

July 19, 1932.

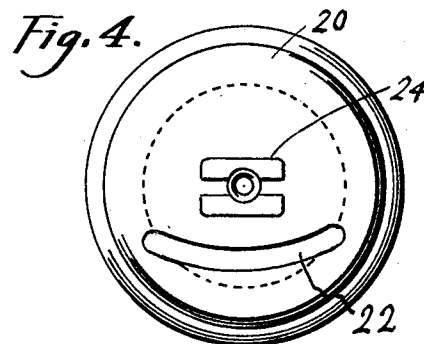
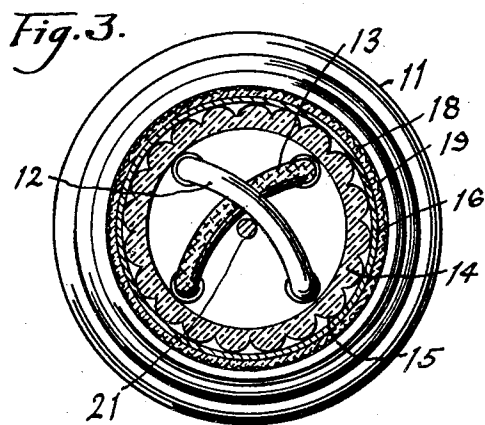
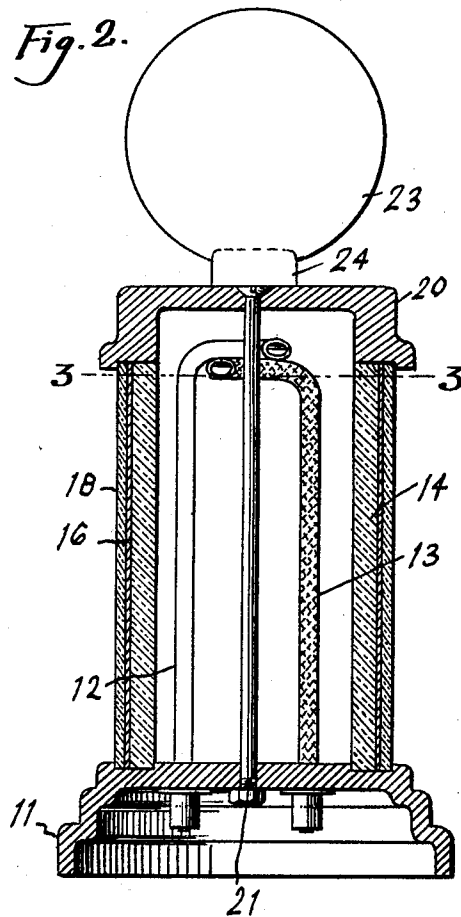
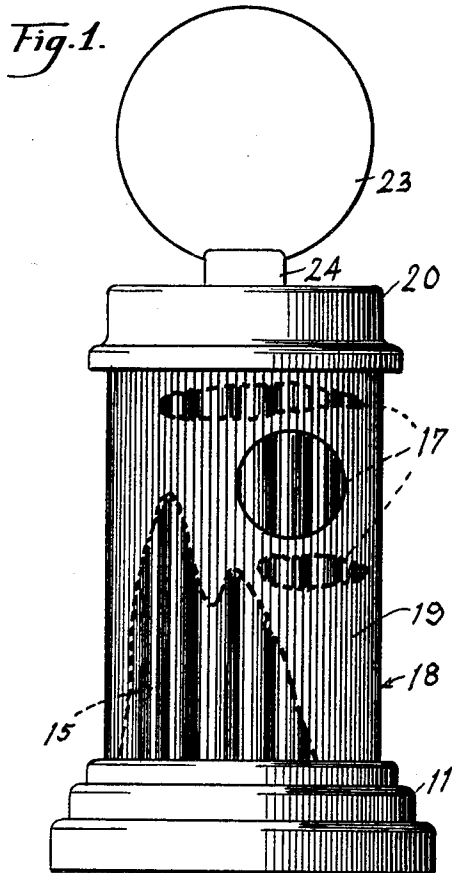
H. HARASE

1,867,916

ELECTRIC COLOR RAY DEVICE

Filed Dec. 8, 1931

2 Sheets-Sheet 1



INVENTOR:
HANZABURO HARASE
BY ATTY:

