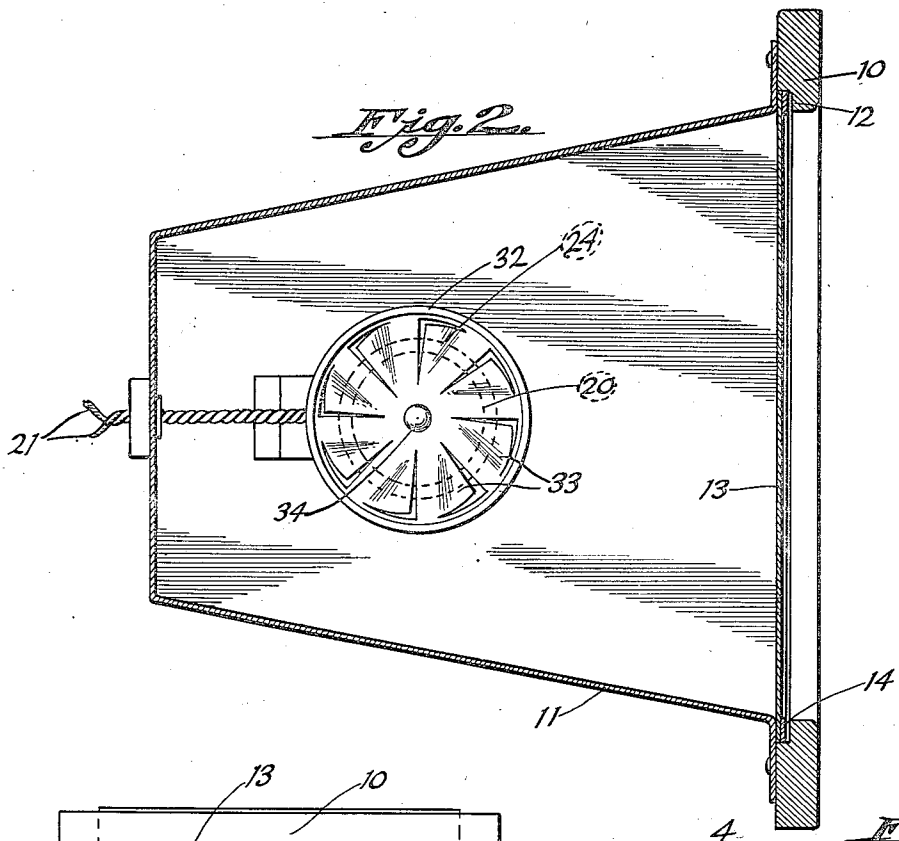
Jan. 30, 1923. 1,443,919.

W. J. LE VIE.

ADVERTISING DEVICE.

FILED SEPT. 22, 1921. 2 SHEETS—SHEET 1.

Fig. 2.



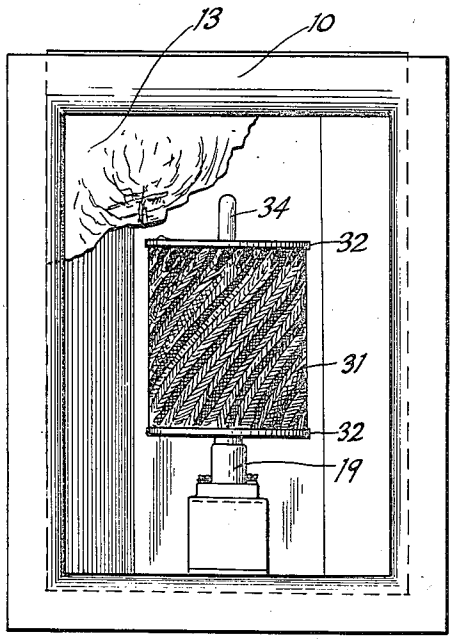
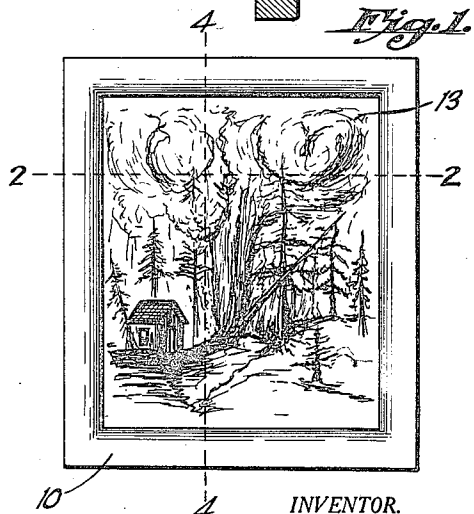


Fig. 3.

