

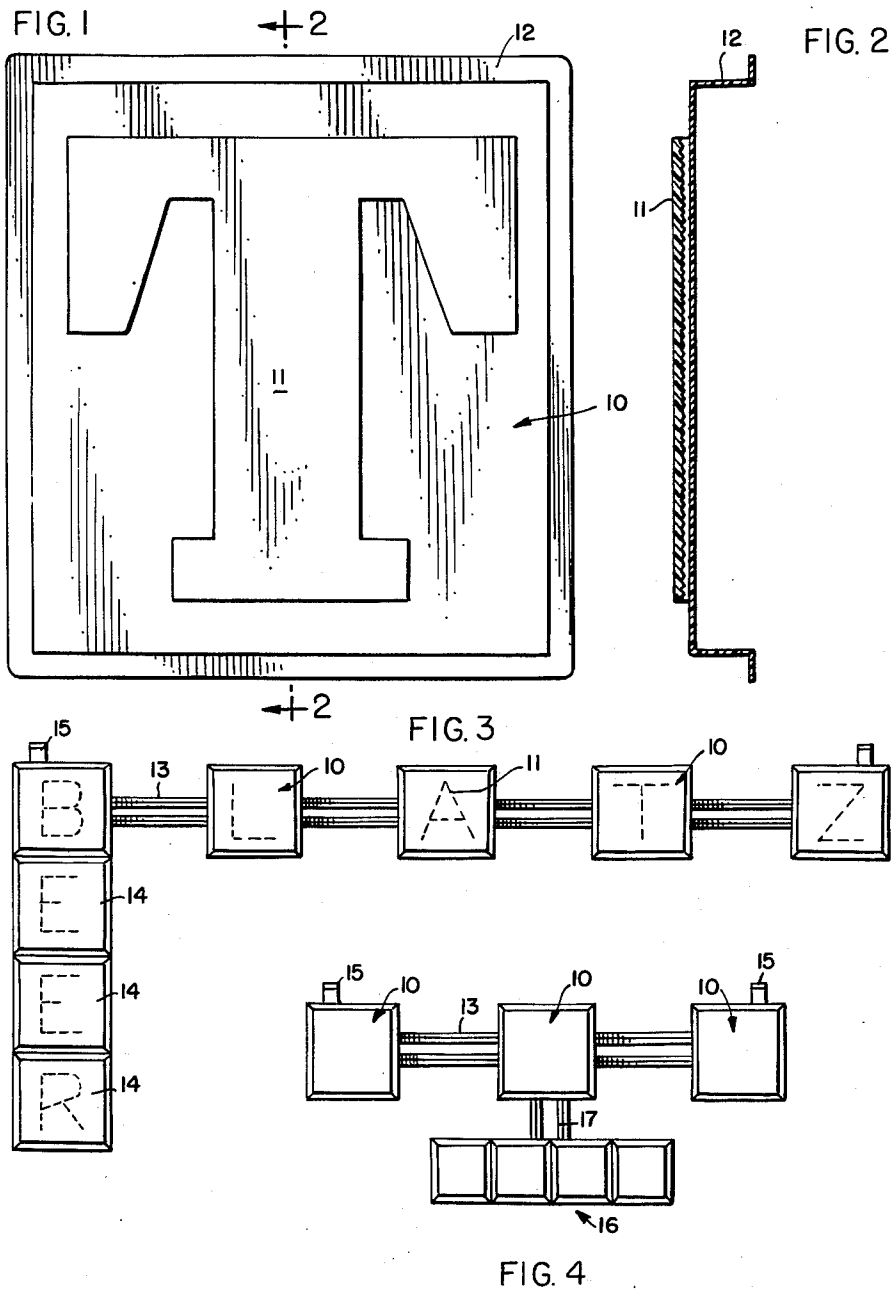
March 8, 1966

T. ROSENAK ETAL
EXPANDABLE SIGN

3,238,654

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2 Sheets-Sheet 1



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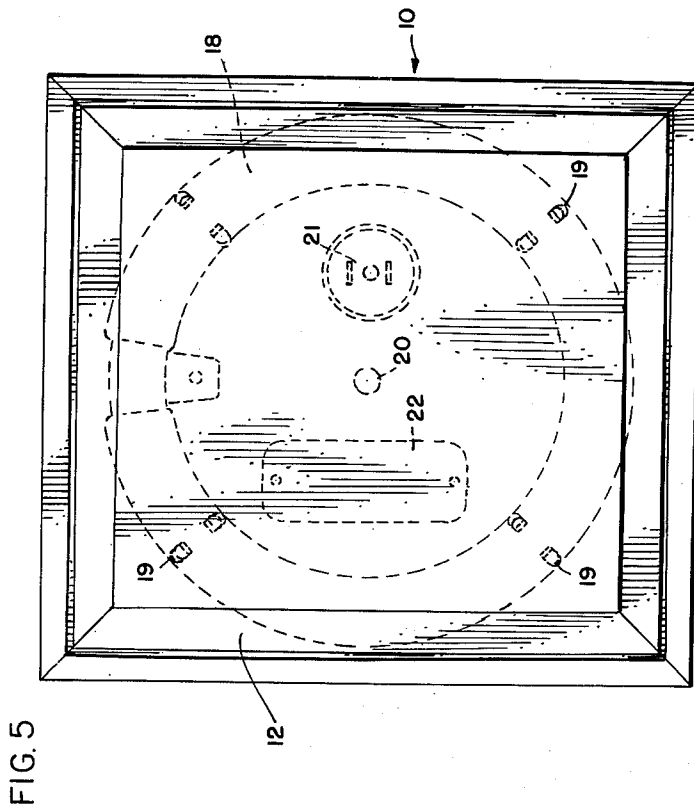
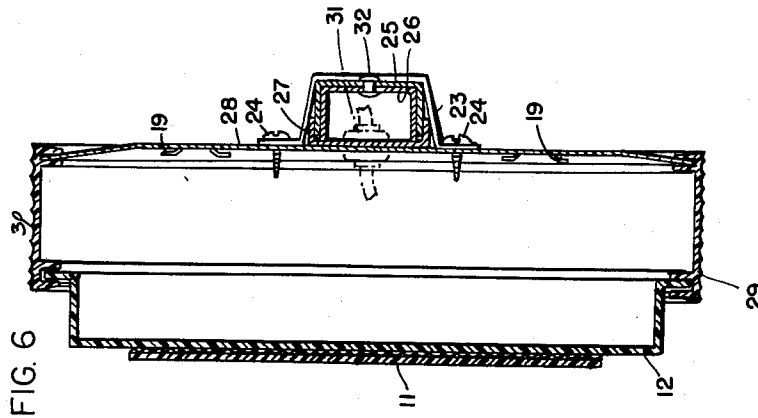
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EXPANDABLE SIGN

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The present invention is directed to improved sign structures. More particularly, the present invention relates to expandable advertising signs which consist of individual letter units mounted on hollow support members.

Almost all business establishments make use of advertising signs. Since the discovery of inert gases over 50 years ago, most of these signs have been illuminated by such gases as argon, neon and helium. If an inert gas is placed in a glass tube and if a current of electricity is passed through the gas a bright glow is produced. The color formed by passing the current through the gas is dependent both upon the particular gas and upon the particular tube coating that is used. If neon gas is activated, for example, a bright red glow usually results, whereas a blue color is obtained from mercury vapor and neon, a yellow color from helium in a yellow glass tube, and green from neon and mercury vapor in a yellow tube. A conventional fluorescent lamp consists of a glass tube coated on its inner surface with a fluorescent material such as phosphor. The lamp contains mercury vapor which when bombarded by electrons from a cathode produces ultraviolet light which in turn causes the phosphor to emit visible light.

If a sign is to be effective, it should have the proper dimensions for a given display area. Inasmuch as windows, serving areas, etc., vary widely from one establishment to another, signs having fixed dimensions often are found to be either too large or too small for a given purpose. Even where a sign is custom made, it may be desirable on occasion either to increase or to decrease the width or height of the sign. This is especially true where window layouts or serving area displays are changed from time to time.

