This invention relates to a Christmas tree decoration, and particularly to a novel combination of reflector and lamp. It is now the common practice to decorate Christmas trees and similar objects with small electric lamps, which lamps are often of various colors. It is also now common practice to use reflectors of various ornamental shapes with such lamps. While such reflectors and lamps have been used, the lamps of the prior art have been of uniform color or have had all parts thereof of uniform degree of light permeability.

It is an object of this invention, therefore, to provide a novel combination of reflector and lamp.

It is a further object of the invention to provide a reflector having spaced reflecting portions in combination with a lamp having portions of different degrees of light permeability, which portions are, respectively alined with said portions of the reflector.

It is also an object of the invention to provide a reflector of symmetrical shape having circumferentially spaced reflecting zones, together with a lamp having circumferentially spaced portions of different colors or degrees of light permeability, which portions are, respectively related to said zones.

It is still another object of the invention to provide a lamp having thereon portions of different degrees of light permeability and of various formations.

These and other objects and advantages of the invention will be fully set forth in the following description made in connection with the accompanying drawings in which like reference characters refer to the same parts throughout the different views, and in which,

Fig. 1 is a view in front elevation of a reflector and lamp;

Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 1, as indicated by the arrows;

Fig. 3 is a view in front elevation of a modified form of reflector and lamp;

Fig. 4 is a horizontal section taken on the line 4—4 of Fig. 3, as indicated by the arrows;

Fig. 5 is a view in front elevation of a reflector and lamp of further modified form;

Fig. 6 is a horizontal section taken on the line 6—6 of Fig. 5, as indicated by the arrows;

Fig. 7 is a view in front elevation of a portion of one of the reflectors shown on a much enlarged scale; and

Fig. 8 is a horizontal section on the line 8—8 of Fig. 7, as indicated by the arrows.

Referring to the drawings, in Fig. 1 is shown a reflector 10 made of sheet material, preferably metal, the same having a shape, in front elevation, of a five-pointed star. The reflector 10 is curved toward the front, as seen in the drawings, the curvature being uniform with the central axis extending normal to the reflector at the center thereof. The reflector 10 has its surface formed with a multiplicity of small substantially semi-spherical depressions 10, such as in Figs. 7 and 8. The surface of the reflector, including the depressions 10, is quite highly polished so as to give a high degree of reflection. While these depressions may be disposed in various ways and arrangements, in the embodiment of the invention illustrated, they are shown as being arranged in rows parallel to the sides of the star forming the reflector. The reflector 10 has a central aperture therein and a bushing or washer 11 of insulating material is provided having a central aperture considerably smaller than the aperture in the reflector, said washer 11 being placed against the rear side of the reflector with its central axis co-axial with the central axis of the reflector. Said washer is secured to the reflector by a plurality of circumferentially spaced and preferably pointed tangs 10 extending through washer 11 and bent over on the outer side thereof in a manner similar to that shown in Fig. 4. A lamp 12 is provided having a bulb portion 12 of glass, or similar transparent material, and the rear part comprising the threaded sleeve 12 and the tip contact 12 insulated from said sleeve. The lamp 12, preferably, is provided with some coating or color, as indicated by the shading. Any particular color may be used. The lamp 12 is provided with a portion 12, and while this portion may be of various shapes and variously arranged, in the embodiment of the invention illustrated, it is shown as a zigzag band extending circumferentially about the bulb 12 substantially at the widest portion thereof.
The band 12a thus has a plurality of pointed portions 12b, and these are arranged with their central axes in alinement with or directly in front of the central lines of the respective points of the reflector 10. It may be stated that the portion or band 12b is of different color or degree of light permeability than the remainder of the bulb 12a and while various degrees of light permeability may be used, as many different colors, in the embodiment of the invention illustrated, the band 12b is shown as being clear.

In operation, the reflector and lamp disclosed will be mounted on a Christmas tree, or other Christmas decoration, in the usual manner, by screwing the sleeve 12b of the lamp into the customary lamp socket, the reflector 10 being clamped or held between the lamp and lamp socket. When the lamp 12 is illuminated, the color in the main portion of the bulb will be reflected from the surface of the reflector 10 so that said reflector will show the color from the bulb in the shaded portion 10a. The band 12b, however, will cause the surface of reflector 10 to show a different reflection about the border of the same, as indicated by the unshaded portion in Fig. 1, thus forming two zones of different reflecting effect on the reflector. If the band 12b is clear, this portion of the reflector will show with a very high light. If the band 12b is of a different color, this color will be reflected about the edge of the reflector 10. A very striking and beautiful effect is thus obtained on the surface of the reflector 10. The pointed portions 12a as stated are circumferentially aligned with the points or zones of the reflector so that the border of said reflector is bright, as shown by the unshaded portion in Fig. 1.

