Jan. 29, 1957 E. J. HILL 2,779,270

METHOD OF MAKING ADVERTISING SIGNS

Original Filed April 3, 1952

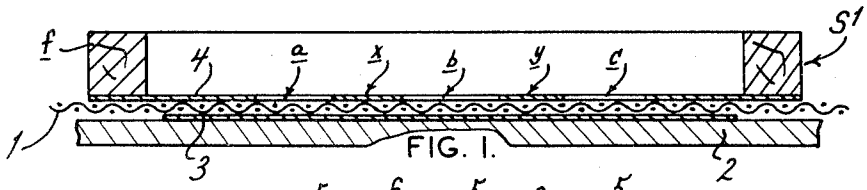


FIG. 1.

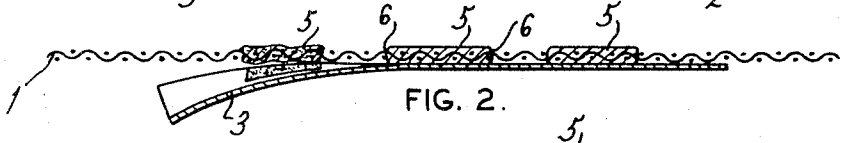


FIG. 2.

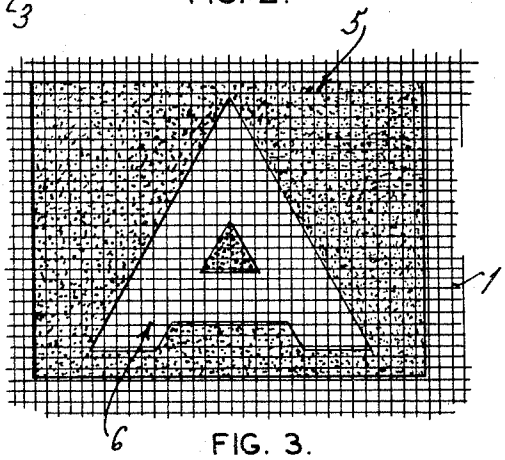


FIG. 3.

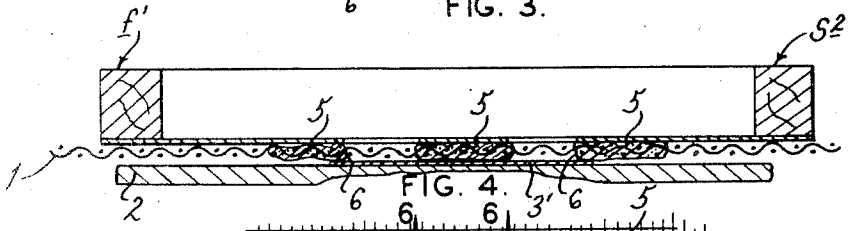


FIG. 4.

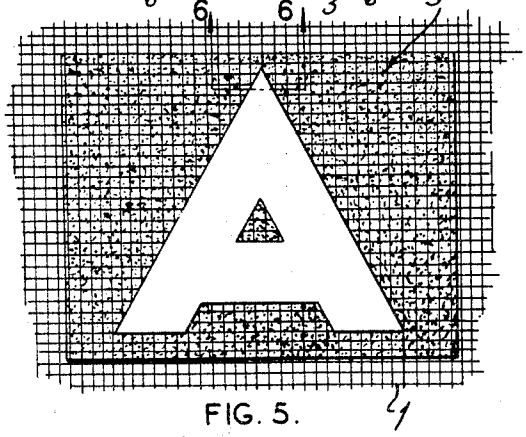


FIG. 5.



FIG. 7.

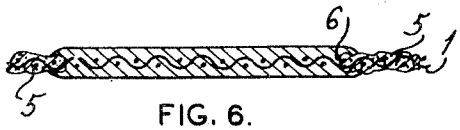


FIG. 6.

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METHOD OF MAKING ADVERTISING SIGNS

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Continuation of application Serial No. 280,265, April 3, 1952, now Patent No. 2,659,171, dated November 17, 1953. This application April 8, 1954, Serial No. 421,858

2 Claims. (Cl. 101—129)

This invention relates in general to certain new and useful improvements in advertising signs and methods of making the same, and is a continuation of application Serial No. 280,265, filed April 3, 1952, which is now United States Letters Patent No. 2,659,171, issued November 17, 1953.

It is the primary object of the present invention to provide an advertising sign and a method of making the same which is simple and economical.

It is another object of the present invention to provide an advertising sign which is formed in the interstices of screen wire and may be inserted in door screens and window screens of commercial establishments to present an advertising message to the passerby and to persons entering and leaving the store.

