May 23, 1950 E. D. McLENDON 2,508,680

ELECTRIC SIGN

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Fig. 1

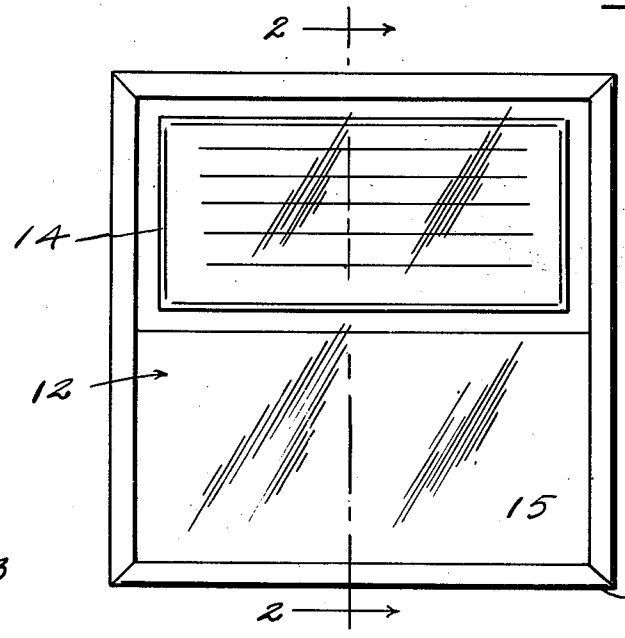


Fig. 1a

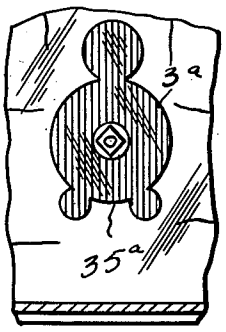
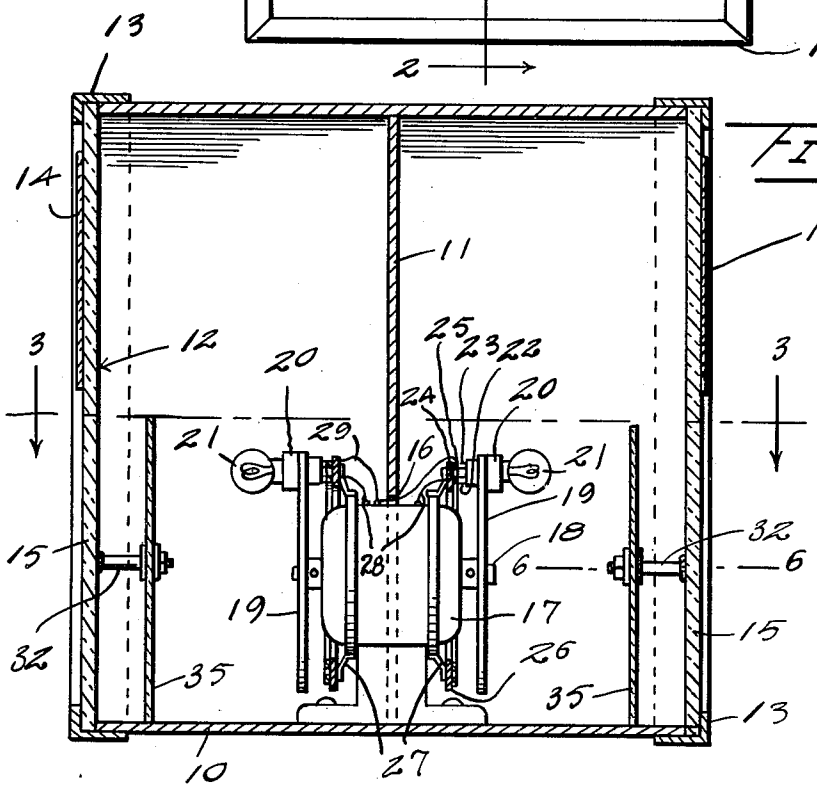


Fig. 2



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Fig. 3.

