May 28, 1929. F. A. GRITT 1,715,129

SECTIONAL LUMINOUS ANIMATED OUTDOOR BILLBOARD

Filed Feb. 6, 1928

Fig. 1.

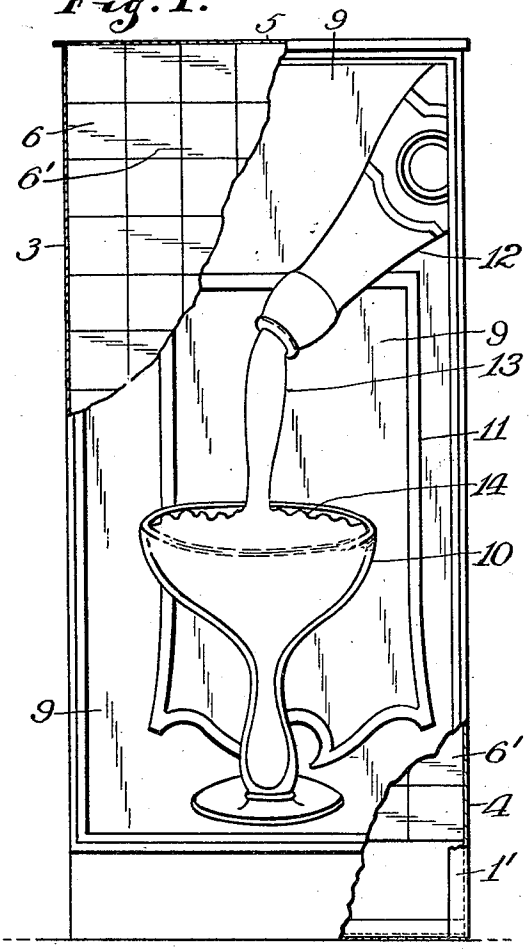


Fig. 2.

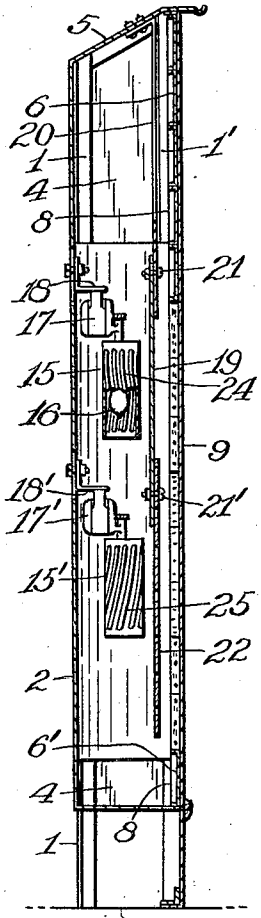


Fig. 3.

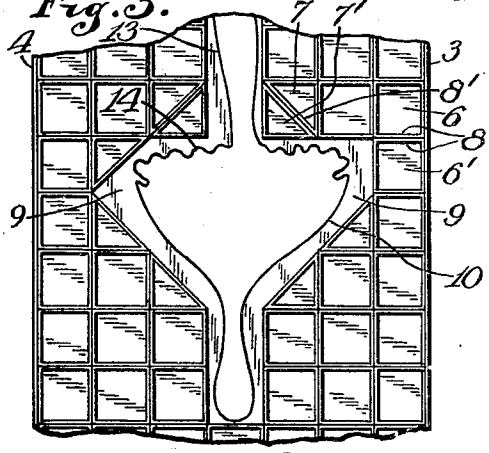


Fig. 4.

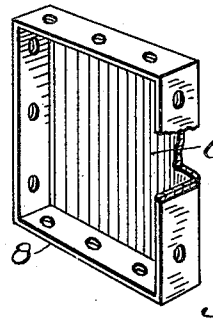
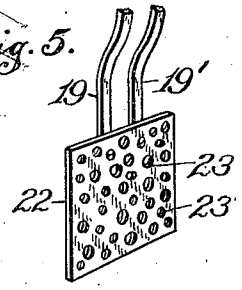


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRANK A. GRITT, OF INDIANAPOLIS, INDIANA.

SECTIONAL LUMINOUS ANIMATED OUTDOOR BILLBOARD.

Application filed February 6, 1928. Serial No. 252,355.

This invention relates to a bill-board on which advertising matter may readily be changed as occasion may require, without entailing great cost, the invention having reference more particularly to ornamental and specially attractive advertising matter, including luminous and illuminated classes of advertising which may embrace animated views or scenes.

An object of the invention is to provide an improved outdoor bill-board which shall be of such construction as to be weather-proof and permanent yet not of costly structure.