It is a further obect of the present invention to provide an advertising sign of the type stated having a background element coating but not completely filling the interstices of the screen wire in a defined area and having letters, design indicia, or advertising messages similarly applied upon the background in contrasting colors or in relief or in intaglio or in any combination thereof, so that a legible sign is produced but air may still pass freely through the area thus treated.

It is also an object of the present invention to provide a method of making an advertising sign whereby the background and advertising design or letters are independently formed and held within adjacent areas of a piece of screen wire and are marginally bonded to each other in such a manner that the entire advertising device will not readily become loosened or disintegrated under the impact of opening or closing the screen door.

It is an additional object of the present invention to provide a unique method of making advertising signs of the type stated which method can be simply and conveniently practiced without waste of materials or undue labor cost.

With the above and other objects in view, my invention resides in the novel features of form, construction, arrangement, and combination of parts presently described and pointed out in the claims.

In the accompanying drawing—

Figures 1 and 2 are horizontal sectional views of a piece of screen wire and a stencilling screen superimposed thereon preparatory to performing the first and second steps in the method constituting the present invention;

Figure 3 is a top plan view of a fragmentary section of screen wire provided in a defined area with a background element resulting from the initial steps in the method of the present invention;

Figure 4 is a horizontal sectional view of the section of screen wire with a stencilling screen superimposed thereon preparatory to performing the third step in the method constituting the present invention;

Figure 5 is a top plan view of a fragmentary section of screen wire provided in a defined area with a completed advertising sign constructed in accordance with, and pursuant to, the methods of the present invention;

Figure 6 is a fragmentary sectional view taken along line 6—6 of Figure 5; and

Figure 7 is a fragmentary sectional view of a modified form of sign made in accordance with the present invention.

Broadly speaking, the present invention resides in the unique method of placing a removable flexible membrane or paper sheet beneath a section of screen wire in a defined area and forming a background section for the sign by applying a plastic, heavily pigmented, paste-like material to the interstices of a section of screen wire in such defined area by forcing the material through a stencilling screen while masking out areas wherein the letters, design indicia, or advertising message is to be applied, so that the interstices of the screen wire in such latter areas is left completely open and unclogged. Almost immediately, the paper membrance is peeled off, pulling a major amount of the plastic material out of the interstices and leaving the wires coated to produce a "phantom effect." After the material in the defined area has been permitted to solidify, a second screen is placed thereover and is masked in all areas except areas registering with the open portions left in the background section. Thereupon, a second plastic, paste-like material, preferably, though not necessarily of contrasting color, is forced through the second screen in such a manner as to become marginally bonded to and around the edges of the open areas originally left in the background section. By the use of contrasting colors and by providing an appropriate amount of vertical space between the screen and the background sections, contrasting colors, relief effects, or combinations of such effects may readily be obtained.

Referring now in more detail and by reference characters to the drawing, which illustrates practical embodiments of the present invention, 1 designates a section of screen wire which may be of any desired size to fit the particular window, door, or the like in which it is to be installed. The section of screen wire 1 is placed flatwise upon any smooth horizontal table top or similar work surface 2 and a piece of wax paper 3, or other similar flexible membrane, is placed therebetween in a defined area. Thereupon, a stencilling screen S^1 is superimposed thereon, as shown in Figure 1.

The stencilling screen S^1 comprises a suitably shaped frame *f* having a screen stencil 4 stretched tautly across the operative surface or under face thereof. The screen 4 may be of any appropriate material, such as stencil silk or even a very open mesh wire, depending upon the fineness or coarseness of texture desired in the finished sign. The stencil 4 is masked over its entire area except in a defined area conforming to the shape or outline of the background design of the sign being fabricated. Such open spaces are schematically indicated in Figure 1 at *a*, *b*, and *c*. The stencil is also masked in certain areas within the defined area in the portions corresponding to the letters, design indicia, or advertising message which is to appear on the background. Such areas are schematically designated in Figure 1 at *x* and *y*.

A suitable pigmented, somewhat fluid material containing drying oils, or some such similar vehicle, and having a viscosity at room temperature approximately equal to that of heavy molasses, is then squeegeed through the screen 4 into the interstices of the screen wire section 1 forming a flat under surface against a smooth table top 2 and almost immediately the membrane 3 is peeled off, as shown in Figure 2, to produce a pervious or so-called "phantom" background section 5 for the sign or advertising display in which the area to be occupied by the letters or design indicia is left completely unfilled or open, as indicated at 6 in Figure 2. For purposes of illustration herein, a single letter "A" has been used to

exemplify the design indicia, but it will, of course, be understood in this connection that any number of letters or designs may be employed instead.

It has also been found that the screen wire section 1 may be laid down on the table 2 directly without the interposition of the flexible membrane 3 and, by peeling off the screen wire section 1 as soon as the pigmented material has been stencilled thereon, the material in the interstices will be pulled out and remain adhered to the table top 2, producing the same "phantom" effect.