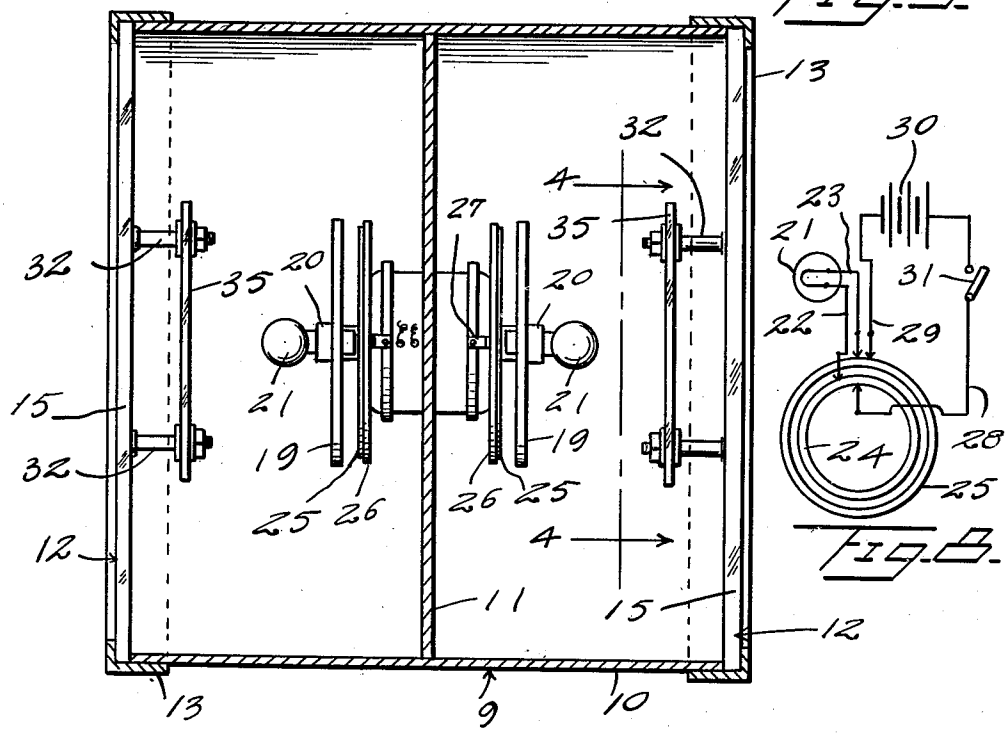


Fig. 8.

Fig. 4.

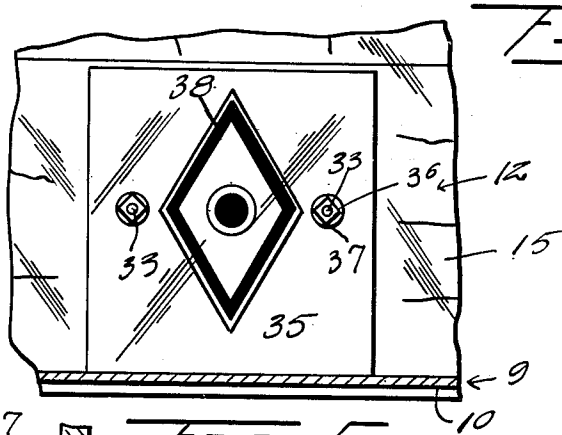


Fig. 5.

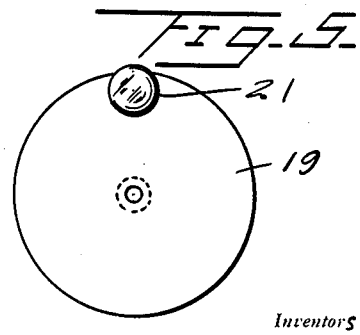
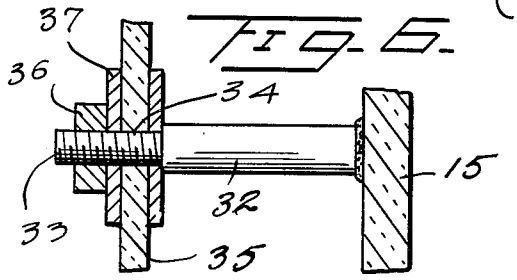


Fig. 6.



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ELECTRIC SIGN

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2 Claims. (Cl. 40—130)

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This invention relates to an improved construction of animated electric sign especially intended and adapted for use as an advertising medium and by means of which images will be projected onto a screen or transparent panel for attracting attention thereto and to illuminated advertising matter disposed in close proximity thereto.

More particularly, it is an object of the invention to provide an electric sign having a movably disposed light source for projecting images onto a screen or transparent panel whereby such image or images will be caused to appear to move relatively to the screen or panel.

Other advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, illustrating preferred embodiments thereof, and wherein:

Figure 1 is an end elevational view of the improved electric sign;

Figure 2 is an enlarged longitudinal sectional view taken substantially along a plane as indicated by the line 2—2 of Figure 1;

Figure 3 is a horizontal sectional view of the sign taken substantially along a plane as indicated by the line 3—3 of Figure 2;

Figure 4 is a transverse vertical sectional view taken substantially along a plane as indicated by the line 4—4 of Figure 3;

Figure 5 is a plan view of the illuminating means and its support;

Figure 6 is a fragmentary horizontal sectional view taken substantially along a plane as indicated by the line 6—6 of Figure 2;

Figure 7 is a view similar to Figure 4 of a modification of the electric sign, and

Figure 8 is a diagrammatic view of the electric circuit for the illuminating means of the sign.

Referring more specifically to the drawings, the electric sign in its entirety is designated generally 9 and includes an elongated housing 10 having a central transverse partition 11 and corresponding removable end walls 12 which are detachably retained in position by retaining members 13 of angular cross section which have corresponding sides engaging over the side wall 10 and opposite sides engaging the edge portions of the end wall 12.

