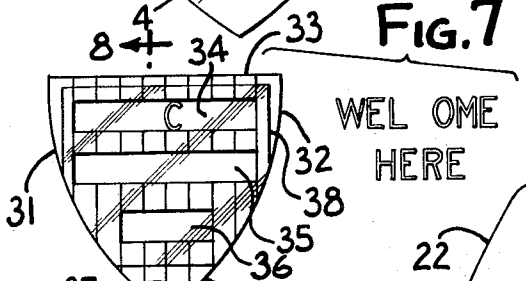


FIG. 6

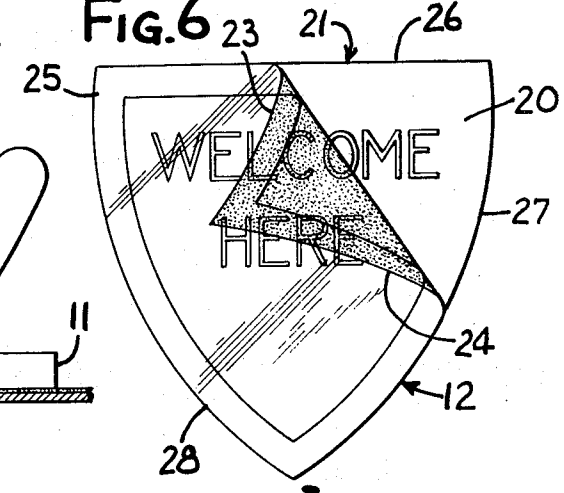


FIG. 5

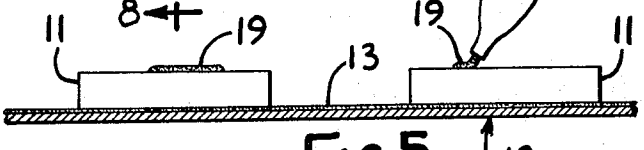
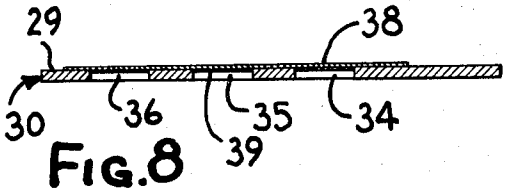


FIG. 8



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METHOD FOR APPLYING LETTERS TO PLAQUES AND THE LIKE

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U.S. Cl. 156—235 5 Claims

ABSTRACT OF THE DISCLOSURE

Method for applying indicia to a plaque or other surface comprises applying a transfer sheet containing a pressure-sensitive adhesive to the indicia. While the indicia is on the sheet, the back of the indicia is coated with adhesive, and then the transfer sheet is applied over the plaque in predetermined registration therewith to position the indicia properly onto the plaque. After the adhesive on the indicia has dried, the sheet is stripped from the indicia, leaving the same bonded to the plaque.

This invention relates to a method for applying letters and like indicia to wall plaques and other surfaces.

It is an object of this invention to provide a method of the type stated that permits accurate alignment on a wall plaque or other surface of individual letters and similar indicia, even though the indicia may consist of small elements that are otherwise difficult to position properly on such surface.

It is a further object of this invention to provide a method of the type stated in which the indicia may be secured to relatively heavily textured surfaces and yet give the appearance of being integrally formed therewith.

It is another object of this invention to provide a method of the type stated that permits a preview of how the indicia will appear on the surface before the indicia is applied to such surface. This enables the user to make any desired corrections in the indicia. This is important where the indicia and surface are of plastic and a solvent-type adhesive is used to bond the indicia to the surface. In such case, movement or rearrangement of the letters of the indicia after application to the surface should be avoided as this tends to spoil the appearance of the surface due to the dissolving effect thereon of the adhesive.

Another object of this invention is to provide a method of the type stated that eliminates the use of a pressure-sensitive adhesive for attaching the indicia to the plaque or other surface. Such pressure-sensitive adhesive is objectionable and does not adequately bond the adhesive to such surface where the surface is heavily textured because there will be only small regions of contact of the indicia and the surface. Such pressure-sensitive adhesive is also objectionable where the surface is overpainted with varnish or the like, since the surface then tends to have a weak bond with the indicia. Moreover, coating the backs of small letters and numerals with pressure-sensitive adhesive is often difficult and expensive.

A still further object of this invention is to provide transfer sheet comprising a cardboard member with openings therein and guidelines thereon to facilitate positioning the letters thereon in neatly appearing lines for subsequent transfer to the plaque, the openings having pressure-sensitive tape thereat for temporary adherence of the letters during transfer to the plaque.

The attainment of the above and further objects of this invention will be apparent from the following description taken in conjunction with the accompanying drawing forming a part thereof.

