Feb. 18, 1930. B. E. MAXON 1,747,377

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FIG. 1

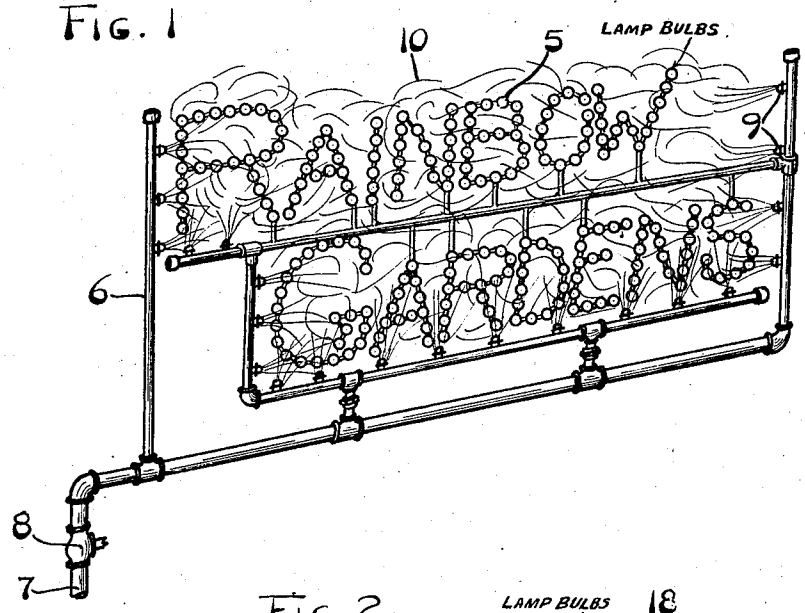

FIG. 2

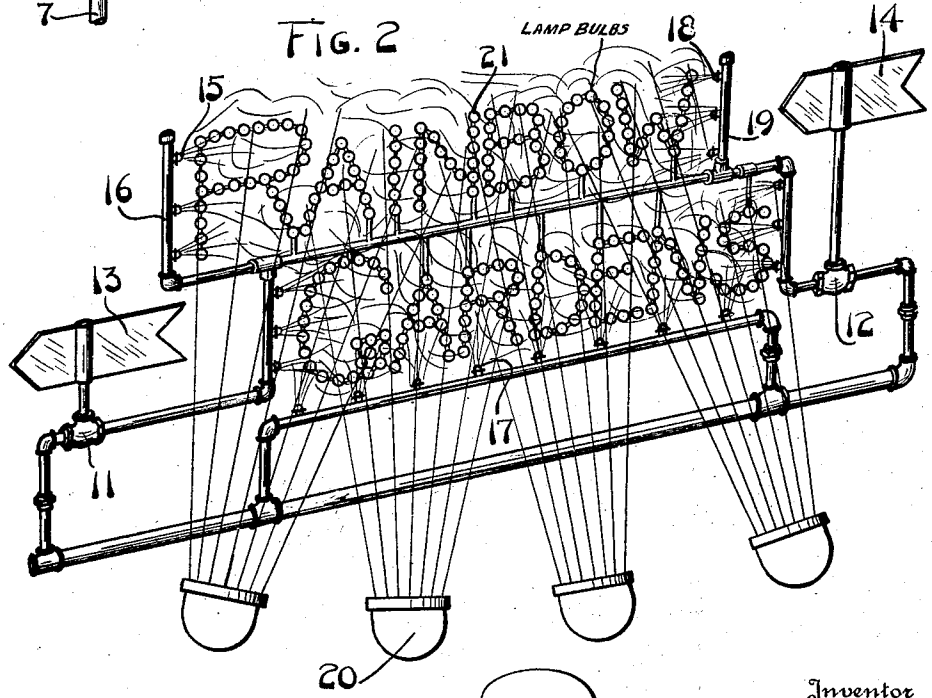

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FIG. 3.

