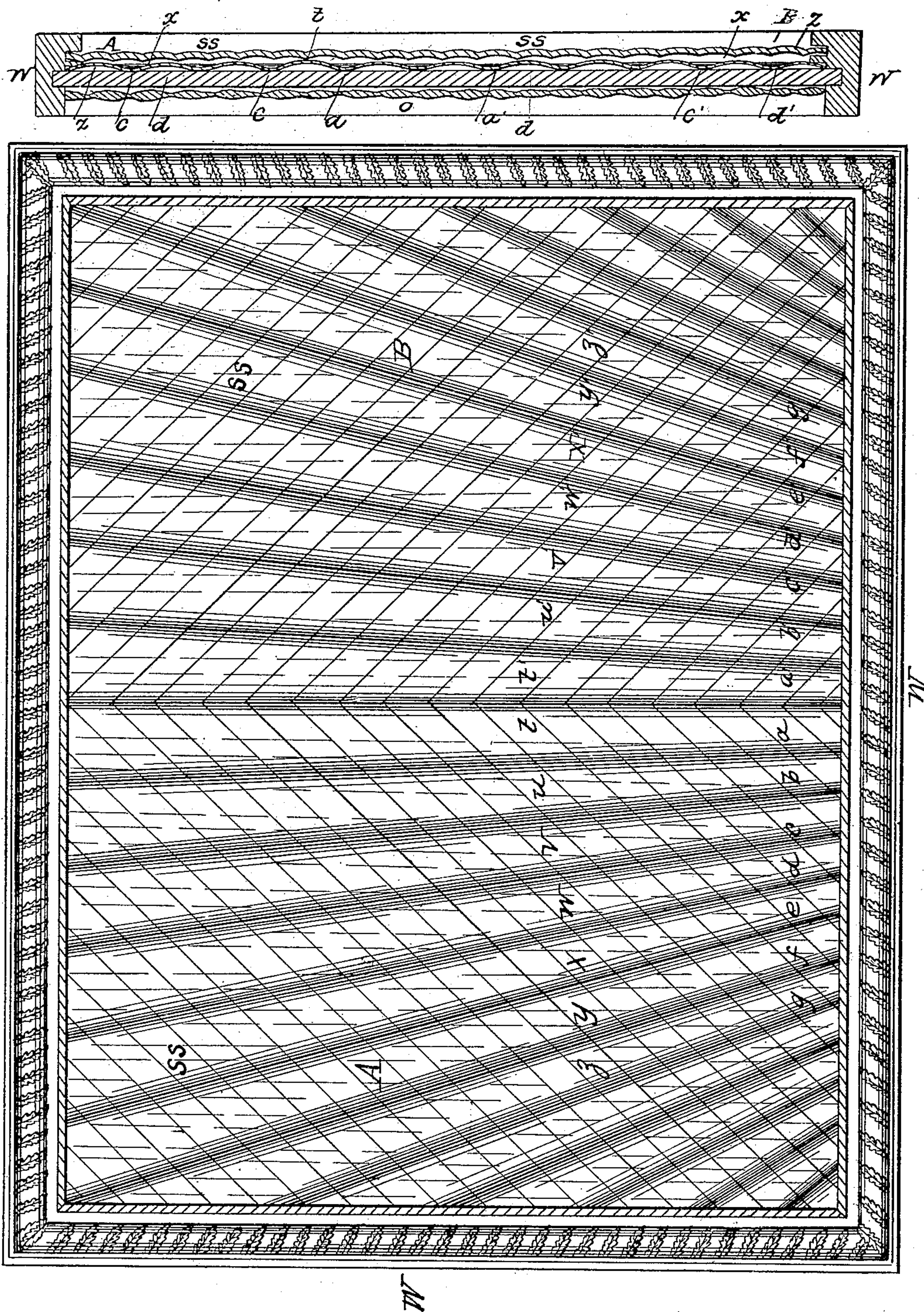


B. GOETZ.

Reflector.

No. 13,615.

Patented Oct. 2, 1855.



WITNESSES
David Blumner
J. H. B. Jenkins

INVENTOR
Bernard Goetz

UNITED STATES PATENT OFFICE.

BERNARD GOETZ, OF PHILADELPHIA, PENNSYLVANIA.

CORRUGATED REFLECTOR.

Specification of Letters Patent No. 13,615, dated October 2, 1855.

To all whom it may concern:

Be it known that I, BERNARD GOETZ, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Mode of Illuminating Dark Rooms in Dwellings and other Buildings; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

Plate 2 shows the reflector in its completed state.

The object of my invention consists in supplying rooms darkened by contiguity of buildings or other causes with a sufficiency of daylight. This result I accomplish by means of a silvered metallic reflector with an undulated or grooved surface placed on the outside of the window at an angle of 45° to the plane thereof or at such other angle that the rays of light from above will strike the face of the reflector and be reflected into the room. At the same time that the light is reflected, it is by the peculiarity of the grooves diffused throughout the room.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

In constructing my reflector I employ the metallic substance commonly used in silver plating and known in the arts as composition. This composition I coat or plate with silver in order to obtain a surface durable and yet capable of receiving a high polish. Copper and other metals would answer the purpose but I prefer composition because of its cheapness. Having thus prepared a sheet of metal I proceed to groove, flute or furrow its surface in the manner shown in Plate 2 of the accompanying drawings by the shaded lines *a, b, c, d, e, f, &c.—a', b', c', d', e', f', &c.* The furrows incline from

either side toward each other and if produced would meet at a common point or focus. They are intersected from the back of the sheet by parallel grooves *t, u, v, w, x, y, z,—t', u', v', w', x', y', z', &c.*, as shown in Plate 2. By this peculiarity of the grooves *a, b, c, d, &c., a', b', c', &c.*, tending toward a common center and crossed by the other series of parallel grooves *t, u, v, &c., t', u', v', &c.*, my reflector is made to present an undulated or grooved appearance and I have found from experiment that no other form of reflector will to an equal degree reflect the light into and diffuse it throughout the room.

My metallic plate A, B, Plate 3, is next set in a casing as represented on Plate 3, O, W, of wood, metal or other material, and covered in front by a sheet of glass plain or fluted represented by the green and white parallel lines S, S, on Plate 2. Thus it is effectually guarded against the influences of the weather. I prefer the fluted glass because it assists the diffusing effect of the reflecting surface.

I do not desire to claim reflectors generally to throw light into darkened rooms or such as have been used for lamps, but

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

A reflector A, B, having the peculiar form of grooved or fluted undulating surface above described and the converging grooves *a, b, c, d, &c., a', b', c', d', &c.*, and crossed transversely by the other series of parallel grooves *t, u, v, w, &c., t', u', v', w', &c.*, on Plate 2 in the manner and for the purpose substantially as hereinbefore described.

BERNARD GOETZ.

Witnesses:

J. H. B. JENKINS,
F. O'CONNOR.