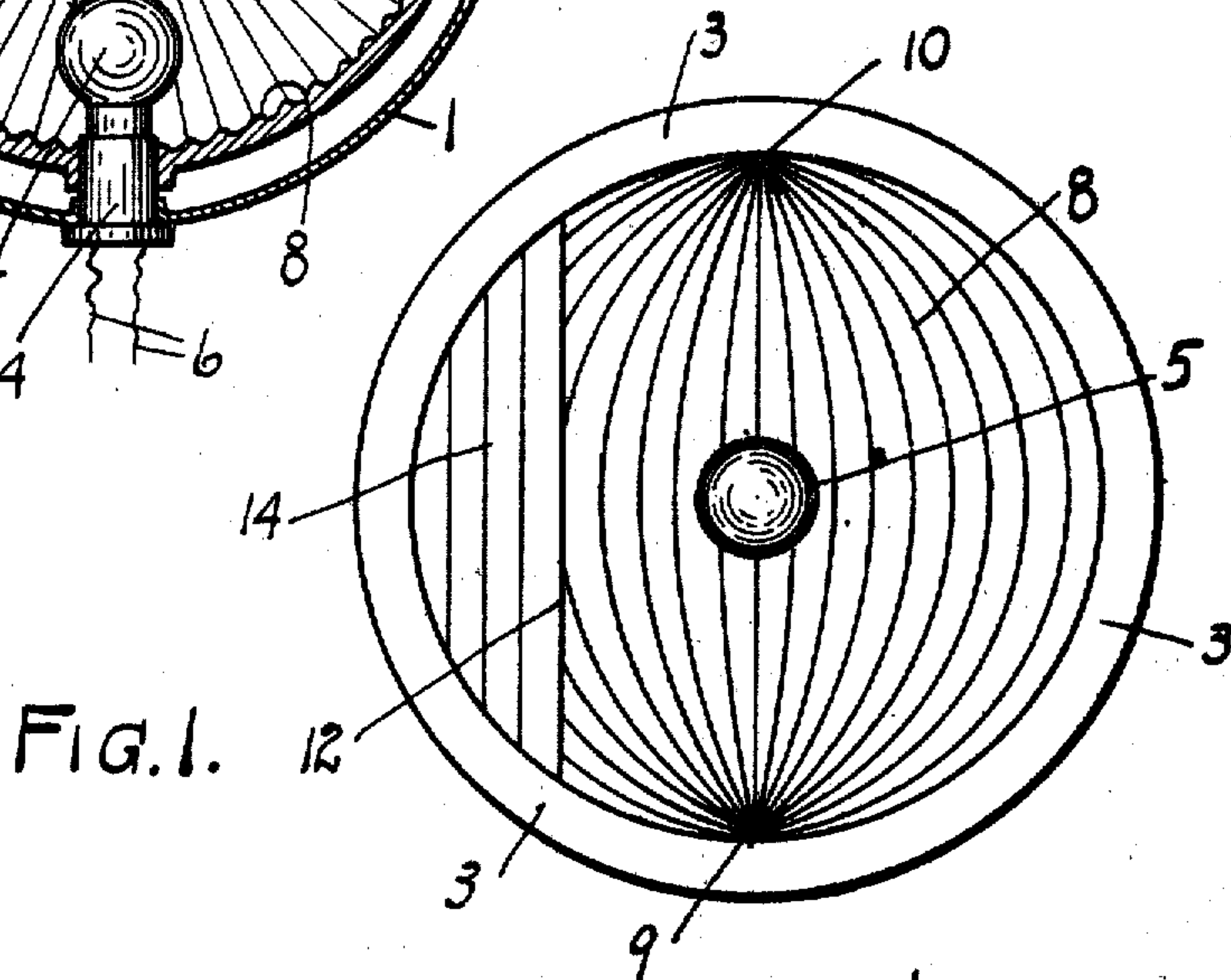