Fig. 1.



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ADVERTISING DEVICE.

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Fig. 4.

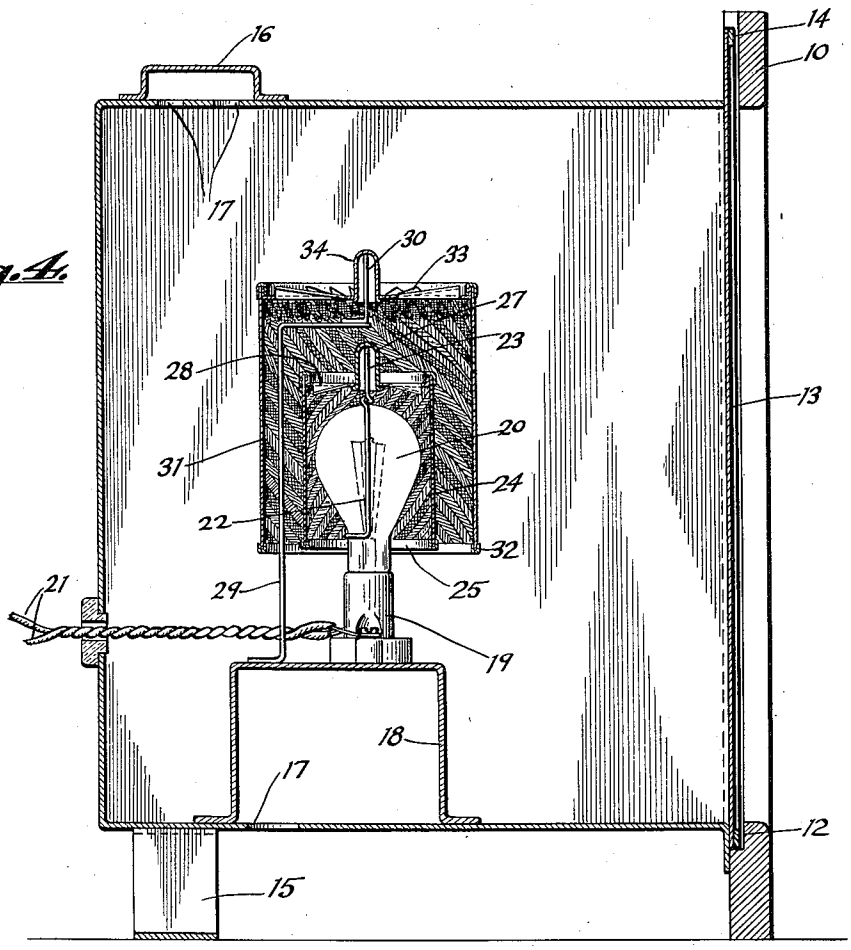


Fig. 5.

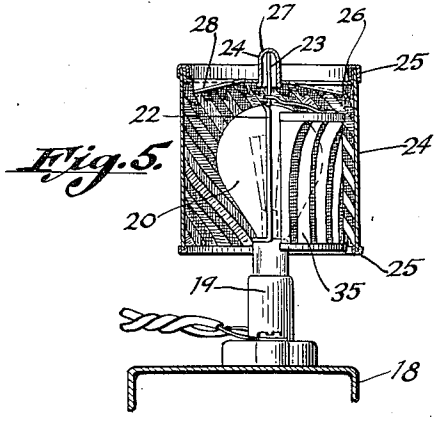
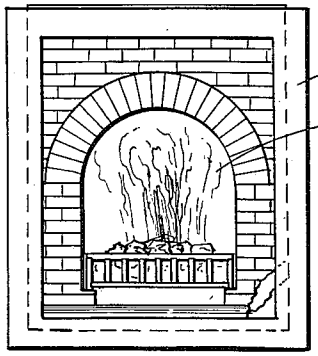


Fig. 6.



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Patented Jan. 30, 1923. 1,443,919

UNITED STATES PATENT OFFICE.

WILFRED J. LE VIE, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO ABRAHAM M. CHAPMAN, OF LOS ANGELES, CALIFORNIA.

ADVERTISING DEVICE.

Application filed September 22, 1921. Serial No. 502,403.

To all whom it may concern:

Be it known that I, WILFRED J. LE VIE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Advertising Devices, of which the following is a specification.