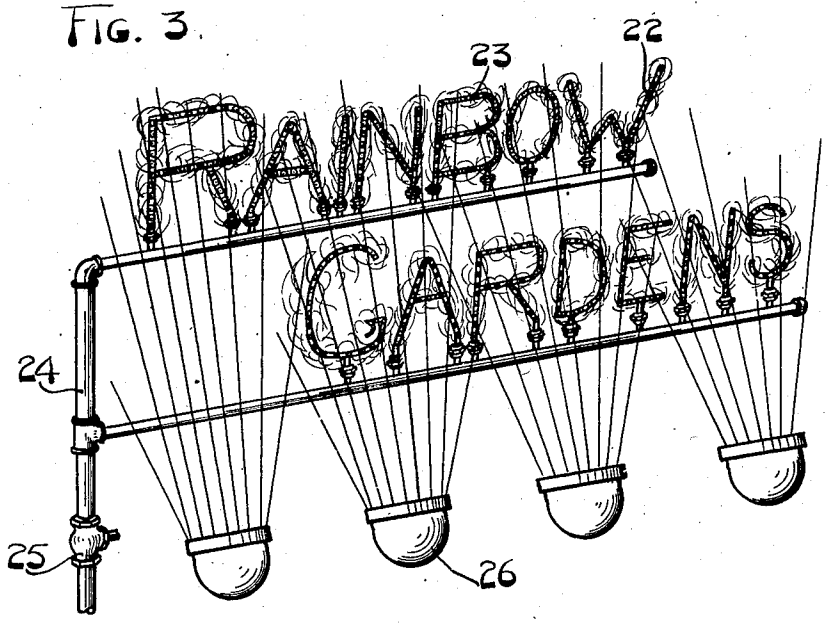
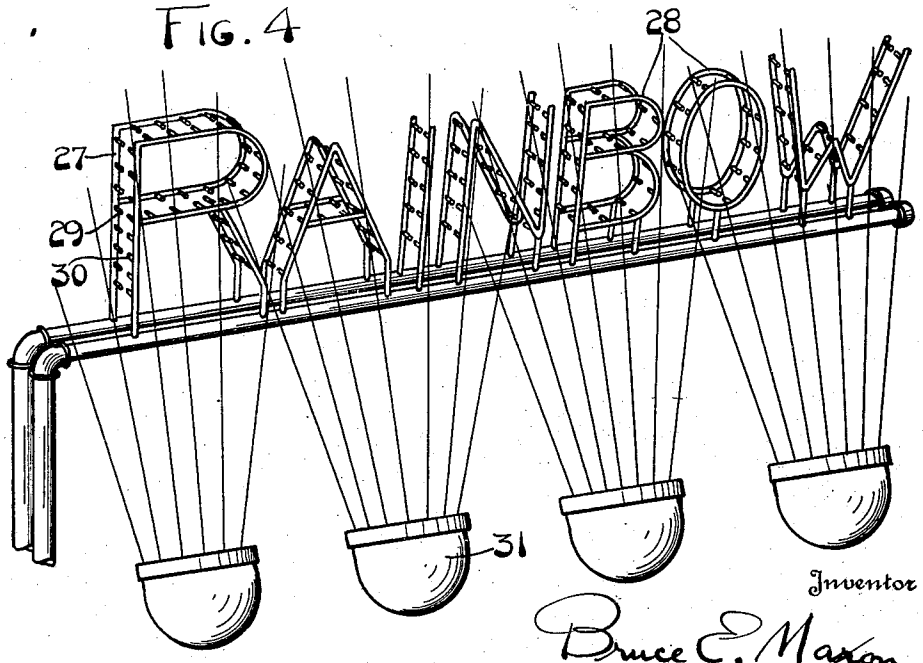


FIG. 4



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UNITED STATES PATENT OFFICE

BRUCE E. MAXON, OF CINCINNATI, OHIO

SIGN

Application filed July 30, 1927. Serial No. 209,518.

My invention relates to an improved sign in which an object is a novel combination of illumination with certain enhancing effects produced by vapors of marked characteristics or in which combinations of vapors with suitable illumination are employed to create weird, mysterious, alluring and yet thoroughly legible results.

A further object is to produce an improved sign which in adapting itself to the use of vapors and sources of illumination in cooperation, may be controlled in its functioning with suitable pressure, thermostatic or wind operated instrumentalities.

These and other objects are attained in the embodiments disclosed in the following specification and illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of a form of my invention employing an illuminated sign of the usual electric sign type with vapor distributing apparatus associated therewith, with a suggestion for thermostatic or pressure control of the vapor.

Fig. 2 is an amplified form of the invention shown in Fig. 1, in which mechanism is employed for wind control of the vapor discharge, with additional illumination provisions for color flood lighting of the vapor.

Fig. 3 is a slightly simplified form of the invention employing only a vapor and flood lighting combination with a pressure or thermostatic control device.

Fig. 4 is a form employing the same general idea as is shown in Fig. 3, but utilizing the idea of mixing vapors of different characteristics in the present of a scheme of flood lighting.

The form of my invention shown in Fig. 1 consists of a sign of the usual electric type in that suitable supports of character outline are employed with the usual electric bulbs 5 for illumination of the outline. Associated with this character arrangement is a vapor projecting device consisting of piping 6 leading from a main pipe 7 in which a pressure or thermostatic valve 8 is or may be located. This piping 6 preferably extends beneath the sign legend and up the sides thereof, with nozzles 9 at intervals along the length of the piping in position to discharge vapor across the illuminated character outlines. The vapor employed in this form of the invention is preferably steam and is projected from the nozzles in a series of jets which form clouds of steam 10. This cloud like atmosphere surrounding the lamp bulbs 5 gives a most surprising and pleasing effect as of illumination coming from a cloud with an outline which assumes a shape of legibility. If the device 8 is a pressure regulating valve the emission of steam may be depended upon to be substantially uniform regardless of variation in pressure, but if the device 8 is of a thermostatic character the effect will be to increase the flow of steam in cold weather while in warm weather it will reduce the flow of steam.

