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tion being substantially constant, which spotlight comprises a lens and a light source adapted to be positioned at variable distance from the lens, said lens comprising a circular, substantially flat plate of glass having on the rear light-incident face thereof a system of arcuate ridges to each side of said other diameter and concave with respect thereto, each ridge of said system sloping outwardly and rearwardly of the lens, the ridges of said system having progressively greater radii of curvature from the inmost ridge outward, and each ridge being a portion of a negative lens surface, and said lens having thereon refractive means for converging some of the light transmitted through said light-incident face which refractive means is a system of substantially concentric annular ridges each of said annular ridges being a portion of a positive lens surface.

2. A spotlight for producing a beam of light having substantially uniform intensity throughout its cross-section and having greater divergence in opposite directions parallel to one diameter of the lens than the divergence in opposite directions parallel to another diameter perpendicular to said one diameter, the ratio of divergence in one direction to the divergence in the other direction being substantially constant, which spotlight comprises a lens and a light source adapted to be positioned at variable distance from the lens, said lens comprising a circular, substantially flat plate of glass having on the rear light-incident face thereof a system of arcuate ridges to each side of said other diameter and concave with respect thereto, each ridge of said system sloping outwardly and rearwardly of the lens, a substantially plane area between the inmost ridges, and each arcuate ridge being a portion of a negative lens surface, said plane area having flutes in the surface thereof, and said lens having thereon refractive means for converging some of the light transmitted through said

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light-incident face which refractive means is a system of substantially concentric annular ridges each of said annular ridges being a portion of a positive lens surface.

3. A spotlight for producing a beam of light having substantially uniform intensity throughout its cross-section and having greater divergence in opposite directions parallel to one diameter of the lens than the divergence in opposite directions parallel to another diameter of the lens perpendicular to said one diameter, the ratio of divergence in one direction to the divergence in the other direction being substantially constant, which spotlight comprises a lens and a light source adapted to be positioned at variable distance from the lens, said lens comprising a circular, substantially flat plate of glass having on a rear light-incident face thereof a plurality of arcuate ridges to each side of said other diameter and concave with respect thereto, the radius of curvature of each of said arcuate ridges being substantially greater than the radius of the flat plate, each of said ridges sloping outwardly and rearwardly of said lens, and each being a combination of negative lens surfaces, and said lens having thereon refractive means for converging some of the light transmitted through said light-incident face which refractive means is a system of substantially concentric annular ridges each of said annular ridges being a portion of a positive lens surface.

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