My invention relates to an illuminated advertising or display device of the general type disclosed in my co-pending application, filed August 5, 1920, Serial No. 401,511; the principal objects of my present invention being to generally improve upon and simplify the construction disclosed in my aforesaid co-pending application, as well as other similar types of advertising and dispayl devices; to provide a relatively simple and practical device in which a plurality of independently movable members may be arranged for operation adjacent to each other and adjacent to a source of light; to equip the independently movable members with means that is adapted to be impinged by the heated air arising from the source of light in order to impart rotary motion to said members; further to construct the walls of the independently rotating members of transparent or translucent material and to arrange on said walls different colors so that differently colored rays of light will be transmitted onto a transparent or translucent screen or panel arranged in the front of the device, and consequently producing on said screen or panel illuminated colored motion effects, such for instance as are produced by fire, smoke, vapor, rain, snow, or water in motion.

A further object of my invention is to provide a relatively simple, practical and attractive illuminated advertising device having transparent screens or panels that are readily removable in order that different illuminated scenic effects may be produced by interchange of the screens or panels.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will be herinafter more fully described and claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a front elevational view of an illuminated advertising device of my improved construction.

Fig. 2 is an enlarged horizontal section taken approximately on the line 2—2 of Fig. 1.

Fig. 3 is a front elevational view of the device with the greater portion of the screen or panel broken away.

Fig. 4 is an enlarged vertical section taken on the line 4—4 of Fig. 1.

Fig. 5 is a vertical section showing a modified arrangement of the screens utilized for producing the differently colored light rays.

Fig. 6 is a front elevational view of the device and showing a modified form of the screen on which the illuminated motion effects are produced.

Referring by numerals to the accompanying drawings which illustrate a practical embodiment of my invention, 10 designates a substantially rectangular frame, and secured thereto around the opening therein is the forward edge of a rearwardly projecting housing 11, preferably of sheet metal, and which gradually decreases in width toward its rear end.

The rear face of the frame around the opening thereof is rabbeted in order to form a narrow pocket 12 that is adapted to receive the screen or panel on which the illuminated motion effects are produced.

The screen or panel on which the illuminated effects are produced consists of a substantially rectangular section 13 of thin transparent material such as paper, tracing linen, glass or the like, and which section of material is carried by a marginal frame 14 which latter is adapted to be readily positioned within or removed from the pocket 12.

The rear portion of the house 11 is supported by a depending bracket 15, and arranged on top of the housing is a loop 16 that provides a handle whereby the entire device may be lifted when carried from one point to another.

Formed in the bottom and top of the house are openings 17 which permit air to circulate through the chamber within the housing.

Mounted on a suitable support 18 within the housing is a socket 19 that is adapted to receive an incandescent electric light 20, and leading to the terminals of said socket are current supply wires 21.

Removably positioned on the bulb of the lamp 20 is a frame 22 and projecting up-

wardly from the central portion of the top is a vertically disposed rod 23 that provides a support for the inner one of the rotating members that surrounds the lamp bulb. This inner member comprises a vertically disposed tubular body 24 of transparent material such as isinglass, glass or like material, the upper and lower edges of which are reinforced by rings 25 preferably of light sheet metal.

Secured to the ring at the top of the tubular body is a plate 26 preferably of metal, and seated in the center thereof is an inverted cup shape member 27, that receives and bears upon the upwardly projecting member 23 of bracket 22.

Formed in the plate 26 is a series of radially disposed slots and the material to one side of each slot is bent downwardly to form an inclined vane or blade 28. By such construction a fan-like propeller wheel is provided at the upper end of the tubular member 24, said propeller having a plurality of radially disposed inclined blades against which the heated air arising from the lighted lamp is adapted to impinge and consequently causing the tubular member 24 to rotate upon the support member 23.

The surface of tubular member 24 is provided with a series of differently colored stripes of ribbon-like areas and the latter are preferably spirally arranged on the surface of said member. The color of these stripes will depend of course upon the effect that is to be produced on the screen 13. For instance, in producing fire-like effects the stripes of color will run in different shades of red and yellow to represent flames, and from black to light gray to indicate smoke; or if water effects are to be produced the stripes may run in different shades of green or blue.

Projecting upwardly from support 18 to the rear of socket 19 is a standard 29, the upper portion of which is extended inwardly to a point over the bearing member 27, and projecting upwardly from the end of said inwardly turned portion and directly above member 23 is a supporting member 30.

Inclosing the tubular member 24 and the upper portion of standard 29 is a tubular member 31 of transparent material that is reinforced at its upper and lower edges by light weight metallic rings 32. Secured to the upper one of the rings 32 is a thin plate of sheet material, preferably metal, in which is formed a series of radially disposed inclined blades or vanes 33, and which constitute a fan-like propeller wheel, the blades of which are impinged by the heated air arising from the lighted lamp that is inclosed by the lower portion of the cylinder.