When the background section 5 has dried sufficiently, a flexible membrane or backing sheet 3', formed of absorbent tissue paper or similar material, is placed on the flat table working surface 2 and the screen wire section placed thereover. Then a second stencilling screen S^2 is placed over the screen wire section 1. The screen S^2 comprises a frame f' of substantially the same size and shape as the previously described frame f of the screen S^1 and is similarly provided with a tightly stretched screen 4' which is masked over its entire area except the areas conforming to the letters or design indicia, and as to such areas, the screen pattern is slightly larger than the letters or design indicia with which it is intended to register.

A heavily pigmented paste-like material of appropriate contrasting color and much greater viscosity than the previously mentioned material is then squeegeed through the screen 4' and will be forced through the open areas 6 in the screen wire 1. Inasmuch as the openings in the screen 4' are peripherally larger than the actual opening 6 in the screen wire 1, the compound being extruded through the screen 4' will overlap very slightly onto the background material and will force its way around on the under side to overlap somewhat, thereby forming a double locked retentive bond, substantially as shown in Figure 6. When the material has dried sufficiently, the backing sheet 3' is removed.

By using materials of proper consistency and by appropriately elevating the top surface of the screen S^2, by use of thicker stencil paper or masking material, to introduce the desired amount of space vertically between the upwardly presented face of the background plaque or section 5 and the upper face of the screen 4', it is possible to achieve various types of "raised-letter" or relief effects combined with a "phantom" background. If desired, the screen 4' may be masked in such a manner as to introduce letters or design indicia into only a portion of the open spaces in the background plaque or section or further complementary screens may be employed to introduce different contrasting colors into other open spaces. It is thus possible to produce multi-colored effects.

If desired, it is also possible to provide a "phantom-on-phantom" effect, so to speak as shown in Figure 7, by creating a phantom background 5 in exactly the manner previously described above and, thereupon, repeating the process with the stencil S^2. After the coating material has been squeegeed through the stencil S^2, the screen wire section 1 is peeled up from the table 2 to remove the excess material from the interstices. It also should be noted that desirable attention-getting effects may be achieved by dusting the coatings on the screen wire, while still wet, with sand smalto or fine-gauge glass beads, and such materials may be used in various colors.

It should be understood that changes and modifications in the form, construction, arrangement, and combination of the several parts of the advertising sign and in the steps of its production may be made and substituted for those herein shown and described without departing from the nature and principle of my invention.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. The method of making a screen mounted advertising sign comprising laying a section of paper upon a flat surface, laying a section of screen wire on the paper, filling the interstices of the screen wire in defined areas with a heavily pigmented paste which is viscous but flowable and is capable of hardening upon drying to form an initial body, the outer periphery of which conforms to the desired shape of the entire advertising in such defined area while leaving certain portions wholly within such area conforming in shape to the message-forming indicia unfilled so that the interstices are open in such portions, peeling off the paper before said paste is dry and thereby removing a substantial portion of said paste from the interstices to leave the interstices substantially open and the wires in such defined areas enclosed in a coating of said paste, allowing said coating to harden, applying a complementary stencil having openings peripherally larger than the periphery of said unfilled portions in overlying but elevated relation thereto, and then filling the interstices of the screen wire in areas directly adjacent to the areas previously coated with a heavily pigmented fluid paste capable of hardening upon drying, said last-named paste being forced into and through the interstices and causing such last-named paste to flow through the spaces resulting from the elevation of the stencil and around the peripheral margins of the previously introduced paste to form a marginally bonded and interlocked engagement therebetween.

2. The method of making a screen mounted advertising sign comprising laying a section of screen wire on a flat surface, placing a flexible membrane therebetween in defined areas, filling the interstices of the screen wire in defined areas with a heavily pigmented paste which is viscous but flowable and is capable of hardening upon drying to form an initial body, the outer periphery of which conforms to the desired shape of the entire advertising in such defined area while leaving certain portions wholly within such area conforming in shape to the message-forming indicia unfilled so that the interstices are open in such portions, peeling off the membrane before said paste is dry to remove a substantial portion of said paste from the interstices to leave the interstices substantially open and the wires in such defined areas enclosed in a coating of said paste, allowing said coating to harden, applying a complementary stencil having openings peripherally larger than the periphery of said unfilled portions in overlying but elevated relation thereto, and then filling the interstices of the screen wire in areas directly adjacent to the areas previously coated with a heavily pigmented fluid paste capable of hardening upon drying, said last-named paste being forced into and through the interstices and causing such last-named paste to flow through the spaces resulting from the elevation of the stencil and around the peripheral margins of the previously introduced paste to form a marginally bonded and interlocked engagement therebetween.

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