May 3, 1927.

E. P. VINCENT

1,627,528

SIDE READING ILLUMINATED SIGN

Original Filed April 20, 1917 4 Sheets-Sheet 1

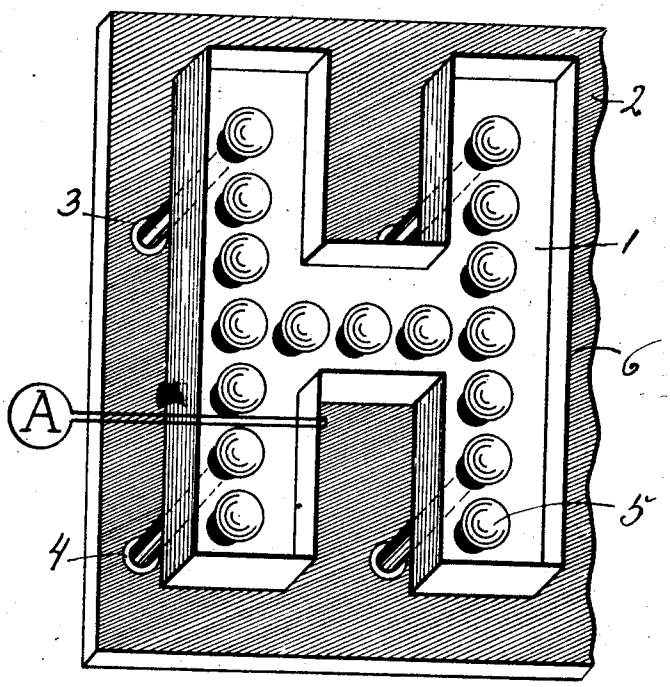


Fig. 1

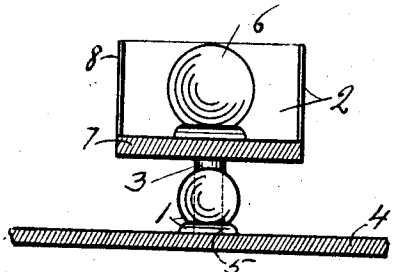


Fig. 2

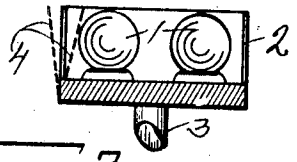


Fig. 3

Witness:
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Ernest P. Vincent

May 3, 1927.