In the drawing:

FIG. 1 is a top plan view of a template that forms part of the present invention and shown with indicia adhered thereto;

FIG. 2 is a fragmentary sectional view, on an enlarged scale, taken along line 2—2 of FIG. 1 and showing the manner of positioning individual letters onto the template;

FIG. 3 is a top plan view of the template shown overlaid by a transfer sheet that forms part of the present invention;

FIG. 4 is a bottom plan view of the indicia shown adhered to the transfer sheet;

FIG. 5 is a fragmentary sectional view, on an enlarged scale, taken along line 5—5 of FIG. 4 and showing the application of adhesive to the backs of the letters of the indicia;

FIG. 6 is a top plan view of the indicia applied to a wall plaque and showing the transfer sheet being removed from the indicia;

FIG. 7 is a top plan view of a modified form of transfer sheet of the present invention; and

FIG. 8 is a sectional view taken along line 8—8 of FIG. 7.

Referring now in more detail to the drawing, 1 designates a template of cardboard or the like and having margins 2, 3, 4 of a predetermined configuration. The template 1 has an upper surface 6, and projecting upwardly from the surface 6 are spaced parallel rails 7. The rails 7 may be integrally formed with the template 1 or they may be permanently secured thereto by adhesive 8. Adjacent to each rail 7 is a band of pressure-sensitive adhesive 9 of a width that is a minor fractional part of the spacing between two adjacent rails 7, 7, and for purposes presently more fully appearing.

The indicia applied to the template 1 may be of any suitable kind, for instance the individual plastic letters 11 shown. The letters to be used may be selected and cut from a font of such letters that is molded in a single mass, or the letters may be individually supplied in a set and selected therefrom. In any event, the length of each letter 11 is slightly less than the distance between adjacent rails 7, as shown in FIG. 2. In applying the letters 11 to the template 1, the letters are first placed along the appropriate rails 7 to lay out the personalized indicia. Then each letter 11 is slid from the rail 7 and snapped downwardly onto the adjacent pressure-sensitive adhesive band 8, the space between adjacent rails 7 serving as a guide for aligning the respective letters. The pressure-sensitive adhesive holds the letters 11 in fixed position, but nevertheless the letters can be readjusted by slight movement or for major adjustment they may be lifted up entirely from the pressure-sensitive adhesive band 8 and then repositioned thereon. Because the bands of adhesive 8 are relatively narrow as compared to the length of the letters 11, the latter are temporarily held onto the template only over small portions of their areas.

Provided for cooperation with the template 1 is a transfer sheet 12 of transparent plastic having a pressure-sensitive adhesive coating 13 over one surface thereof. The transfer sheet 12 is positioned over the template 1 in proper registration therewith as shown in FIG. 3. In so positioning the transfer sheet 12, the pressure-sensitive adhesive 13 is presented face down and the sheet 12 is pressed face-wise against the exposed flat surfaces of the letters 11. Provision is made for registering the transfer sheet 12 with the template 1 to insure that the letters 11 will be adhered to the transfer sheet at the proper positions. This may be done in various ways. In the form of the invention shown, the transfer sheet may have an opaque or contrasting border portion 14, the interior edges 15, 16, 17 of which form an outline congruent with the template margins 2, 3, 4.

Since the transfer sheet 12 forms a stronger pressure-sensitive bond with the letters 11 than do the letters with

the pressure-sensitive adhesive bands **8**, the transfer sheet **12** may be lifted up to pick up the letters **11** without disturbing their alignment. The transfer sheet with the letters **11** adhered to the adhesive **13** thereon is inverted, as shown in FIG. 4, and placed on any suitable flat surface. An adhesive **19** is applied to the back of each letter for permanently bonding the letters to the surface **20** of the plaque **21**. The adhesive may be supplied from a suitable capsule **22** that is incldued in a kit containing the template **1**, a font of the letters **11**, the transfer sheet **12** and the plaque **21** itself. If the plaque **21** and the letters **11** are of the same plastic, the adhesive **19** may be of the solvent type, and only a drop or two of adhesive **19** need ordinarily be applied to each letter.

After applying the adhesive **19**, the transfer sheet **12** is again inverted and is properly registered with the plaque **21** with the letters **11** against the plaque, as shown in FIG. 6. Each letter **11** should be gently pressed into place, which serves to spread adhesive **19** substantially over the entire back surface of each letter **11**. When the adhesive **19** has dried sufficiently, the transfer sheet **12** may be stripped from the letters **11**, as shown in FIG. 6.