Edward M. Kojima

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2 Sheets-Sheet 2

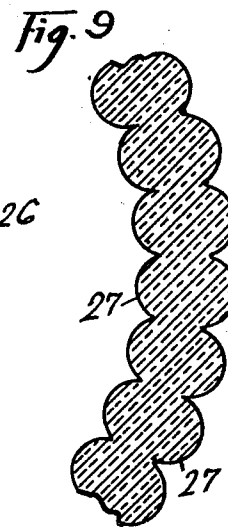
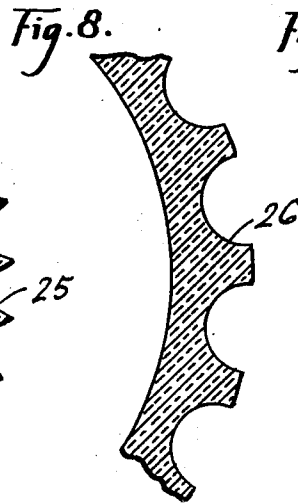
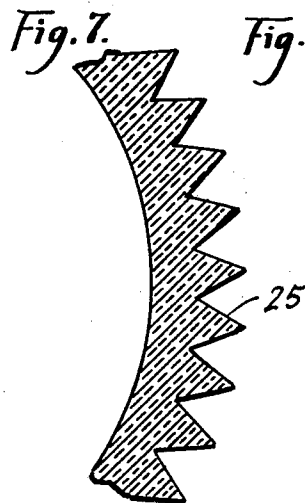
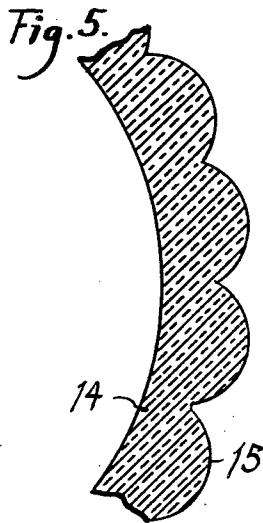


Fig. 6.

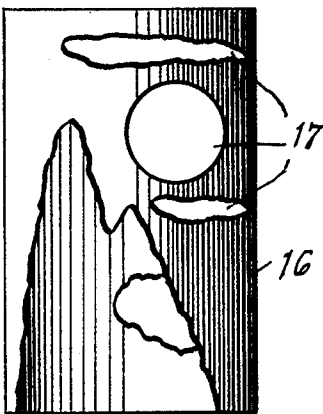
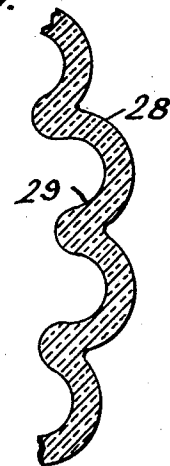


Fig. 10.



INVENTOR:
HANZABURO HARASE.
BY ATTY:

Edward M. Kojima

UNITED STATES PATENT OFFICE

HANZABURO HARASE, OF LOS ANGELES, CALIFORNIA

ELECTRIC COLOR RAY DEVICE

Application filed December 8, 1931. Serial No. 579,731.

This invention relates to advertising and display apparatus and to a device adapted to produce novel and pleasing color effects through a combination of neon illuminating elements, screen elements and light refracting elements.

This invention has for its objects to produce pleasing color effects with neon illuminating elements and circumferentially related refracting elements combined with novel screen elements.

In the preferred form of this invention, neon tube illuminating means are provided, and enclosing the same I provide a substantially tubular enclosure therefor, the walls of which have a plurality of ribs whereby light rays are refracted to increase the illuminating effect, an opaque cover for the ribbed wall which has a plurality of openings for emitting the refracted light, and over the cover a translucent casing, preferably of frosted glass.

By means of the structure as herein set forth, a brilliant and beautiful lighting effect is attained for advertising and display purposes.

Other objects and advantages may appear as the invention is better understood from the following specification and claims.