E. P. VINCENT

1,627,528

SIDE READING ILLUMINATED SIGN

Original Filed April 20, 1917 4 Sheets-Sheet 2

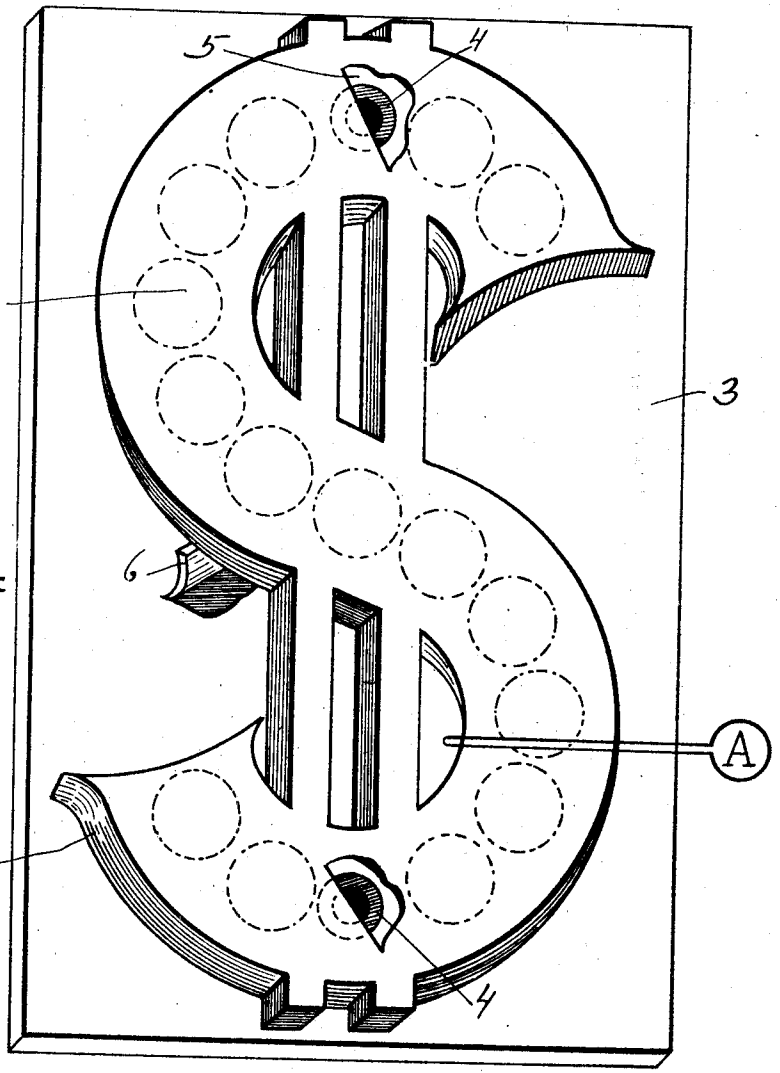


Fig. 4

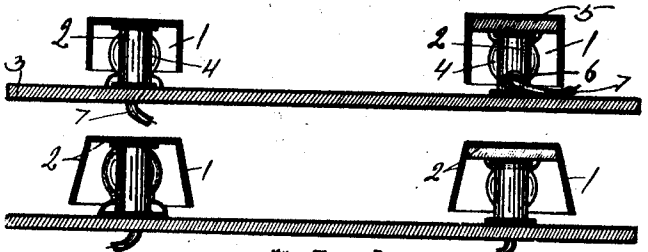


Fig. 5

Fig. 6

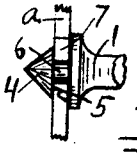


Fig. 4a

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Witness:

Geo. F. Brelsford

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SIDE READING ILLUMINATED SIGN

Original Filed April 20, 1917 4 Sheets-Sheet 3

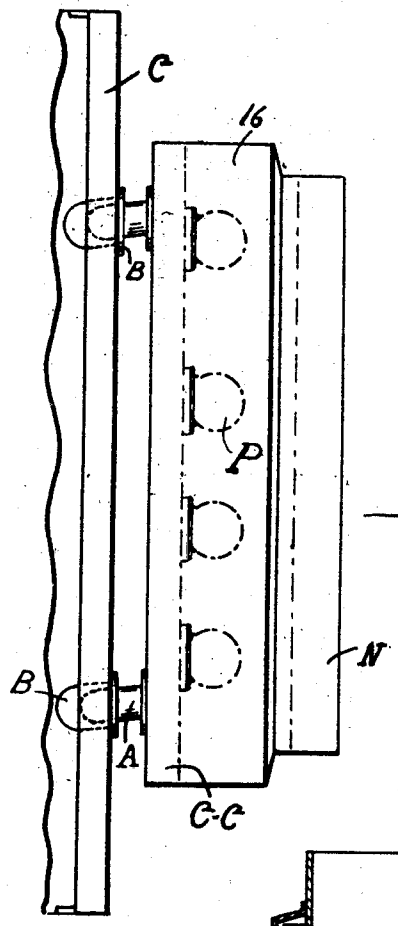


Fig. 8.

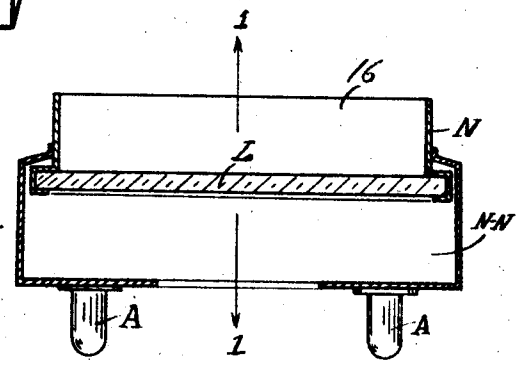


Fig. 7.