Because the function of the sign is to attract attention, it is important that the sign be both appealing and distinctive. Furthermore, the fact that the sign is in almost continuous use makes it important to maintain the cost of operating the sign as low as possible.

The principal object of the present invention is to provide an expandable sign structure which is both attractive and versatile.

Another object of the invention is to provide a sign structure which is unique and which can be used to form a display of variable dimensions.

Other objects will become apparent to those skilled in the art from the following detailed description of the invention.

In general, the subject invention is directed to an improved sign which is expandable in at least one direction. The sign includes individual letter units which are mounted on hollow support members. In a preferred embodiment of the invention, current carrying wires, placed within the support member, are used to illuminate lighting means within each of the letter units. It is also preferred that the letter units be constructed of translucent plastic materials such as methyl methacrylate polymers, polystyrene, etc.

The accompanying drawing serves as an illustration of the invention. In the drawing:

FIG. 1 is a front elevation of a letter unit;

FIG. 2 is a cross-sectional view taken through line 2—2 of FIG. 1;

FIG. 3 is a front elevation of a particular sign arrangement. In this arrangement, horizontally placed letters are

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in an expanded condition, whereas the vertical letters have been moved together;

FIG. 4 is a front elevation of one display arrangement that falls within the scope of the present invention;

FIG. 5 is a front elevation of a letter unit after the letter panel has been removed; and

FIG. 6 is a cross-sectional view which shows the relationship between the movable letter units and the expandable support member.

In FIG. 1 reference character 10 designates generally a letter unit which is suitable for use in preparing the subject sign. Letter unit 10 includes letter 11 and letter panel 12. As can better be seen from FIG. 2, letter 11 is cemented to the face of letter panel 12. The back of letter 11 comprises a series of prisms. The prisms diffuse and soften the light coming from a fluorescent lamp or other light source.

In the arrangement set forth in FIG. 3, hollow support member 13 has been expanded to its full length. Letter units 10 are movably mounted on support member 13 as will be more fully described in connection with FIG. 6. Letter units 15 can also be mounted for vertical movement on a hollow support member. Letter units 15 and their support member are shown in their fully contracted position. If it is desired, this group of letters can have a fixed dimension. Brackets 15 are used to suspend the sign from the ceiling or other structure.

FIG. 4 sets forth a modified embodiment of the sign structure of the present invention. In this arrangement, letter units 10 are once again movably mounted on hollow support member 13. A group of letters of fixed dimension indicated generally as 16, however, have been suspended from middle letter unit 10 by means of support bar 17. It would be possible, of course, to mount the individual letters of group 16 movably on a hollow support member. In this event one would obtain a sign having two expandable and parallel rows of letters.

In FIG. 5 letter unit 10 is shown without letter panel 12. In this particular embodiment the light source is circular fluorescent lamp 18 which is held in place by clamps 19. Opening 20 communicates with hollow support member 13. Supply conductor wires (not shown) which are connected in parallel to a feeder line (not shown) within support member 13 pass through opening 20. The end of supply conductor wires is formed into a two-pronged plug which is connected to plug receptacle 21. The fluorescent light unit also includes ballast or choke coil 22.

FIG. 6 is a cross-sectional view which shows the relationship between expandable support member 13 and letter unit 10. Mounting strap 23 holds letter unit 10 to support member 13. This strap can be tightened or loosened by means of screws 24. The hollow support member includes telescoping channels 25 and 26. U-shaped bracket 27 is attached to the back 28 of letter unit 10. Letter channel 12 is attached to back member 28 by means of plastic sections 29 and 30. Wire 31 passes from the feeder line within support member 13 to receptacle 21 within letter unit 10. The feeder line is sufficiently long to allow support member 13 to be fully extended. When the sign is in its contracted position the excess feeder line is stored within support member 13. The feeder line is connected to a power source which can consist of an ordinary A.C. outlet. Set screw 32 is used to fix the sliding channels of support member 13 at a desired position. When the sign is to be expanded, set screw 32 is loosened which allows letter units 10 to be moved along support member 13 and which allows sliding channels 25 and 26 to be extended.

