May 5, 1925. 1,536,449

J. J. H. MULLER

SIGN LETTER

Filed Feb. 12, 1923 2 Sheets-Sheet 1

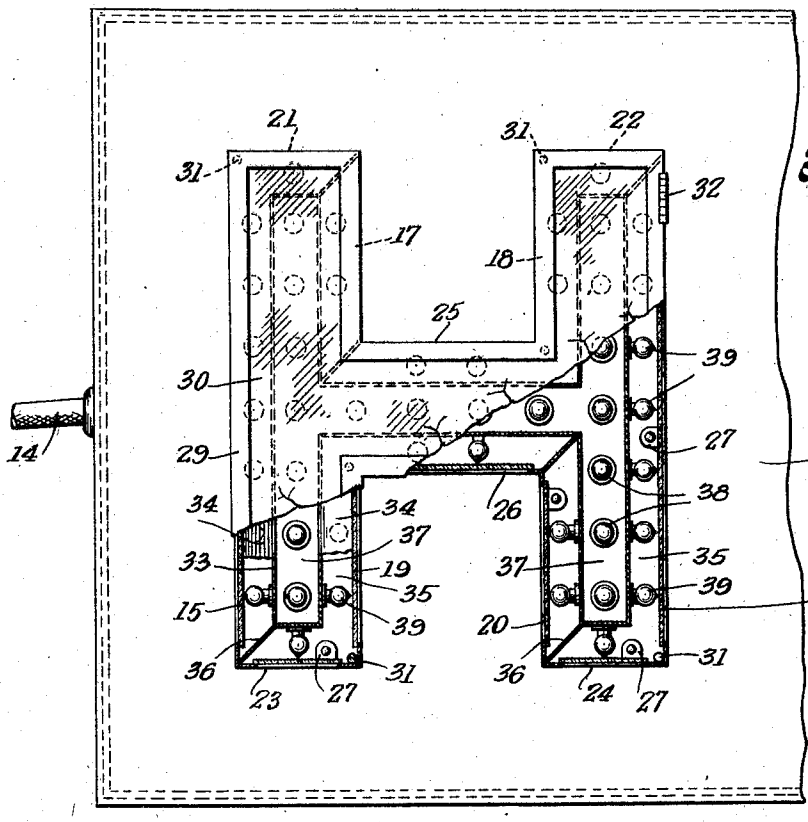


Fig. 1.

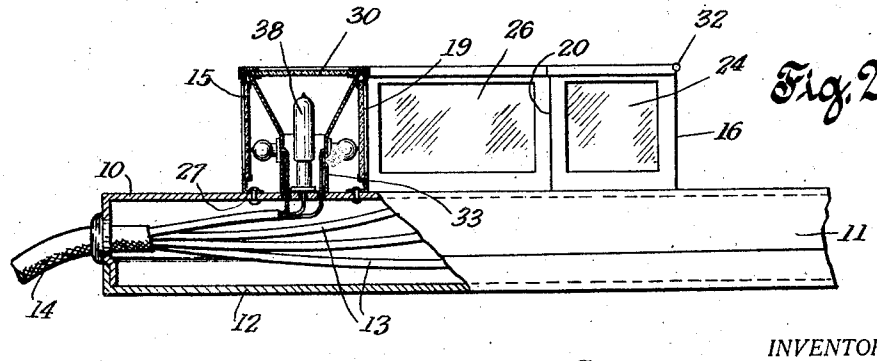


Fig. 2.

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Fig. 3.

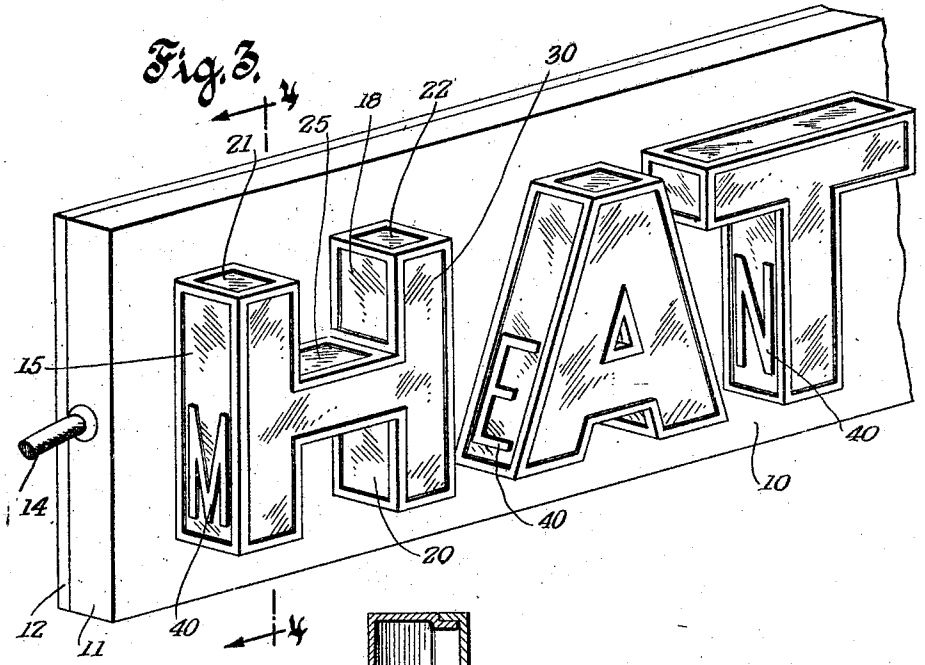


Fig. 4.