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May 3, 1927. E. P. VINCENT 1,627,528

SIDE READING ILLUMINATED SIGN

Original Filed April 20, 1917 4 Sheets-Sheet 4

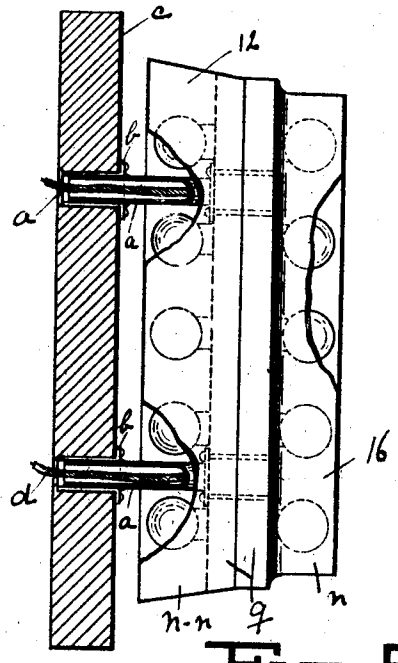


Fig-9.

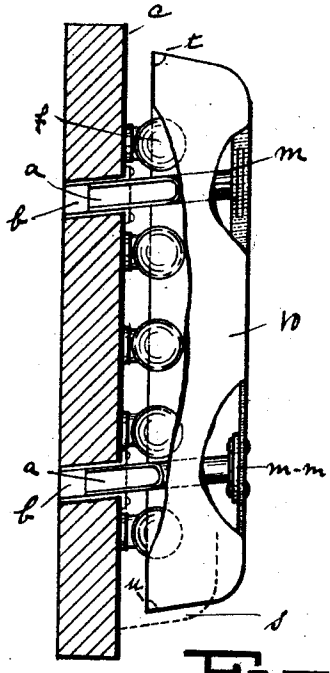


Fig-10.

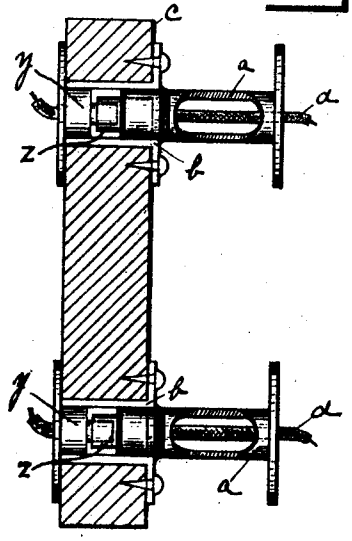


Fig-11.

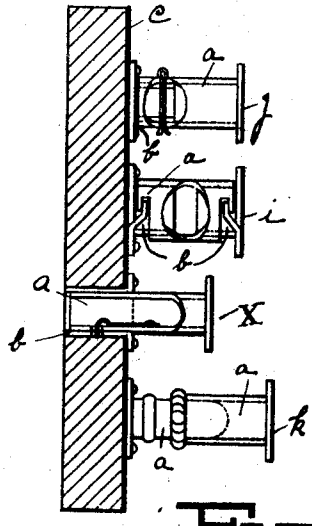


Fig-12.

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Patented May 3, 1927. 1,627,528

UNITED STATES PATENT OFFICE.

ERNEST PETER VINCENT, OF NEW YORK, N. Y.

SIDE-READING ILLUMINATED SIGN.

Original application filed April 20, 1917, Serial No. 163,368. Divided and this application filed September 1, 1922. Serial No. 585,680.

This invention consists of transmissible and partly transmissible, and non-transmissible symbols of support-spaced or linearly adjustable and detachable characters separate or in combination with a sign-surface. These symbol characters may have socket means within their construction for clear or color incandescent lamps, but of course where only a reflection from the light is needed such as concealed light, the said illuminating means may consist of tube or other illuminating means harmonizing suitably with colors as required.

The invention has for one of its principal objects the production of sidereading characters, which can be read at a distance without having to stand directly in front of the sign. This was one of the principal objections to the signs at the time the original application Serial Number 163,368 was filed. In other words a sign is better read, when the character can draw the eyes of passers-by either by the action of the clear glare from the illuminating lights, or from the colored reflection produced by tainted color incandescent lamps mounted within the characters or upon the surface supporting said characters, these symbol characters may of course be mounted in combination with painted matters or support-spaced ornaments in combination with a border of lights surrounding said sign-surface or sign-support, and the illuminating means may consist of tinted or clear lamps, or connected with a motor developing a flicker current or for illuminating the colored lamps alternately.