The end walls 12 are preferably each in the form of a transparent or translucent panel having an upper part 14 adapted to contain any suitable printed matter or advertising matter which may be applied thereto in any suitable manner so as to render the portion 14 transparent or translucent and of various colors, or partially opaque and partially transparent or translucent, so that light rays passing outwardly therethrough will render the advertising matter on the portion 14 readily visible in either day or night. The lower half of each end wall or panel 12 constitutes a transparent or translucent panel or screen 15 which may be either plain or frosted and which may be colored or which may be provided with light diffusing screens or coatings on the inner sides thereof.

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The partition 11, in the embodiment of the invention as illustrated, is provided with an opening 16 in the bottom portion thereof to accommodate an electric motor 17, the base of which is suitably fastened to the bottom part of the side wall 10, as clearly illustrated in Figure 2, so as to position said motor in the lower part of the housing. The motor 17 extends through the opening 16 of the partition 11 and is shown provided with a driven shaft 18 which extends outwardly from each end thereof and to each end of which is keyed a disk 19. Each disk 19 is provided with a lamp socket 20 which is mounted therein adjacent its periphery and which is adapted to support a conventional incandescent lamp bulb 21, which projects from the outer side of the associated disk 19. Each socket 20 is provided on its inner end on the inner side of its disk 19 with radially spaced inner and outer electrical contacts 22 and 23, respectively, which respectively engage annular conductor strips 24 and 25, respectively, carried by a ring 26 of insulating material which is supported behind its associated disk 19 and around an end of the electric motor 17 by a plurality of supporting arms or brackets 27 which are in turn supported by the electric motor 17. It will be readily understood and as clearly illustrated in Figure 2, each of the disks 19 carries a socket and lamp bulb and each socket 20 is associated with a pair of conductor strips 24 and 25. The inner conductor strips 24 are preferably grounded by electrical conductor wires 28 on the casing of the electric motor 17 and a conductor wire 29 leads from each of the conductor strips 25 to a suitable source of electric current 30, as illustrated in the diagrammatic view, Figure 8. A manually control make and break switch 31 may be interposed in the circuit of Figure 8 for interrupting the flow of current to the lamp bulb 21 when the electric motor 17 is not energized. The circuit of Figure 8 illustrates only one of the lamp bulbs 21 and the circuit thereof, but it will be readily apparent that the other circuit for the other lamp bulb 21 is identical and further, it will be readily obvious, that only one light source and its associated cir-

cuit and rotating means may be utilized, in which case a partition 11 could function as a rear wall.

Each of the transparent or translucent portions 15 is provided with one or a plurality of inwardly extending pins or supports 32 having inner restricted, threaded ends 33 adapted to extend through apertures 34 in one or a plurality of image members 35 which are thus supported between the screen or panel 15 and its light source 21. The image members 35 are retained on the threaded portions 33 by a nut 36 and are protected by washers 37, disposed on each side of the member 35. The image member or members 35 may be formed of various materials including transparent or translucent colored materials or opaque or partially opaque materials, so that the light rays from the light source 21 will either be projected therethrough for projecting an image of the member 35 on its associated screen or panel 15 or so that the member 35 will intercept the light rays so as to produce a shadow on the otherwise illuminated panel or screen 15.

In Figure 4 the image member 35 is shown as being formed of a transparent material having a design 38 thereon which may be either opaque or of colored transparent or translucent material, and in Figure 7 a smaller, distinctively shaped image member 35a which is preferably formed of a colored transparent or translucent material, is disclosed.

From the foregoing it will be obvious that when the light sources 21 are energized and the motor 17 is likewise energized for revolving the shaft 18 and disks 19, that each light source 21 will revolve behind the image member or members 35, associated therewith, so that the light rays, from the revolving light source, will be projected through the images for casting a moving representation thereof on each screen or panel 15, located outwardly of said image member 35. Likewise, if the image member 35 is formed of opaque material, a moving shadow from the light source 21 will be projected onto the screen 15, so that various forms of image members may be utilized and the images or shadows therefrom projected on the screen or screens 15 so as to appear to be moving in a circle, and by providing a plurality of image members 35 in association with each light source 21 and screen 15, various novel

results may be obtained. Further, by mounting the disks 19 eccentrically on the shafts 18 the light sources 21 can be caused to move in an irregular endless path for accomplishing other novel effects.

The light source or sources 21 can be utilized to illuminate the advertising panels 14 or other illuminating means may be provided in the casing for this purpose.

Various other modifications and changes are likewise contemplated and may obviously be resorted to, without departing from the spirit and scope of the invention as hereinafter defined by the appended claims.

I claim:

1. In an electric sign, an opaque casing having transparent or translucent end walls provided with upper sections adapted to contain advertising matter and lower sections forming screens, said casing having a transverse partition intermediate of its ends, an electric motor mounted in the casing and extending through said partition and disposed adjacent the bottom thereof, an armature shaft driven by the motor and having portions disposed on either side of the partition, supporting members projecting radially from said shaft portions, a light source mounted on each of said supporting members and rotated by said shaft, and a stationary colored transparent or translucent member interposed between each screen and light source and through which the light rays are adapted to pass for projecting a moving image of said member on the screen.

2. An electric sign as in claim 1, and commutator means forming a part of the electric circuit of each of the movable light sources.

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