As was indicated above, the letter units in our preferred embodiment are constructed of translucent plastic material such as polystyrene or methyl methacrylate poly-

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mers. It would be possible, however, to form the letter units from other materials such as glass or the like.

Methyl methacrylate polymers are well known in the plastics industry. They are sold in the form of tubes, sheets, etc., under the trademarks Lucite, Plexiglas, and Perspex. These polymers possess many useful properties such as excellent clarity, stability to light and heating, and moderately high softening temperature which makes them a satisfactory synthetic glasslike plastic for most operations.

It is preferred that a light source be used in the sign structure and that this light source be individual fluorescent light units. Under certain circumstances, however, it might be satisfactory to prepare these signs without including an artificial light source. Additionally, incandescent lights or the like could be used in place of the fluorescent lamps.

In the preferred embodiment of our invention, individual letter units having a suitable source of illumination are movably mounted on a hollow and expandable support member. A current carrying wire within the support member is connected to light sources within each of the letter units. The sign includes at least one and preferably two expandable support members. In the latter instance, the sign can be expandable in both a horizontal and vertical direction, or the sign can consist of two rows of movable letters.

It is apparent that this novel sign structure will provide significant advantages over conventional displays signs. No longer will it be necessary to custom fit a sign to each particular window or serving area of a given business establishment. Furthermore, because the dimensions of the sign are variable, the display will remain effective even though the window layouts, etc., are varied from time to time.

Obviously, many modifications and variations of the above invention can be made without departing from the spirit and scope of the invention. For this reason, only such limitations should be placed on the invention as are indicated by the following claims.

We claim:

1. An improved sign structure which comprises: individual letter units in contact with and slidably mounted on a hollow and expandable horizontal support member, each of said letter units including an illuminating means connected to a current carrying wire within said support member, a vertical support member attached to said horizontal support member at a given point on said support member, and individual letter units in contact with and mounted on said vertical support member.

2. An improved sign structure which comprises: an expandable and hollow horizontal support member, individual letter units slidably mounted on said horizontal support member, each of said letter units including an illuminating means connected to a current carrying wire

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within said horizontal support member, and expandable and hollow vertical support member attached to said horizontal support member at a given point on said support member, and individual letter units in contact with and slidably mounted on said vertical support member, each of said letter units including an illuminating means connected to a current carrying wire within said support member.

3. An improved sign structure which comprises individual letter units slidably mounted on a horizontal support member, said horizontal support member consisting of two slidable channels which form an axially expandable chamber, each of said letter units including an illuminating means connected to a current carrying wire within said support members, said current carrying wires being sufficiently long to allow said expandable support members to reach their maximum length, said letter units including a letter attached to a letter panel, said letter panel lying between said illuminating means and said letter, said letter and letter panel being constructed of translucent plastic material.

4. An improved sign structure which comprises individual letter units slidably mounted on a horizontal support member, individual letter units slidably mounted on a vertical support member, said vertical support member being attached to said horizontal support member at a given point on said horizontal support member, said horizontal support member and said vertical support member consisting of two slidable channels which form an axially expandable chamber, each of said letter units including an illuminating means connected to a current carrying wire within said support members, said current carrying wires being sufficiently long to allow said expandable support members to reach their maximum length.

References Cited by the Examiner

UNITED STATES PATENTS

406,729	7/1889	Harris	40—140
2,165,595	7/1939	Weinhard	40—140
2,783,367	2/1954	Locke	248—287 X
2,788,188	4/1957	Smith et al.	248—298 X
2,809,002	10/1957	Rudolph	248—298 X
2,824,167	2/1958	Bauer	248—298 X
2,925,676	2/1960	Yetman	40—125
2,930,564	3/1960	Maier	248—298 X
2,933,549	4/1960	Antonucci	248—298 X
2,954,626	10/1960	Kies	40—145 X
2,954,627	10/1960	Kies	40—125
2,960,784	11/1960	Frey et al.	40—125

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