This application was reconstructed January 17 for the purpose of omitting views in Figs. 1 and 2 as a different invention, the said tube construction now being shown in Serial Number 2,699 filed January 15, 1925, while the other views as shown in Figs. 3, 4 and 5 inclusive Fig. 6 pertain to another independent invention as now shown in Serial Number 746,245 filed October 27, 1924. Therefore the first five figures upon drawing Sheet 1 have been cancelled as matters pertaining to this application, and a new drawing substituted pertaining to Figs. 7 and 8 only.

The invention further consists of removable compound characters, and according to my preferred method of construction, the symbols such as the letters of a sign consist of characters conjoined with an extending support, which may if desirable consist of sleeve members, by means of which the said characters can be linearly support-spaced and adjusted, as well as laid tight against a surface all according to the desired effect of the reflection from the lights, therefore the construction as illustrated in the accompanying four drawings consists of symbol-members joined with an extending support, which is a new and practical invention, and intended for regulating the reflection from the lights as well as the visibility of the characters as shown.

Drawing Number 3 illustrates: Fig. 7 illustrates a cross-section of a box-channel character, and is a development and modification of Fig. 5 of the original Patent 1,421,044, the surface N upon this character now forming a knee-bend or seat at its centre beneath which a transparent surface L is located, while at N—N is shown the hollow casing or chamber where the incandescent lamps may be mounted or covered beneath the transparent surface L, as shown attached to the inner end of surface N. This surface may have a tint of one or several colors transmissible to the light beneath said surface, or the lights as shown at P in Fig. 8 may have alternating colors and by flicker action at night in the combination with a motor creating and developing the effect or a changeable color surface. The character forms an independent case-letter made of two separate long strips of metal as two halves, and about assembled at cross line 1—1 as shown; when the lights are mounted inside the chamber N—N, while small lights may be properly used to form a uniform glare against the transmissible surface. This case-letter of course can be mounted in units or a continuous row to form a continuous sign-surface, and may have supporting members as shown at A for the purpose as set forth in this specification.

Fig. 8 shows a view of a sign-board looking sideways, with the character 16 in Fig. 7 shown mounted upon the sign-surface compartment C by male members A—A inserted upon the bearing or socket B—B on the said surface C, the character is mounted over the lights P which are shown inserted upon the socket of the surface C—C. But of course the entire character does contain the illuminating means, whether this means is mounted upon the socket or surface C, since other

means as illustrated for supporting said case-letters may be adapted in combination with electric contact means, as described in this specification.

Drawing No. 4 illustrates: Fig. 9 is a duplicate or double reverse character seen sideways of a letter "I" or other letter-symbol numbered as 12 and 16 in view Fig. 3 of my first parent application Serial Number 568,577 filed June 15, 1922. This character may be made in one part of metal, or the wall-surfaces of the inner character may be formed of substantially right-angle colored surfaces made of transparent material, in combination with an outer metal character, but of course both of said characters may be constructed either of metal or translucent material. The male supporting members A—A are secured at one end to the electric socket container Q and leads through the supporting members A—A as a feed wire D. This feed wire connects with the incandescent lights in both the outer and inner symbol-characters, and may at its outer end be suitably connected with plugs for instant feed and support connection. The character as shown is mounted by means of supporting members A—A which are inserted upon sockets B—B located upon the surface C, the supporting or bearing members may be directly connected at Q to the outer letter as numbered 16, with the inner character removed, or the outer character 16 may be removed so that only the inner character 12 is being used. The double reverse character is so constructed that it may be spaced at demand against a surface, so as to regulate the reflection of the lights upon the sign-surface or support, by means of this method of construction the space between the character and the surface is held in escrow so as to give the best result. The inner letter 12 may also be used alone with the inner and outer lights, as well as closed tight against the surface C, when using only the outer-lights. The symbol as just described has been developed from the base character H in Fig. 4, and base character H in Fig. 5 of my original Patent 1,421,044 filed April 20, 1917.

The incandescent lamps or lights used in combination with these new symbols of readable characters may have colors of different origin, and of course, the characters are painted to harmonize with suitable surroundings. It will therefore be realized that when these readable symbols are lighted up with electric flicker means or alternating action of color means, a most wonderful effect is created upon any sign at day or night time, while of course the characters as mentioned may also be used in combination with any other type of characters (patent-right of such added symbols of course must be considered) while ornamental or painted illustrations are free to be incorporated upon such advertising signs.