Projecting upwardly from the center of the propeller wheel at the top of cylinder 31, is an inverted cup shape bearing 34, that receives and bears upon supporting member 30. The member 30 provides a point bearing for the tubular member 31 and permits the latter to rotate freely when the inclined blades 33 are impinged by the heated air arising from the enclosed lamp.

The blades or vanes 33 are oppositely inclined with respect to the vanes or blades 28 so that in operation the cylindrical members 24 and 31 rotate in opposite directions.

The surface of the tubular member 31 is covered with differently colored, spirally disposed strips or ribbon-like areas, and the arrangement thereof, that is the general direction in which they lie, is oppositely disposed relative to the spiral arrangement of the colored strips of tubular member 24.

The colors of the strips on tubular member 31 will depend of course upon the effect that is to be produced on the screen 13, and the coloring of one tubular member will depend to a large extent upon the coloring of the other tubular member. For instance, if fire effects are being produced the inner tubular member 24, may be provided with strips or ribbon-like sections that are colored black, brown, and gray upon the screen, and the strips on the outer tubular member 31 may be colored in different shades, red and yellow to produce flame like effects upon the screen.

The transparent portion 13 of each screen or panel has painted or printed upon it a suitable scene, for instance, the representation of a forest fire, a waterfall or the like, and those portions of the scene that represent the earth, buildings, trees and the like are preferably painted with opaque paint or covered with suitable opaque material.

In some instances, in the representation of a fire place, the screen 13 may be painted to represent burning wood or coal, and a second screen of opaque material and painted or printed to represent a black or stone fire place, may be removably positioned in front of the painted screen as illustrated in Fig. 6, thus leaving a portion of the transparent screen 13 exposed, and which portion has painted on printed thereupon the representation of flames arising from burning fuel.

In the operation of my improved device, the tubular members 24 and 31 are arranged on the supports 23 and 30, and after the lamp 20 has been lighted for a short time, heated air arising therefrom will impinge against the inclined blades arranged in the upper ends of the tubular members with the result that the latter will be rotated in opposite directions.

The rays of light from the lamp 20 will pass through the differently colored positions of the tubular members 24 and 31 and the resulting colored rays of light will be thrown on to the transparent screen or panel 13, thereby illuminating the same, and producing effects corresponding with the pic-

ture that is painted or printed on the screen or panel.

Inasmuch as the colored stripes or ribbon-like areas are spirally disposed upon tubular members 24 and 31, the color rays of light transmitted into the painted screen or panel at the front of the device will give the appearance of rising flames and smoke.

In the event that the screen is provided with a picture of water, the colored rays of light thrown on to the screen will, as the device is operated, illuminate the picture so as to produce the effect of moving water.

It will be understood that the painted or colored portions of the tubular members may differ in shape, size and angularity to suit the picture that is being illuminated, and, further, some of the strips or areas may be opaque while others may be translucent and others transparent.

Obviously each device may be provided with a number of interchangeable tubular members and with a corresponding number of interchangeable screens so that each device is capable of producing a number of different illuminated scenes and effects.

Further, if desired, the tubular members may be rotated by suitable means, other than the heated air arising from the lamp. For instance, the drive means may comprise a small motor or spring operating gearing.

In Fig. 5 I have shown a modified construction wherein a semi-circular screen 35 is positioned directly in front of the lamp bulb, said screen being held in stationary position, in any suitable manner, and said stationary screen being provided with vertically disposed colored strips or areas which co-operate with the colored areas on the rotating tubular members in producing different effects on the stationary screen at the front of the device.

Thus it will be seen that I have produced a relatively simple, practical and efficient device for producing novel and pleasing color effects upon a transparent or semi-transparent screen, and which device may be easily and cheaply produced and which is very economical in operation.

Various changes in the size, form and construction of the various parts of my improved advertising device may be made and substituted for those herein shown and described without departing from the spirit of my invention, the scope of which is set forth in the appended claim.

I claim as my invention:

In an advertising device, the combination with a housing having a transparent front screen, of a source of light located in the housing to the rear of said screen, a translucent cylinder mounted rotatively upon and surrounding the source of light, a standard extending upwardly beside the source of light and said rotary cylinder and having an inturned arm at its upper end provided with a pivot member coaxial with the axis of the said cylinder, and an outer, translucent cylinder mounted rotatively on said shaft member; the rotary cylinders being provided with means operative to rotate the same by an ascending stream of heated air.

In testimony whereof I have signed my name to this specification.

WILFRED J. LE VIE.