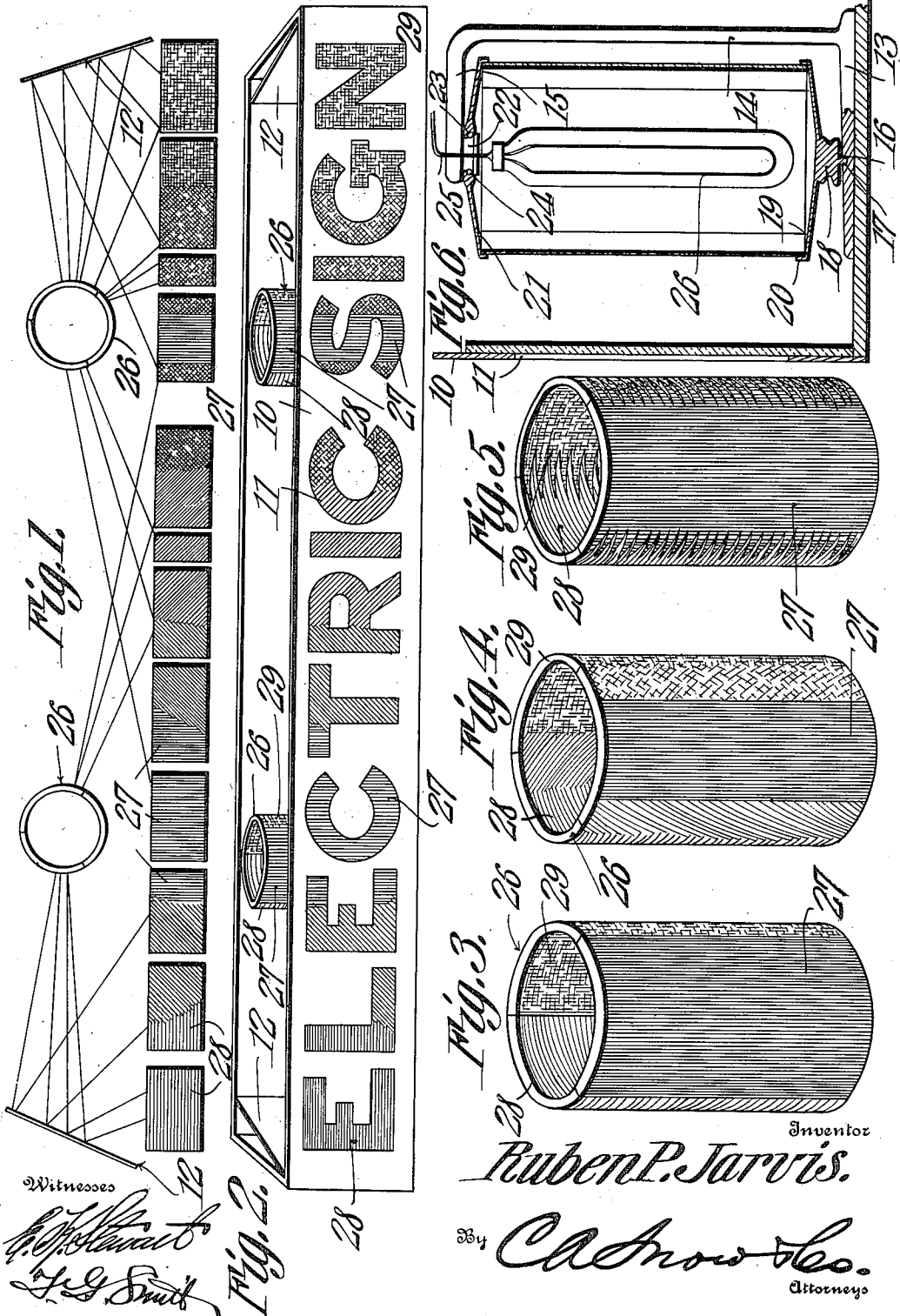


1,064,911.

Patented June 17, 1913.



UNITED STATES PATENT OFFICE.

RUBEN PALMER JARVIS, OF SMITH CENTER, KANSAS, ASSIGNOR OF TWO-THIRDS TO
ALOYTIOUS FRED LUTZ, OF BELOIT, KANSAS, AND ONE-THIRD TO THE MANY
COLORED ELECTRIC COMPANY, OF BELOIT, KANSAS, A CORPORATION.

ILLUMINATED SIGN.

1,064,911.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed June 5, 1909. Serial No. 500,332.

To all whom it may concern:

Be it known that I, RUBEN P. JARVIS, a citizen of the United States, residing at Smith Center, in the county of Smith and State of Kansas, have invented a new and useful Illuminated Sign, of which the following is a specification.

It is the object of the present invention to provide a novel form of illuminated sign and the invention aims primarily to provide a sign which will attract and hold attention.

The invention relates more specifically speaking to signs of that class in which the sign characters are illuminated by light rays of various colors and whereas such signs have heretofore been so constructed that each character or set of characters would have a distinct color, it is the object of the present invention to provide means for illuminating the sign characters in such manner that they will be constantly changing not only from one color to another but through all of the tints between such changes in color.

