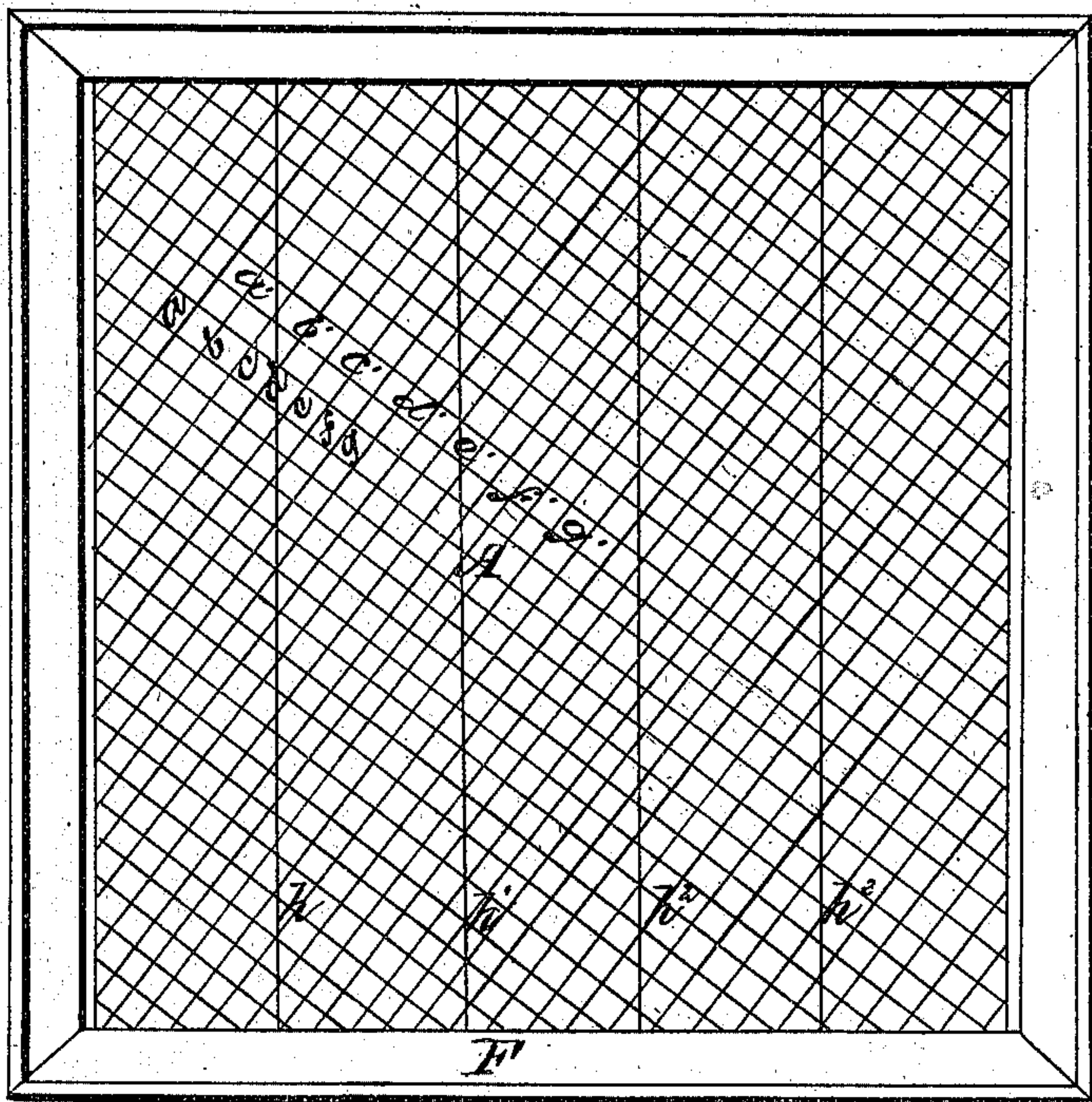


B. GOETZ.  
Lamp Reflector.

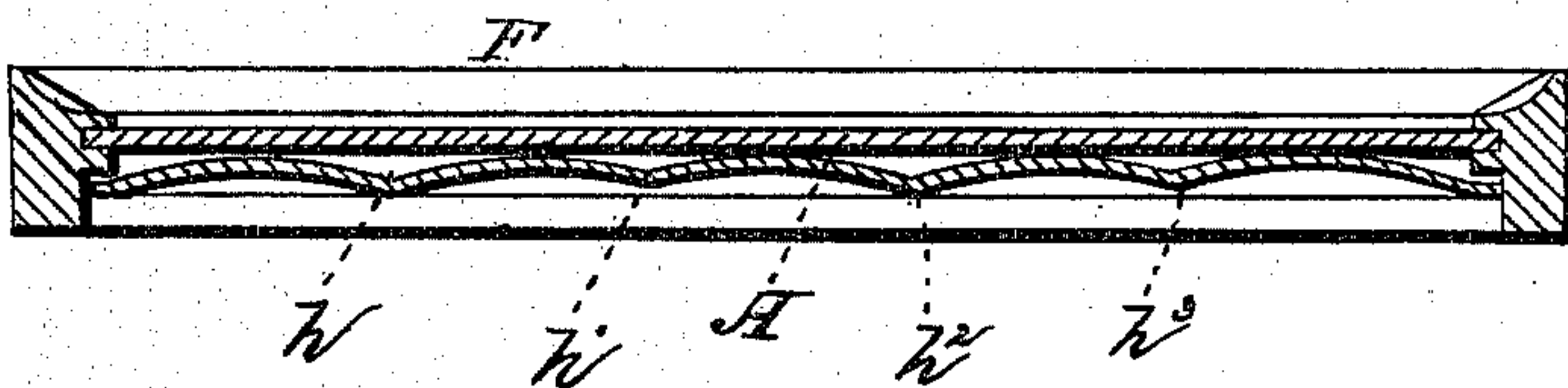
No. 97,628.

Patented Dec. 7, 1869.

*Fig. 1*



*Fig. 2*



*Witnesses*

*Isaac R. Cokford*  
*George C. Nichols*

*Inventor*

*Bernard Goetz*  
*By his attorney*  
*C. H. Evans*



# United States Patent Office.

BERNARD GOETZ, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 97,628, dated December 7, 1869.

## IMPROVEMENT IN CORRUGATED REFLECTORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BERNARD GOETZ, of the city of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful "Improvement in Corrugated Reflectors;" and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This is an improvement on the corrugated reflector patented by me, under date of October 2, 1855, in which is a metallic plate, with an undulated or grooved surface, formed by the furrows inclining from either side toward each other, and intersected from the back of the plate by parallel grooves, and crossed by other series of grooves, all tending toward a common centre or focus.

In the present improvement, the rays of the light are not drawn to a common centre or focus, but are broken and diffused more thoroughly throughout the room, by corrugating the plate in the form of squares or diamonds, as will be hereinafter described.

Figure 1 is a plan view of my improvement in corrugated reflectors.

Figure 2 is an edge view of same, with a portion of the framing removed.