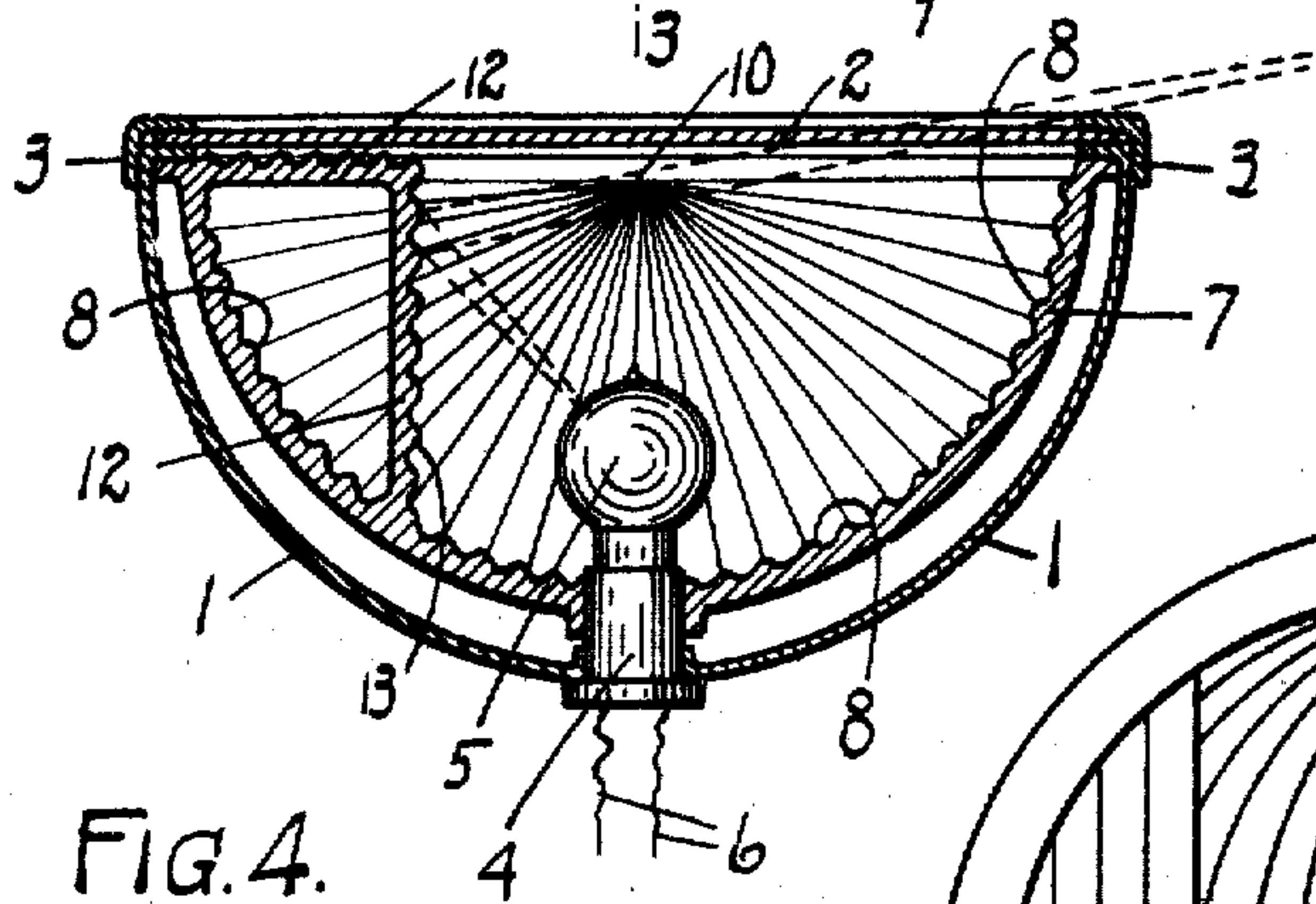
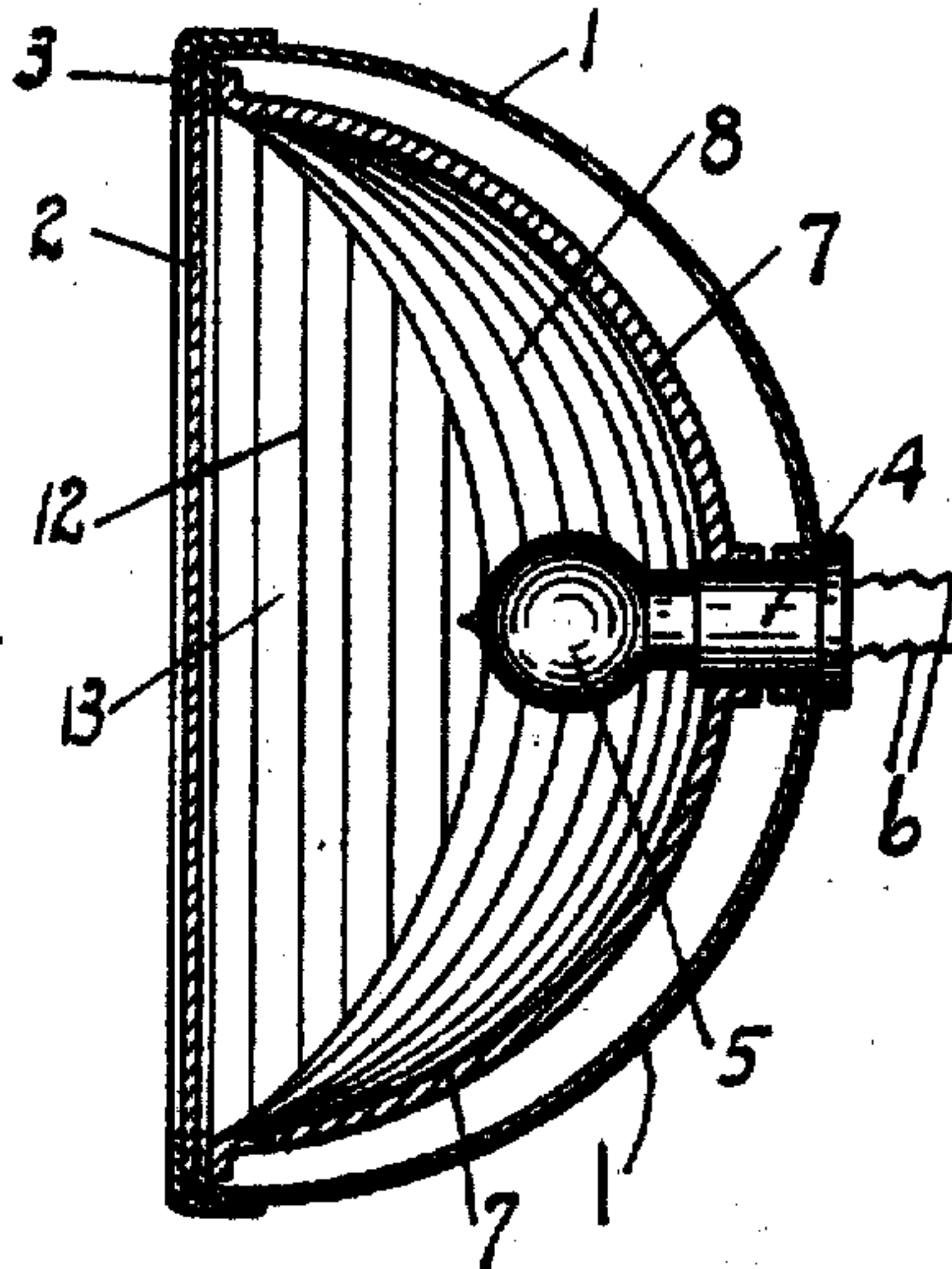