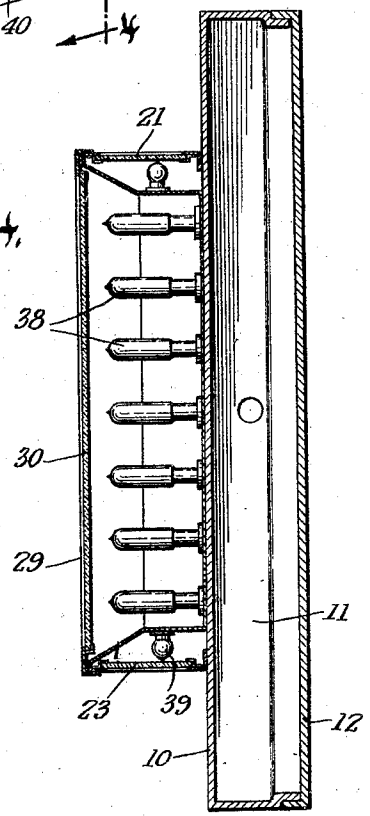
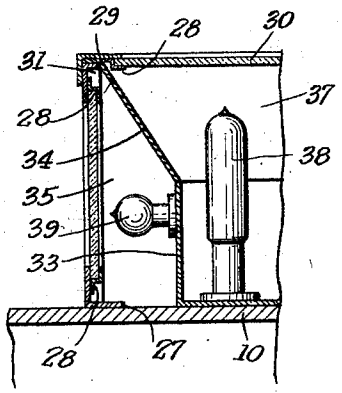


Fig. 5.



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Patented May 5, 1925. 1,536,449

UNITED STATES PATENT OFFICE.

JOHN JURGEN HENRY MULLER, OF NEWARK, NEW JERSEY.

SIGN LETTER.

Application filed February 12, 1923. Serial No. 618,450.

To all whom it may concern:

Be it known that I, JOHN JURGEN HENRY MULLER, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Sign Letters, of which the following is a specification.

This invention relates to improvements in sign letters, particularly to those of a relatively large size, arranged to be interiorly illuminated.

The main object of the invention is to produce a sign character that can be read at a considerable distance and at points laterally remote from the front of the sign.

One of the objectional features of common illuminated signs is the difficulty of reading the sign unless almost opposite, due to the confusion of light rays and dazzling effects of the lights.

It has therefore been an important purpose to produce a sign character that can be readily distinguished, irrespective of intervening space or angularity.

These objects are accomplished by the novel construction, combination and arrangement of parts hereinafter described and shown in the accompanying drawings, forming a material part of this disclosure, and in which:—

Figure 1 is a front view of a single significant character as used on a sign made in accordance with the invention, parts being broken away to show the construction.

Figure 2 is a bottom plan view of the same, partially in section.

Figure 3 is a fragmentary perspective view of a sign showing the disposition of several characters.

Figure 4 is an enlarged transverse sectional view taken substantially on line 4—4 of Fig. 3.

Figure 5 is a further enlarged fragmentary sectional view showing the construction.

The base or background of the sign may be a single plate of wood or metal, as indicated by the numeral 10, suited to conform to the size of the sign or, as shown, extend marginally beyond the profiles of the several characters.

If it be preferred, the back plate 10 may form the outer element of a hollow box-like structure, generally designated by 11, the same being provided with a removable cover 12, and adapted to receive and contain electric conductors 13 entering by the cable 14, the purpose of which will be further noted.

Attached to the back plate are the selected characters, which may be letters, figures, symbols etc. arranged so as to convey meaning to the public, the letter H being herein used to illustrate the structure employed.

The framing of each letter, varying as they do, calls for the display of certain mechanical ability well indicated by the selected letter which discloses a pair of side panels 15 and 16 extending the full length of the letter upon its opposite outer sides, relatively short inner side panels 17 and 18 above the cross bar, and lower inner panels 19 and 20 below it.

Each of the main vertical elements of the letter have top panels 21 and 22 and bottom panels 23 and 24.

The central cross bar has panels 25 and 26, respectively in its upper and lower sides making twelve in all, surrounded by rectangular frames having inturned flanges or pads 27 secured in any preferred manner to the back plate 10.

Held by suitable clips 28 fixed to the inner sides of the frame elements, are colored translucent panels, those on one side, as at the left of each letter and also the panels on top, being of one color, and those at the right and bottom of another color.