Drawings 1 and 2 illustrate each a modification, and each representing either of the duplicate characters Fig. 9 drawing No. 4 when separated, and each showing a different construction of said side-view as illustrated in Fig. 9.

Fig. 10 illustrates a modification of the inner character 12 in Fig. 9 which shows the lights inserted upon the surface C Fig. 10, the lamps or lights as mentioned may consist of a divisional color lamp as separately patented by me in a copending application. Or the incandescent lamps may consist of my separate pending application consisting of a "one-color transmutation incandescent lamp." But it will readily be understood that clear incandescent lamps inserted in suitable colored characters will create a beautiful effect as will clear illumination alone upon these new developed symbol-characters or signs, as these new characters and signs originally were designed for clear illuminating means in or without the combination of flicker action and motor means.

Fig. 10 as further shown, illustrates in one view two forms of material said symbol may be made of, the upper half being shown in transparent material as shown at M and at this point the supporting members A are inserted in the transparent material while the character is being formed. The other half of the character such as the lower half is made of metal as shown at M—M, where another method is illustrated how to attach the supporting member A. But it will of course be understood that the character 10 as shown, will only be made of one of the two materials in one character, but may contain both when made as a duplicate symbol. This character as shown may be mounted upon interlocking means such as sleeve supports A—A and B—B by means of the flange M—M which is shown in a position at an angle or degrees to said character or surface, upon said sleeve support A. This sleeve support A rests in the outer sleeve support B on the surface C as illustrated. The lights which may be adapted can be both of the ordinary size or of automobile size as shown at F, while the character 10 is so constructed that it can be set linearly or tight against a surface such as C, this adjustment or movement of said character is shown by the dotted line S. When the characters are so placed the hot air as expanded extracts itself through the opening U on said characters.

Drawing No. 2 illustrates: Fig. 1 illustrates the former view 23 in Fig. 7 of the original Patent 1,421,044, and which now shows the substantially right-angle surfaces extended. The view represents a modifica-

tion of illustration such as "$" formed as an inverted channel character and which is illuminated within its chamber, as seen, the substantially right-angle surfaces 1 have been extended down to cover the illuminating globes 2 within the character. This symbol as shown is spaced upon the surface 3 by means of supporting members 4, as shown beneath the removed section 5 upon the face of the character, while at 6 is shown a turned-up part of the surface 3 so as to illustrate the space beneath the mounted symbol. This character as an illustration of readable-matter will stand out clearly with harmonizing colors when correctly spaced upon a surface.

Fig. 5 shows the cross-section of Fig. 4 at A, at 1 is shown part of the character, while 2 illustrates the supporting member mounted upon the surface 3, and 4 shows the illuminating globes. And at 5 is shown one of the views where the globes are inserted upon the socket container as designated by 5, while the outer view shows the globes mounted upon the surface 3. At 6 is shown how the feed illuminating wire 7 may be inserted according to the construction of the supporting member.

Fig. 6 illustrates a modification of a similar view as in Fig. 5 consisting of substantially right-angle surfaces extending outwards as shown at 1 upon the character 2.

Fig. 4 illustrates a modification of a member-support upon which the character may be mounted. This member support 1 consists of rod or tube material with an expanded head 4, and which has a groove at 5 ending into a shank 6, and into this groove the surface A slips, by means of hole 7, when the character is mounted, the supporting hole is better illustrated in view B at 7 upon a supporting washer which may be substituted for the hole 7 upon the surface A.

Drawing No. 1 illustrates: View in Fig. 1 illustrates an outstanding channel character H numbered as 1, and spaced against a surface 2 by means of supporting members 3 as shown at 4, while at 5 are illustrated the electric globes which may extend beyond, or to within the limit of the outer edge 6 of the substantially right-angle surfaces of the character 1.

Fig. 3 illustrates a modification of cross-section in Fig. 2 with a double row of illuminating globes 1 as mounted inside the character 2, while 3 is a fraction of the supporting member. The dotted lines as shown at 4 illustrate how the surface-walls of the character may have an inward or outward position as shown.