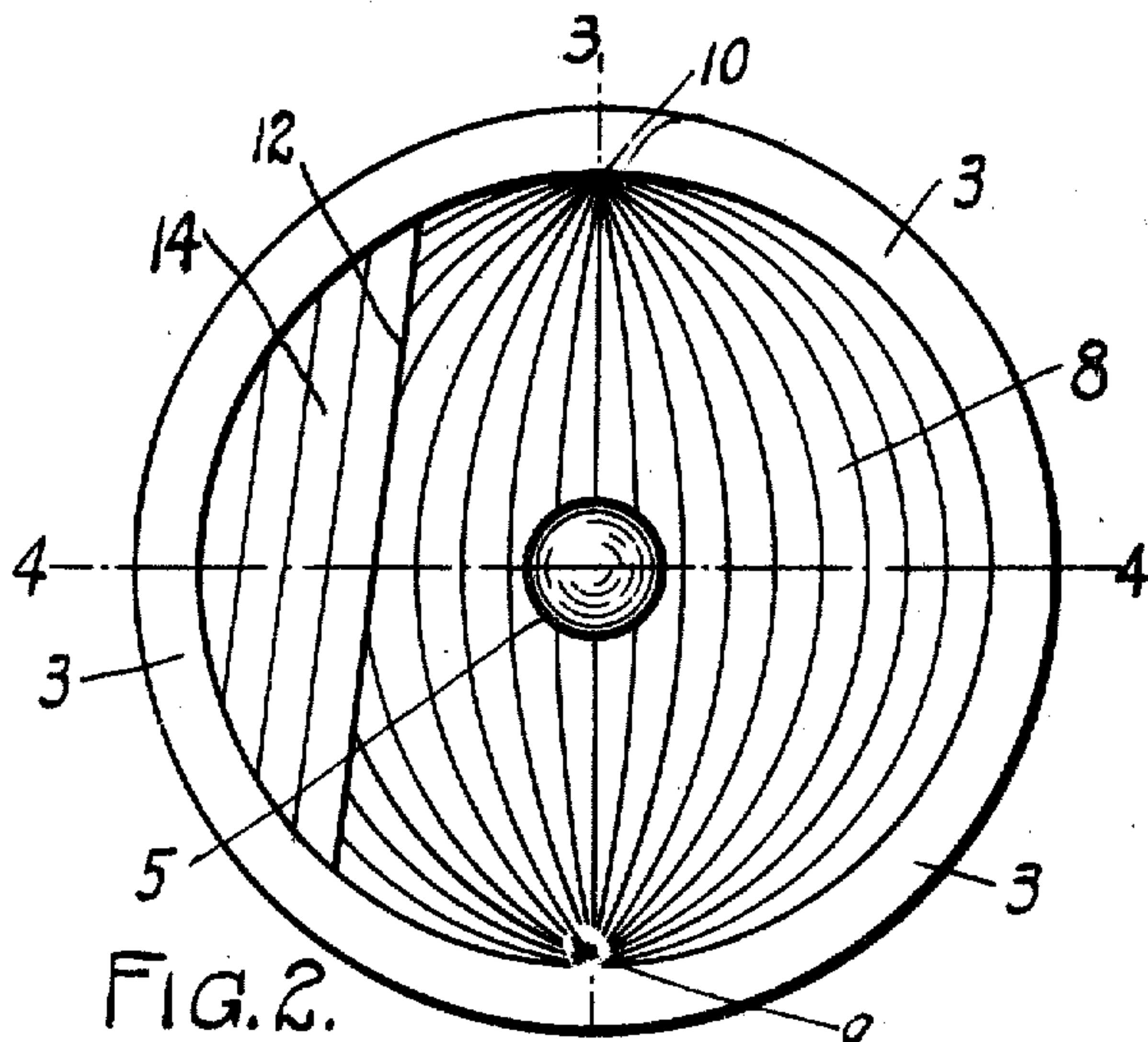