For instance the panels 15, 18, 20, 21, 22 and 25 may be red, while the oppositely disposed panels, 16, 17, 19, 23, 24 and 26 may be blue.

Disposed over the front of each character is a frame, generally designated by the numeral 29, shaped to conform to the outline or profile of the character and adapted to overlie the edges of the side frames before mentioned.

This frame carries a translucent panel 30 preferably of frosted glass through which rays of light may pass.

This frame may be held in position relative to the body of the letter by any preferred means as the posts 31, or hinges 32, and suitable clips, it being desirable to remove the face of the letter at times for the purpose of adjusting the lights, cleaning the interior and other reasons.

Disposed within the confines of the character, spaced parallel with the panels, are opaque partitions 33 secured at their lower

edges to the back plate 10 and having their upper portion 34 bent outward to make contact with the walls of the frame over the panels, thereby forming compartments 35 extending circumjacently around the entire letter.

These partitions also have diagonal extensions 36 at their ends, the same being adapted to completely prevent the transmission of light from compartments covered by one color of panel to those of another color and also from the central compartments 37 formed between the partition walls, these central compartments being the full width of the outer or cover panels 30, due to the out-turned portions 34 of the partitions.

Within these central spaces or compartments are arranged a plurality of lights, as the electric bulbs 38 the same being secured in sockets fixed on the back plate 10 and in connection with the wires 13.

Other similar lights 39 are disposed in the compartments 35 and are also in circuit with the wires 13, a switch (not shown) being provided on the cable 14 for controlling the current. As an alternative type of construction, well within the scope of the invention, all of the several panels may be uncolored or plainly translucent, and the light bulbs made in any preferred colors, the same general color effect being thus obtained.

From the foregoing it will be understood that when the lamps are energized, a person approaching from the left will see the red panels disclosing the outline of the letter; when in front the panel 30 shows a white letter and when at the right a blue letter will be seen, blending into the other according to the angle at which the letter is viewed.

As a modification, it is further proposed to utilize the outer panels of each letter in the manner shown in Figure 3, illustrating the word Hat and having on the lower portion of the stems of each letter an opaque or translucent readily distinguished letter 40 which may be the same or wholly different as shown.

Thus the word Hats, might read additionally to one approaching from the left Mens and on the opposite or right hand stems might appear the word Here, giving a variety in color, meaning and combination at once novel and practical.

As changes of construction could be made within the scope of the invention, it is intended that all matter contained in the foregoing description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

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

1. A sign character comprising a hollow body, containing interior partitions and having differently colored translucent side walls, lights in each compartment thereof, and an uncolored translucent cover for said body through which certain of said lights show.

2. A sign character comprising a hollow body, containing interior partitions forming a plurality of compartments; having differently colored translucent side walls, lights in each compartment thereof, an opaque character disposed on opposed side walls, being distinguishable by observation at angles to the main character, and an uncolored translucent cover over said body.

3. A sign character comprising a back plate, a translucent colored wall extending at a right angle from said plate enclosing the profile of a character, an opaque partition spaced interiorly said wall and at its outer edge connected therewith, lights within the intervening space between said wall and partition, other lights between said partition within the confines of the wall, and a translucent cover over said wall.

4. A sign character comprising a back plate, a translucent wall extending at a right angle from said plate enclosing the profile of the character, said wall disclosing one color when viewed from one side of the character and a contrasting color from the other side, partitions spaced from said wall, said partitions terminating below the full height of the wall and extending over the intervening space, lights in the mentioned space, other lights on the opposite sides of said partitions, and a translucent cover over the entire space included between said walls.

5. A sign comprising a back plate having one or more hollow bodies representing alphabetical characters, partitions in each body dividing the same into compartments in accordance with the character, said partitions being substantially parallel with the outlines of the character, transverse flanges from said partitions extending to the outer walls of the character, said outer walls being colored and translucent, lights in each compartment, and a translucent cover plate disposed over the character through which certain of said lights show.

6. A sign comprising a back plate having one or more significant hollow bodies each consisting of translucent walls raised at right angles, said walls showing a definite color from one side and a different color from the other side of the same body, opaque partitions spaced, shaped and disposed to form compartments associated with each colored translucent wall, lights disposed in each compartment, a translucent cover over each body, means for removably engaging said cover, and means for energizing each of said lights.

7. A sign comprising a back plate having one or more significant hollow bodies each

consisting of translucent walls raised at right angles, said walls showing a definite color from one side and a different color from the other side of the same body, opaque partitions spaced, shaped and disposed to form compartments associated with each colored translucent wall, a second significant character superposed on each hollow body, light producing means in each compartment, and an uncolored translucent cover over each body.

This specification signed and witnessed this ninth day of February, 1923.

J. J. HENRY MULLER.

Witnesses:
FRED'K C. FISCHER.
F. NOLL.