H. G. RUSSELL
LIGHT PANEL FOR SIGNS AND LAMPS
Filed Dec. 7, 1921

Fig. 1.

Fig. 2.

Fig. 3.
To all whom it may concern:

Be it known that I, HARRY G. RUSSELL, a citizen of the United States of America, and resident of Lima, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Light Panels for Signs and Lamps, of which the following is a specification.

This invention relates to translucent lenses or screens for signs, the same being adapted to be placed in front of a lamp through which the light will show in different colors according to the coloring of the coating which the screen carries; and it is further an object of this invention to produce a screen of the character indicated which will prove unusually strong and durable, since the body comprises a wire screen structure effective to carry a binder which will support a plastic composition, the surfaces of which may be treated to produce the color effect and scheme for displaying light in different colors.

It is a further object of this invention to produce a flexible or glass composition which may be successfully employed as lenses for automobile lamps and the like, to produce a non-glare substitute for glass lenses now in use.

It is a further object of this invention to produce a screen of the character indicated which will prove comparatively inexpensive and which will withstand hard usage without there being liability of fracturing the screen.

With the foregoing and other objects in view, the invention consists in the details of construction, and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this application wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 illustrates a view in elevation of a screen having the plastic material applied thereto:

Figure 2 illustrates a sectional view thereof; and

Figure 3 illustrates enlarged views of fragments of screens differently colored:

In carrying out the invention, and in one embodiment of the invention, I employ a body 1 of wire screen, the interstices of which are filled and coated with silicate of sodium, the said filling being identified by the numeral 2. Figure 2 shows that after the body of silicate of sodium has been applied to the frame, the body of silicate of sodium is covered with a film of ground glass, the said ground glass being applied to each side of the screen. The ground glass is of any appropriate color such as red, green, blue, brown or orange, as indicated by the sections in Figure 3 of the drawing. The body 1 may, of course, be formed of foraminous material other than wire screen.

The silicate of sodium retains its state of pliability after it has been applied to the screen, and the metal of the screen is likewise pliable so that it can be shaped to produce a curved lens or a lens having portions angularly disposed with relation to other portions.

Previous to the application of the ground glass, the silicate of sodium should be coated with some agent which will serve as a binder for holding the ground glass on the body, and in this step of the process of manufacture, I employ varnish, lacquer, shellac, liquid paraffin or like gummy substances which will serve the purpose. The product may further be coated with a waterproof coating and this coating may be varnish or the like.

The purpose for which the product is used is in connection with the manufacture of illuminating devices as a substitute for solid transparent or opaque glass, as it can be manufactured much cheaper than solid glass and will not be liable to damage in shipping, and it will result in cheapening the production of electric signs, standing lamps and the like.

When the screen is used as a lens for automobile lamps, it intercepts the direct rays of light and so diffuses said rays as to spread the light evenly and to a great distance transversely, so that the driver is enabled to see the sides of the roadway in front of the automobile.

I claim:

In a screen of the character indicated, a body having openings therein, silicate of sodium filling the openings, a binding agent coating the said body and filling, substantially pulverized glass carried by the coating, and a waterproof covering for the said glass, consisting of transparent lacquer.

HARRY G. RUSSELL