Fig. 2 shows an idea which is a substantial duplicate of that shown in Fig. 1, with the exception that the pressure or thermostatic valve 8 is eliminated and in lieu thereof there is substituted one or more wind controlled valves 11 and 12. For example, if the wind is blowing as from the left hand side of the sign as shown in Fig. 2, the vanes 13 and 14 on the respective valves 11 and 12 are arranged so as to swing as shown to open valve 11 and close valve 12. The result is that the nozzles 15 of pipe 16 will emit steam for discharge across the face of the sign while the lower row of nozzles 17, which are not so controlled, project steam continuously. Now if the wind should reverse in direction the nozzles 15 will be stopped while nozzles 18 of pipe 19 will be opened so that the steam will be projected across the sign from the opposite direction. In addition to these features I have shown a form of flood lighting 20 by which the vapor floating across, around and through the lamp bulbs 21 of the sign is given a tint as of colored clouds drifting by.

Fig. 3 is a view disclosing an embodiment of my invention carrying the combined vapor and illumination idea to a point suggested by the preceding embodiments in that the source of vapor supply is made to take the outline of the sign characters instead of the lamp bulbs being used therefor. This is accomplished by making the pipes 22, which carry the nozzles 23, to conform with the outline of

the characters and then locating the nozzles thereon in closely spaced relation so that the cloud of vapor will take on the form of the outline of the character. These pipe outlines are mounted suitably on the supply piping 24 to which the thermostatic or other control device 25 is attached. In order to obtain the necessary illumination of the cloud like character shapes of vapor I have provided the flood lighting sources 26, which may be of a varied color character in order to enhance the effect.

Fig. 4 discloses an amplification of the idea shown in Fig. 3, in that the supply pipes mount duplicate character outlines 27 and 28, which carry nozzles 29 and 30 located to face each other. The result of simultaneous discharge from these facing nozzles is to cause the jets of vapor to collide with each other head on as it were and thus produce a flattened out effect of the cloud thus obtained and in a measure creating a more ribbon like characteristic of the character outlines thus produced. Flood lightning 31 may then be placed to illuminate these vapor character outlines and in color if desired. Up to the description of Fig. 4 I have probably given the impression that I contemplate the use of nothing but steam as a vapor. Nevertheless this is not my intention, in that the construction just described is intended primarily for the usage of two gases which, when brought into contact with each other will form a cloud which is the chemical resultant of two gases of definite chemical composition.

Of course it is quite possible to rearrange the elements of the forms I have shown and to form other combinations thereof so that other pleasing and novel effects may be produced, but it is apparent that such changes will not deviate from the spirit and scope of my invention as set forth in the appended claims.

What I claim is:

1. A sign or display device comprising two elements spaced apart, one of said elements affording illumination and the other of said elements affording a supply of vapor in the presence of the illumination, one of said elements having the shape of the characters to be displayed, a vapor supply pipe connected with the vapor discharging element, a valve in the pipe, and a wind-controlled vane attached to the valve and automatically controlling it to govern the functioning of the vapor discharge element.

2. A sign or display device comprising two elements, one of said elements affording illumination, the other of said elements affording a discharge of vapor into the presence of the illumination, one of said elements having the shape of the characters to be displayed, means connected with the second mentioned element to control the discharge of vapor therefrom, and a vane responsive to wind variation, connected with said means and controlling it to affect the functioning of the second mentioned element.

3. A sign or display device comprising an element shaped to character outline and bearing means for illuminating it, a source of vapor discharge exterior to and adjacent to the element for creating a cloud of vapor in the presence of the illumination, a valve associated with the source of vapor discharge, and means connected with the valve, responsive to air current variation and functioning to cause the valve to control the vapor discharge source.

4. A sign or display device comprising two elements spaced apart, one of said elements affording illumination, the other of said elements discharging a supply of vapor into the presence of the illumination, one of said elements having the shape of the characters to be displayed, a vane responsive to wind variation, and a valve associated with the vapor-discharge element and operated by the vane to control the functioning of the vapor-discharge element to bring about vapor illumination at such times as vapor would be carried by the wind across the path of light from the source of illumination.

5. A sign or display device comprising two elements spaced apart, one of said elements affording illumination, the other of said elements affording a discharge of vapor in the presence of the illumination, and a vane responsive to wind variation, connected with one of the elements to control the functioning thereof.

In testimony whereof I have hereunto affixed my signature.

BRUCE E. MAXON.