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

Plate A is made of composition, or any metal suitable

for the purpose, and is coated with silver, so as to make it durable and susceptible of a high polish.

The said plate has formed on its surface, by means of diagonal lines *a, b, c, d, e, f, g, &c.*, intersected by the diagonals *a', b', c', d', e', f', g', &c.*, a series of squares or diamonds.

These diagonals are made on the back of the plate, so as to raise the sides of the squares or diamonds on the surface.

Also, on the surface of the plate is formed a series of parallel grooves or furrows *h, h<sup>1</sup>, h<sup>2</sup>, and h<sup>3</sup>*, so as to give it a wavy appearance, and better diffuse the light.

Plate A, thus prepared, is set in a frame, F, of any desired form, and the plate protected from the weather by means of a glass plate, G P, as shown in fig. 2.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The plate A, having on its surface a series of squares formed by diagonal lines *a, b, c, d, e, f, g, &c.*, intersecting diagonal lines *a', b', c', d', e', f', g', &c.*, and also having a series of parallel grooves or furrows, *h, h<sup>1</sup>, h<sup>2</sup>, and h<sup>3</sup>*, substantially as and for the purpose set forth.

In testimony whereof, I have hereunto signed my name, in the presence of two subscribing witnesses.

Witnesses:

BERNARD GOETZ.

CHARLES H. EVANS,  
ISAAC R. OAKFORD.