And by further referring to drawing Number 4 which illustrates several modifications of supporting members for spacing purposes, such as:

Fig. 11 illustrates supporting members which can suitably be adapted in the combination with any of the views shown on the drawings of the attached specification. The supporting member A is connected with the female electric socket Z which is inserted upon the male member A at the innermost end and connected with an electric wire D, and upon the back-side of the supporting surface C is located an electric male plug Y which has an electric feed wire similar to D. By this arrangement and construction it will be seen, that when the male supporting members A—A are inserted upon the female sockets B—B which are located upon the surface C instant connection will be had between the electric plug Y and the electric socket Z. By this original arrangement a sign can have several different forms of character at any time, simply by extracting any present located characters shown upon said advertising sign, and by inserting others of different construction, greatly improving the present advertising system.

Fig. 4a represents supporting members of different construction mounted upon a surface C, the form J, X and K are better suited for ordinary advertising signs, and consist of two outer male members B having transverse flanges with interlocking means. The outer male member B is adapted for attaching a character upon a support as shown, and the inner male member B can be secured to the sign surface C, by this arrangement it will be seen that a character can be instantly mounted upon the surface C by inserting both male members upon the centre sleeves A, which have corresponding means for interlocking purpose with the interlocking means upon the flanges of male members B, these "means" interlock when the centre sleeve A is turned upon inner and outer male members C.

View J is another modification as shown on surface C in Fig. 12, illustrating an outer sleeve A and an inner sleeve B interlocked with a pin, for the purpose as set forth in view I. While views X and K are two other modifications of supporting members for supporting characters upon a sign-surface, both have outer sleeves A—A and inner sleeves B—B for the purpose as set forth in this specification.

But of course it will be understood that various modifications may be made in the construction and arrangement of parts as set forth, without departing from the spirit of the invention as claimed.

I claim—

1. In combination with a support, a sign character, extensible means for supporting said sign character, spaced from the support, and illuminating means on the inner side of the sign character.

2. In combination with a support, a sign character, hollow extensible means for supporting said sign character spaced from the support, illuminating means on the inner side of said character, and feed means passing through the extensible supporting means.

3. In combination with a surface-mount, a side-reading case character spaced from said surface-mount, means for supporting said sign character spaced from the surface-mount, said supporting means comprising interlocking sleeve means for spacing said sign character toward and outward of said surface-mount.

4. The combination of sidereading case characters in alignment with interlocking supporting sleeve means for instant mounting and detachment of said character, and in combination therewith a proper illuminating means adjacent to said character for adjustment of the intensity of equal reflection to said character and the initial linear base thereof, as described and shown.

5. In combination with a character, of an adjustable support, for a mount, said support comprising a sleeve for insertion in the mount and a sleeve secured to the character, the last-named sleeve telescoping within the firstnamed sleeve and being held therein by friction.

6. In combination with a sidereading character, a mount, extensible means for supporting said character upon said mount, said means having an angle of less than 90 degrees with the mount.

7. In combination of one or a series of interjoined telescoping support holders for sign characters, said support holders consisting of inner and outer sleeves connecting the character with a supporting surface, and lamp sockets on the character, said sleeves forming the passage for diverted feed-cord means from the supporting surface to the character.

8. The combination of one or a series of interjoined telescoped support holders for illuminated sign characters, said support holders comprising telescoping center and outer sleeves secured at their outer ends to the sign characters and the support, respectively, by means of flanges, and forming a suitable passage for the feed-cord to the electric lamps on the sign character for instant mounting and lighting of the sign character.

9. The combination of a substantial case character with a suitable convey extender, a sign character adapted for linear spacing from a supporting surface by means of said convey extender, and colored illumination means carried by said sign character.

10. In combination with a support having spaced openings, sleeves in said openings, a double-faced character, said character being formed of two channels placed back to back, the outlines of the channel being that of a character, lamps in said channels, sleeves extending from the base of one of the channels and extending into the sleeves in the support, and conductor means passing through the sleeves and connecting the lamps with a source of supply.

11. In combination, an outlined compound character supported on and spaced from a surface, one section connected with the surface, the other section being connected with the first-named section by means of electrical plugs, and colored illumination means within said other section.

12. In combination, a compound character comprising an inner and an outer character and adapted for spacing in connection with a sign surface, and in combination therewith detachable means for connecting the outer character with the inner one.

In testimony whereby I hereunto affix my signature.

ERNEST P. VINCENT.