Broadly speaking, the invention resides in providing a sign having a character panel and in arranging behind this panel means for emitting vari-colored rays of light and for blending such rays whereby the sign characters will present the appearance of a constantly shifting spectrum.

In the accompanying drawings, Figure 1 is a diagrammatic view showing the principle of the invention. Fig. 2 is a perspective view of a sign constructed in accordance with the invention, the operating mechanism being omitted. Fig. 3 is a perspective view of one form of cylinder employed in the sign. Fig. 4 is a view similar to Fig. 3 but showing another form of illuminating cylinder employed. Fig. 5 is also a view similar to Fig. 3 showing still another form of cylinder, and Fig. 6 is a vertical sectional view taken from front to rear of the sign showing the mechanical construction thereof.

As heretofore stated, the invention resides in mounting behind a translucent sign panel, means for emitting vari-colored rays of light and for blending such rays and in carrying out the invention there is provided a translucent sign panel, a plurality of glass cylinders arranged behind the panel and for

rotation, and colored with one or more primary colors, illuminating devices in said cylinders, and reflectors arranged adjacent to the cylinders for blending the vari-colored rays of light emitted therefrom.

In the drawings, the sign panel is indicated by the numeral 10 and has translucent sign characters 11 arranged therein in any desired manner, these characters being preferably of ground glass although glass of other forms or as a matter of fact other materials may be employed if found desirable. This sign panel 10 preferably constitutes the forward wall of a sign box in each end of which is mounted a reflector 12. These reflectors 12 are disposed at such an angle as to reflect rays of light upon the sign panel and the vari-colored cylinders heretofore mentioned are mounted between these reflectors and behind the sign panel.

In mounting the cylinders above referred to there are provided brackets which each include a base 13 and a standard 14 which has its upper end intumed to extend above the base as at 15 and in the upper face of the base 13 there is formed a step bearing 16 in which a stud 17 is formed axially of a pulley 18 carried upon a disk-like head 19. This head is provided with a peripheral flange 20 and supports the lower end of one of the vari-colored cylinders. At the upper end of each cylinder there is provided another head which is indicated by the numeral 21 and this latter head is formed axially with an opening receiving a boss 22 upon the under side of the over-hanging portion 15 of the upright 14. This boss 22 is peripherally grooved as is clearly shown in Fig. 6 of the drawings and this groove affords a ball race as does also a groove which is formed in the edge of the opening in the said head 21, there being bearing balls 24 disposed in these races. The boss 22 is formed with an axial bore or opening through which are introduced conductor wires 25 leading to an electric lamp 26 suspended by said wires within the cylinder. In practice, a belt is passed about the pulley 18 and to a suitable source of power whereby the cylinders will be rotated, although it will be understood that the chain or sprocket gearing may be employed instead of the pulley and belt if desired.

As heretofore stated, the cylinders indi-

cated by the numeral 26, are of glass and are each colored one or more primary colors, the number of colors in the present instance being three. In the form of cylinders shown in Fig. 3 of the drawings, the cylinder has clearly defined fields or areas one of red, indicated by the numeral 27, another of blue, indicated by the numeral 28 and a third of green indicated by the numeral 29. In the form of cylinder shown in Fig. 4 the same fields are provided except that the colors thereof gradually merge so that there is no readily apparent line of demarcation between the fields and in the form of the cylinder shown in Fig. 5 the line of demarcation is staggered so that the fields may be said to mingle. In any event, regardless of which form of cylinder is employed, the illuminating lamp 26 within the cylinders will cause the cylinders to emit rays of blue, red and green, for example which rays will be directed not only upon the sign characters 11 but also upon the reflectors 12 from which point they will be reflected onto the sign characters. As the light rays intersect or blend, rays of other colors will result and consequently inasmuch as the cylinders are constantly rotating, the sign characters will be constantly changing in color and in tint and the entire sign panel will present the appearance of a spectrum. From the foregoing and a reference to Fig. 1, discloses the fact that every portion of the translucent sign panel will be illuminated directly from both of the rotating cylinders and furthermore that the end portions of the sign panel will also be illuminated indirectly from the cylinders by

means of the reflectors 12. Since said rotating cylinders each contain three longitudinal sections upon which are formed the three primary colors or which are composed of three glass sections with the primary colors thereon, a mixing of the three primary colors upon the translucent sign will be obtained and that a continuous or complete spectrum will be thrown or propagated upon the translucent sign screen. By rotating the two cylinders the said spectrum will move or shift from one portion of the screen to the other and the effect produced will be a screen illuminated by a constantly shifting repeating spectrum all the colors of which naturally blend one into the other to produce a beautiful and novel effect.

What is claimed is:—

In an electric sign, a sign panel, two reflectors disposed one at each end thereof, said reflectors inclined toward the sign panel; rotatable cylinders disposed adjacent said reflectors, light sources in said cylinders each cylinder having longitudinal bands of the primary colors and adapted to illuminate the sign panel for its entire length, said reflectors assisting the intermixing of the three primary colors, means for rotating said cylinders to produce a constantly shifting continuous spectrum upon said sign panel.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of witnesses.

RUBEN PALMER JARVIS.

Witnesses:

O. P. DUVAL,
T. C. BADGER,
J. W. KISSELL.