In Figs. 3 and 4, a different form of reflector 15 is shown having a plurality of radially extending points 15a. The surface of reflector 15 is also highly polished and provided with a multiplicity of substantially semi-spherical depressions 15b, such as shown in Figs. 7 and 8. Reflector 15 is also curved forwardly uniformly about a central axis and is provided with a central aperture 15c. A washer or bushing 16 of insulating material engages the rear of reflector 15 and is held thereon by a plurality of circumferentially spaced tangs 15c passing therethrough in the same manner as already described for washer 11 in reflector 10. A lamp 17 is provided having the bulb portion 17a which is coated, or otherwise colored having the threaded sleeve 17b insulated from the tip contact 17c. The bulb 17a is provided with a portion 17b of a different degree of light permeability from the remainder of the bulb and while this portion may be of various shapes and arrangement, in the embodiment of the invention illustrated, it is shown as a circular band. The portion 17b may be either of a different color or may be clear.

When the reflector 15 and lamp 17 are assembled on a Christmas tree or other similar device, as already described for lamp 12 and reflector 10, the color on the main portion of bulb 17 will be reflected from the central part of the reflector, as indicated by the shading 15b in Fig. 3. The band 12b, however, will emit light of a different coloring or intensity which will cause a different reflection from the outer ends of the points 15a, as indicated by the unshaded portions in Fig. 3, thus giving zones of different reflecting effect. If the band 17b be clear, this latter portion will show quite bright and if the band 17b be of a different color, this color will be reflected from the portion outward of the portion 15b. A beautiful and striking effect is thus produced.

In Fig. 5, another form of reflector 20 is shown having its periphery formed with a plurality of semi-circular lobes 20a. The surface of the reflector 20 is also highly polished and provided with a multiplicity of small semi-spherical depressions 20b similar to the depressions 10a shown in Figs. 7 and 8. While the depressions 20b may be variously arranged, in the embodiment of the invention illustrated, they are shown as disposed in a double row about the outer edge of the reflector 20 and also extending inwardly in radial lines in double rows. Reflector 20 is also provided with a washer 21 extending across the central aperture in reflector 20 secured thereto in a manner already described for washers 11 and 16. A lamp 22 is provided having the usual bulb portion 22a, the rear sleeve portion 22b insulated from the tip contact 22c. The bulb 22 will be coated or otherwise colored and the same is shown as having circumferentially spaced portions 22d of a different degree of light permeability than the remainder of the bulb. While the portions 22d may be variously arranged, in the embodiment of the invention illustrated, they are shown as extending radially and outwardly toward the pointed end of the lamp bulb. Portions 22d may be either clear, or of a different color from the remainder of the bulb.

In operation, when the reflector 20 and lamp 22 are assembled and held, as above described, and the lamp illuminated, the color on the main portion of the bulb will be reflected from the reflector 20, as indicated by the shaded portions in Fig. 5. The portions 22d, however, will cause portions of the bulb of a different reflecting color to reflect onto reflector 20. The portions 22d will be disposed with their central lines in alinement with the radial line extending between the lobes 20a, at each side of which latter lines the rows of depressions 20b are disposed. The
radial rows of depressions 20 will, therefore, be illuminated by the light issuing from the portions 22', and if the portions 22 be clear, these radial rows will be highly illuminated and a very bright reflecting effect secured. If the portions 22 be of a different color from the remainder of the bulb, this color will be reflected along the radial rows, as indicated by the unshaded portions of Fig. 5. A very handsome and striking effect is thus produced.

The reflector illustrated is substantially the same as that disclosed and claimed in applicant's co-pending application, filed June 25, 1925, S. N. 39,488.

From the above description it is seen that applicant has provided a very simple and efficient lamp and reflector therefor and produced a combination having a high degree of utility and ornamentation. The portions of the lamps which emit different kinds or colors of light produce different effects or different reflecting zones on the reflector, giving a very pleasing, beautiful and highly ornamental effect. The lamps used are easily and inexpensively made, as are also the reflectors and the device can be produced at comparatively low cost. With the use of the reflector and lamp a very beautiful and highly ornamental effect is obtained. The device has been amply demonstrated in actual practice and found to be very successful and efficient.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts without departing from the scope of applicant's invention, which, generally stated, consists in the novel parts and combinations of parts disclosed and defined in the appended claims.

What is claimed is:
1. The combination with a reflector having spaced reflecting zones and a lamp bulb disposed adjacent said reflector and having portions adapted to emit light of different kinds, said portions being aligned with said zones whereby different reflecting effects are secured on said reflector.

2. The combination of a reflector having spaced reflecting zones and a lamp bulb disposed adjacent said reflector and having portions of different degrees of light permeability, said portions being arranged in alinement, respectively with said zones of said reflector.

3. The combination of a Christmas tree reflector of symmetrical form having circumferentially spaced reflecting zones, and a lamp bulb disposed centrally of said reflector and having portions thereon adapted to emit light of different kinds, said portions being aligned with said zones of the reflector whereby said zones have different reflecting effects produced thereon.

4. The combination with a reflector having a plurality of reflecting zones and a lamp bulb disposed adjacent said reflector having portions adapted to emit light of different kinds, said lamp being so positioned relatively to said reflector that said different kinds of light produce different reflecting effects on said reflecting zones of said reflector.

In testimony whereof I affix my signature.

LAMBERT L. RAYMOND.