Another object is to provide an animated bill-board which shall be of such construction as to permit the display of portions of advertisements or signs with animated effect and attractive manner at small cost.

A further object is to provide an improved luminous bill-board which shall be of such construction as to permit the display of luminous portions of advertisements or pictures in an effective and attractive manner and at small cost.

A still further object is to provide a sectional luminous animated out-door bill-board which shall be weather-proof and permanent and shall be adapted to permit changing of advertising matter at small cost, with provision for readily changing luminous portions of the bill-board when advertising matter is required to be changed, which bill-board shall be durable and economical in use.

With the above-mentioned and other objects in view, the invention consists in a luminous animated bill-board, preferably having a sectional foundation or base part and a removable front part, the sections of the foundation part being interchangeable, and means to cause the removable front part or portions thereof to appear to be luminous; and further, the invention consists in the parts and in the combinations and arrangements of parts as hereinafter particularly described and further defined in the accompanying claims.

Referring to the accompanying drawings,—Figure 1 is a front elevation of the bill-board constructed substantially in accordance with the invention, with a picture thereon, portions of the front part being broken away; Fig. 2 is a transverse vertical section approximately central of the bill-board; Fig. 3 is a rear elevation of a considerable portion of the advertisement-carrying part of the bill-board, showing particularly the sectional structure thereof; Fig. 4 is a perspective view of one of the sections of the foundation part; and Fig. 5 is a fragmentary perspective view showing the preferred form of devices for causing obstruction and modification of light rays in the process of producing luminous animated effects.

Similar reference characters in the different figures of the drawings indicate corresponding elements or features of construction herein referred to in detail.

In a practical embodiment of the invention a suitable housing is provided which may conveniently comprise angle-iron posts 1, 1′, a housing back 2, sides 3 and 4 and a roof 5, the front of the housing preferably being mainly composed of removable and interchangeable sections, 6, 6′, each section preferably being quadrangular, some of the sections preferably being composed each of two separable triangular parts 7 and 7′. Each quadrangular section has a flange 8 on each of its edge portions and the longer edge portions of the triangular parts have flanges 8′ thereon, and each flange preferably has one or more bolt holes therein to receive bolts whereby to detachably secure each section to an adjacent section, so that the front of the sectional part shall have a plane face on which a cloth face part 9 or any suitable material is placed and suitably secured, the sectional part being the foundation part of the bill-board.

Advertising matter or a picture that may be required to be displayed is suitably applied on the front of the face part 9, as by painting or by printing, an example being illustrated which comprises a drinking glass or goblet 10, ornamental back ground figures 11, and a partially inverted bottle 12 from which a stream 13 of liquid appears to be flowing into the drinking glass and causing a foamy surface 14. The space within the contour of the glass 10 and the stream 13 is translucent, being slightly tinted to represent liquid, the required number of sections or portions being removed from the foundation part to prevent portions of the figures being opaque or obscured, and the remaining portions of the cloth or face part outside the contours are suitably rendered opaque that are not covered by the foundation part, the latter being metallic and opaque and firmly supporting the face part.

A suitable rotor 15 is arranged in the hous-

ing and preferably a similar rotor 15′ is arranged below the other, each rotor having an electric light bulb 16 therein. The rotor may be conventional, such as a hollow celluloid or transparent cylinder, mounted to be rotated by any suitable force, preferably by means of electric motors 17 and 17′ respectively secured to brackets 18 and 18′ respectively that are vertically adjustable on the housing back 2.

A strap 19 composed of opaque material, which may be metallic and preferably also a similar strap 19′ of similar material spaced suitably apart from the other, are arranged between the rotor 15 and the face part 9 and may be supported by a hanger 20 and a bolt 21 so as to be vertically adjustable, and an opaque plate 22 having suitable apertures 23 and 23′, more or less irregular in size and shape, is fastened to the straps by means of bolts 21′ so as to be vertically adjustable between the rotor 15′ and the face or front part 9. The surfaces of the rotors have suitable opaque material thereon, usually in the form of spirally curved bands 24 on one rotor and reversely curved bands 25 on the other, to interrupt light rays. It should be understood that any number of sections or portions of the foundation part may be removed, and may be changed when a change of advertising matter is required, to permit transmission of light through the designed translucent portions of the front part where figures or characters should be luminous or are to appear animated, and when a change of advertising matter is required the old front part may readily be removed, and a new one applied on which to paint or apply a new advertisement, thus retaining indefinitely the more costly parts of the bill-board.