June 19, 1923.

1,459,372

C. E. KISTNER  
REFLECTOR FOR LIGHTS

Filed Nov. 28, 1921



INVENTOR.  
Charles E. Kistner  
by John W. Trebb  
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# UNITED STATES PATENT OFFICE.

CHARLES E. KISTNER, OF CINCINNATI, OHIO.

REFLECTOR FOR LIGHTS.

Application filed November 28, 1921. Serial No. 512,449.

*To all whom it may concern:*

Be it known that I, CHARLES E. KISTNER, a citizen of the United States, residing at the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Reflectors for Lights, of which the following is a specification.

My invention belongs to that class of reflectors designed to eliminate the objectional glare of light, and designed to project the diffused light rays forwardly, horizontally and downwardly, and especially adaptable for use in connection with the lights or lamps of automobiles and motor driven vehicles.

I produce a light projecting construction in connection with the reflecting surface of a reflector, its face being corrugated vertically with corrugations, said corrugations being elliptically inclined, all beginning at one common point, at the bottom of said reflecting surface, diverging gradually to the center of length of said corrugation, and then converging gradually to the end of said corrugation and then to the one common point or end of all the elliptic corrugation, at the top of said reflecting surface. These corrugations follow lines same as the true imaginary meridian lines on the earth's surface, or approximately the same.