Suitable means are provided for registering the transfer sheet **12** with the plaque surface **20** to insure a predetermined positioning of the indicia relative to the plaque **21**. This may be done, for example, by constructing the transfer sheet **12** so that its exterior margins **23**, **24**, **25** are congruent with the margins **26**, **27**, **28** of the plaque surface **20**.

While not shown, it will be apparent that the template **1** and transfer sheet **12** may be provided with strippable protective sheets over the pressure-sensitive adhesive layers **8**, **12**, which may be removed just before those parts of the kit are put into use.

FIGS. 7 and 8 show a modified form of transfer sheet **30** that is used in a method of this invention in which the template **1** may be eliminated. The transfer sheet **30** may be a cardboard member **29** the margins **31**, **32**, **33** of which are such that the sheet **30** is congruent with the surface **20** of the plaque **21**. However, the margins of the sheet need only be such that the sheet **30** can be placed over the plaque surface **20** in proper predetermined registration therewith. Preprinted marks may be applied to the transfer sheet also for this purpose.

In the form of the invention shown, the card of the transfer sheet **30** has three elongated cutouts or windows **34**, **35**, **36**, each for the purpose of accommodating a line of letters or numerals **11**. Of course, the size, shape and number of windows can be varied, but for letters of a given font, the widths of the windows **34**, **35**, **36** are each approximately the same as the height of the letters. There are also printed onto the transfer sheet **30** vertical guidelines **37** which are spaced apart the width of the letters. Disposed over the windows **34**, **35**, **36** is a tape **38** that has a pressure-sensitive surface **39** that bonds the tape **38** to the cardboard and exposes the pressure-sensitive surface **39** through the windows **34**, **35**, **36**.

In using the transfer sheet **30**, the plastic letters spelling out the desired indicia are laid out on a clean flat surface (see FIG. 7). If the indicia is to be approximately centered on the plaque surface **20**, the center or nearest the center letters of the lines are determined. In the example shown, the letter "C" is the center letter of the first line. The transfer sheet **30** is held over the spelled out indicia and positioned so that the letter "C" is just to the right of the center guideline **37** and lined up straight while confined within the window **34**. The tape at the window **34** is then pressed against the letter "C." This is repeated with the remainder of the letters of the indicia, one by one, until the entire indicia is adhered to the transfer sheet **30**. Thereafter, the transfer sheet **30** is inverted, as in the case of the transfer sheet **12** previously described, and a drop or two of adhesive **19** applied to the back of each letter,

after which the transfer sheet is again inverted, placed in registration with the plaque surface **20**, and lowered to press the letters against the plaque.

When the adhesive has sufficiently dried, the transfer sheet **30** is stripped from the letters. In this regard it should be noted that the pressure-sensitive adhesive on the surface **39** is sufficiently tacky to pick up the letters but not so tacky as to prevent careful stripping of the transfer sheet **30** from the letters after the adhesive had dried for only a limited period of time.

The precise constructions herein shown are illustrative of the principles of the invention.

What is considered new and sought to be secured by Letters Patent is:

1. A method of applying separate pieces of indicia to a supporting surface such as a plaque or the like, the steps of providing a template of the plaque having a surface coated with an adhesive to hold indicia thereon in position temporarily but permitting them to be stripped therefrom, assembling pieces of indicia on the template and holding them in place thereon by said adhesive, providing a transfer sheet having a surface coated with an adhesive to hold indicia thereon in position temporarily but permitting them to be stripped therefrom, applying the sheet over the indicia in predetermined registration therewith so that the adhesive thereon engages the indicia and the indicia is sandwiched between the adhesive on the template and the adhesive on the transfer sheet, the adhesive on the transfer sheet having a greater hold on the indicia than does the adhesive on the template so that upon stripping of the transfer sheet from the template it carries the indicia with it, lifting the transfer sheet from the template and with it the indicia, applying adhesive to said indicia for adherence of the same to said supporting surface, applying the sheet to the supporting surface in predetermined registration therewith, and thereafter when the indicia has adhered to said supporting surface, stripping the sheet from the indicia.

2. A method according to claim **1** in which the indicia comprises individual elements and the sheet is applied over said elements one by one in preselected respective positions.

3. A method according to claim **1** in which the sheet has guiding means for aligning the indicia thereon to facilitate registering the indicia with said supporting surface.

4. A method according to claim **1** in which said transfer sheet comprises a cardboard member having at least one opening therein, there being a tape across said opening and having said pressure-sensitive adhesive.

5. A method according to claim **1** including the steps of providing a template with pressure-sensitive adhesive portions thereon and rail members adjacent to said pressure-sensitive portions and projecting thereabove, supporting said indicia on at least one of said rail members and sliding the indicia off of said rail member and onto the adjacent pressure-sensitive portion.

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U.S. Cl. X.R.

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