In practical use the bill-board is stood up in the place where desired, usually in outdoor situations, preferably being weather-proof, and suitable preparations having been made to obtain illumination in the housing for obtaining the desired luminous effect on the front of the bill-board, proper adjustments having been made to that end, the advertising is continuously displayed without assistance of attendants. The translucent portions of the face or front part, and portions thereof that may be rendered transparent or nearly so, appear luminous, and in the figure illustrated as example, the figure portions leading from the bottle appears to be flowing liquid, while the drinking glass appears to contain bubbling liquid, mingling with the stream, due to the operations of the lighted rotors and the interruptors, the strap 19 and the plate 22 causing appropriate shadows to appear on the figures, amplifying the realistic effects of the rotors. Obviously the entire front of the bill-board may at night be illuminated by external lamps.

With the adjustments approximately as shown, the rotor 15 is behind and produces the simulation of the stream 13, the bands 24, however, tending to produce unsatisfactory effects in the absence of the strap 19, the strap as used enhancing the effects by causing intermittent rotor shadows so that the flowing of the liquid appears to be clearly defined and along downward lines without sidewise movement. The strap shadows give appearance of density to the flowing stream. The rotor 15′ is behind the bowl 10 so that the bands 25 with the strap 19 and the plate 22 cause the flowing and bubbling effect of the liquid in the goblet. The results become apparent upon operation of the devices.

What is claimed as new is:

1. An out-door bill-board having a foundation part comprising interchangeable opaque sections removably connected together, each of the sections being quadrangular and a number of the sections composed of triangular parts, one of the sections being omitted providing an opening, a translucent front face part bearing a display character removably secured to the foundation part and extending across the opening, and a light source behind the foundation part.

2. A sectional bill-board having a sectional foundation part, the sections of the part being opaque and provided with flanges detachably secured together, a number of the sections being omitted providing an opening in the foundation part, a front face part stretched on and secured to the foundation part and having a translucent portion covering said opening, the front of the face part bearing a display figure, and a light source in the rear of said opening.

3. An out-door bill-board including a housing having a front structure comprising an opaque sectional foundation part and a weather-proof front face part having a translucent portion removably secured to the foundation part, the foundation part having an opening behind the translucent portion, each of the sections of the foundation part having flanges detachably secured to the flanges of adjacent sections, the front face part having an advertisement thereon, and a light source in the rear of the foundation part.

4. A luminous animated bill-board having a front structure comprising an opaque base part and a cloth face part secured to the front of the base part, the face part having a translucent figure portion and being opaque about the figure portion, a base part being composed of removable interchangeable sections and having an opening therein behind the figure portion, and a lighted rotor having inclined opaque bands arranged behind the base part of the front structure.

5. A luminous animated bill-board including a cloth face part having a display character on its front side and opaque material

on its rear side defining a translucent face portion in the display character, an opaque back part secured on the rear side of the cloth face part having an opening therein corresponding in size and shape to the translucent face portion, a perforated plate arranged rearward of the back part, and a lighted rotor arranged rearward of the perforated plate.

6. In a sectional luminous animated outdoor bill-board, the combination of an enclosing housing having a front comprising a sectional base part and a weather-proof front face part on the front of the base part, the front of the face part bearing the picture of an object normally in motion, sections of the base part being removed, portions of the face part being translucent and other portions opaque, two rotors with opaque bands arranged one above the other and adjustably supported in the housing, lamp bulbs in the rotors respectively, an opaque strap stationarily arranged between the upper one of the rotors and said base part, and a perforated opaque plate stationarily arranged between the other one of the rotors and said base part.

7. In a bill-board, the combination of an enclosing housing, a front foundation part secured to the housing and having an opening therein, the foundation part being provided on its front with a face part having a translucent portion bearing the picture of an object normally in motion, said opening corresponding in size and form to the translucent portion, a light source in the rear of the foundation part, and a plurality of associated devices between the light source and the foundation part co-operating to cast inclined moving shadows and also a stationary vertical shadow on the moving shadows, one of the devices being rotary and the other stationary in the housing and supported thereby.

8. In a bill-board, the combination of an enclosing housing, a front foundation part secured to the housing and having an opening therein, said part comprising removable opaque sections, a front face part secured to the front of the said sections and having a translucent portion and an opaque portion arranged at the front of said opening, the face part bearing the picture of a solidly-flowing stream of liquid, two rotors with inclined opaque bands thereon arranged one above the other rearward of said opening and supported by the housing, light sources in the rotors respectively, an opaque strap stationarily arranged vertically between the upper one of the rotors and said translucent portion opposite to said pictured stream, the strap being fixedly supported by means of the housing, and a perforated opaque plate arranged between the other one of the rotors and the lower portion of said translucent portion, said plate being supported by means of said housing with relation to said strap.

In testimony whereof, I affix my signature on the 30th day of January, 1928.

FRANK A. GRITT.