In my device the reflector is provided with corrugations, grooves or furrows, extending from the vertex of the reflector to the lens of the reflector of said device.

In carrying out my invention, I interrupt the reflecting face of the reflector in its contour, by extending therefrom a wall or partition, which reaches to the lens, and it is this wall or partition which is also a reflector, which projects the light rays to the side of the automobile; on one side of the machine, to the left and on the other side of the machine to the right. It will be understood from this description that by using my device the light rays are projected forwardly on the road or street; also downwardly and also laterally; thus the direction in which the vehicle is moving will also be apparent, whether it be in a straight line or a curved line.

By using my invention I am enabled to dispense with the use of any extraneous construction or means for turning the lamps, to

indicate the direction in which the automobile is about to move or turn, especially when going around a corner.

The corrugations may be concave or convex, V shaped or the like, and of any depth, width or extent and occur with such frequency as found necessary to properly diffuse the light rays in proportion to the intensity of the source of light.

The various features of my invention and their advantages will readily become apparent from the following specification.

In the accompanying drawing forming a part of this specification:—

Fig. 1, is a front view of my new light reflecting device.

Fig. 2, is a similar view, except that at one side the counter reflecting wall is inclined instead of straight.

Fig. 3, is a section on the line 3—3 of Fig. 2 and

Fig. 4, is a section on the line 4—4 of Fig. 2.

In the drawing, the reflector body or housing is marked 1, the lens 2, the retaining rim 3, the light socket 4, the light 5 and the electric wires 6; the reflector itself being marked 7.

The reflecting face of the reflector 7 is formed up of a series of corrugations, ridges, furrows or the like as shown, being marked 8 they are run to the common centers 9 and 10, and are shaped as before set forth, and describe true meridian lines. They may be made to deviate from this course, or be made and formed approximately as such meridian lines, as will be found most efficient in practice.

I interrupt the face of the reflector or reflecting surface by extending from its face, a partition or reflecting wall 12, its face formed of vertically disposed corrugations or the like 13 (see particularly Fig. 4); these corrugations are generally equidistant and parallel. In Fig. 1, this partition wall is straight and in Fig. 2, it is inclined.

The corrugations 8 on the reflector surface 7, in the present instance, extend over the entire face of the reflector (see Fig. 4 particularly).

If it is desired to throw the rays downwardly to a greater extent than by the construction shown in Fig. 1, I form the partition wall 12 inclined as shown in Fig. 2;



by this construction said partition wall will tend to throw the light rays downwardly to a greater extent.

The main reflecting surface will project the light rays forwardly and the auxiliary reflector or partition 12 will throw the light rays to the side or laterally and also downwardly.

By this construction the light is dimmed to such an extent that a glare of light will be eliminated.

By my construction I am enabled by the use of the reflector itself to obtain every phase of light rays needed during the operation of the automobile.

In Fig. 4 the dotted lines show the direction taken by the light rays.

While I have described one specific means for carrying my invention into effect, it will be perfectly apparent that I may modify and change the same to some extent, without departing from the purpose and spirit of my invention.

What I claim as new and my invention and desire to secure by Letters Patent is:

1. A headlight including a reflector provided with substantially parallel vertical re-

flecting corrugations, a source of light arranged within said reflector, a lens, and a substantially vertical reflecting wall extending from a position at one side of the source of light and from the reflector surface to said lens, said wall being constructed and positioned so as to bend and diffuse some of the light rays out of their forwardly extending course.

2. A headlight as claimed in claim 1 in which the reflecting wall is provided with substantially vertical corrugations facing toward the light source.

3. In a reflector of the character described, having its reflecting face crossed by vertically extending corrugations or the like, having a common center for beginning and ending, and running like the earth's meridians; said reflecting surface being interrupted by an outwardly extending reflecting wall, approximately vertical for bending some of the rays of light out of their forwardly extending course.

In testimony whereof, I affix my signature at Cincinnati, Ohio, this 23d day of November, 1921.

CHARLES E. KISTNER