In the drawings: Figure 1 is a side elevation of my improved display device, the opaque cover and inner ribbed wall being indicated thereon. Fig. 2 is a sectional elevation of the same. Fig. 3 is a sectional plan taken on line 3—3, of Fig. 2. Fig. 4 is a top plan view of the top cover. Fig. 5 is a fragmentary and sectional view of the main refracting element which forms the inner wall of the device. Fig. 6 is a side elevation of the opaque cover element. Figs. 7, 8, 9 and 10, each show a fragmentary and sectional view of a modified form of the inner refracting element.

In carrying out this invention, I provide a base 11, and, projecting upwardly from the base, the neon tubes 12 and 13, which may be colored if desired. I provide a tubular refracting wall 14, provided on its outer side with longitudinal ribs 15, and which may be colorful and with clear portions for emitting

beautiful light rays. Over this refracting wall, I provide an opaque screen 16, having a series of apertures 17 through which the light rays are emitted. Over screen 16, I provide an outer translucent casing 18, having relatively fine longitudinal ribs 19, and made, preferably of frosted glass. A top cover 20 and base 11 are preferably grooved to receive refracting wall 14, screen 16, and translucent casing 18, and are connected by a centrally disposed bolt 21. Top cover 20 has an aperture 22 whereby light rays are thrown upon an advertising element 23 carried by projections 24 on cover 20.

The modified form shown in Fig. 7 has angular ribs 25. The modified form shown in Fig. 8 has concave ribs 26. The modified form shown in Fig. 9 has outer and inner ribbed surfaces 27. The modified form shown in Fig. 10 has outer convex ribs 28 and inner concave ribs 29.

The construction as shown is further adapted for straight walls of display devices, as well as tubular walls thereof. By providing the inner wall with relatively coarse ribs, and the outer casing with relatively fine ribs, the fluorescent effect is increased. The screen may have more apertures than are shown in the drawings.

It will be understood that suitable switching means and other features may be employed which form no part of this invention. The essence of this invention comprises the combination with electric luminescent and colored tubes, of tubular or plain refracting walls enclosing the electric tubes, the refracting walls having exterior ribbed surfaces whereby light rays emanating from the electric tubes are enhanced, made more brilliant and refracted, and whereby electric display devices may be made more brilliant, more ornamental and more attention-attracting than heretofore.

I claim:

1. The combination with electric illuminating elements, a base supporting the illuminating elements, a top cover above and apart from the base, and a centrally disposed bolt connecting the top cover and base, of a tubular and ribbed translucent and variously

colored wall disposed between the base and top cover and arranged around the illuminating elements, a screen with a plurality of apertures disposed over the said ribbed wall, and an outer translucent casing over the screen.

2. The combination with illuminating elements, a base supporting the illuminating elements, a top member above and apart from the base, and a bolt connecting the base and top member, of a tubular and coarsely ribbed wall translucent and interposed between the base and top member and enclosing the illuminating elements, a perforated screen disposed over the coarsely ribbed wall, and a finely ribbed translucent wall disposed over the screen.

3. The combination with luminous neon tubes, a base supporting the neon tubes, a top member above and apart from the base, and a bolt connecting the base and top member, of tubular outer and inner translucent walls interposed between the base and top member and supported thereby and surrounding the neon tubes, and outer ribbed surfaces on said walls, the corrugations extending longitudinally thereon.

4. The combination with luminous tubes and supporting means therefor, of outer and inner tubular walls enclosing the luminous tubes, and longitudinal ribs forming the outer surface of said walls, the inner wall having relatively coarse ribs and the outer wall having relatively fine ribs.

5. The combination with luminous tubes and supporting means therefor, outer and inner walls enclosing the luminous tubes, and longitudinal ribs forming the outer surfaces of said tubes, of an opaque screen disposed between said walls and having a series of apertures therein.

6. The combination with electric luminous tubes, a base supporting the tubes, a top member apart from the base, and a centrally disposed bolt connecting the top member and base, of projections on the top member, and an advertising display member supported by the projections, the top member having an aperture for light rays and adjacent to the projections.

7. Outer and inner tubular and longitudinally ribbed walls of transparent materials, means within the inner wall for illuminating the same, and an opaque screen interposed between said walls and having a series of apertures therein to expose luminous areas of the tubular walls.

In testimony whereof, I hereunto affix my signature.

HANZABURO HARASE.