

N. POULSON.  
Illuminating Roof-Plates.

No. 149,153.

Patented March 31, 1874.

Fig: 1.

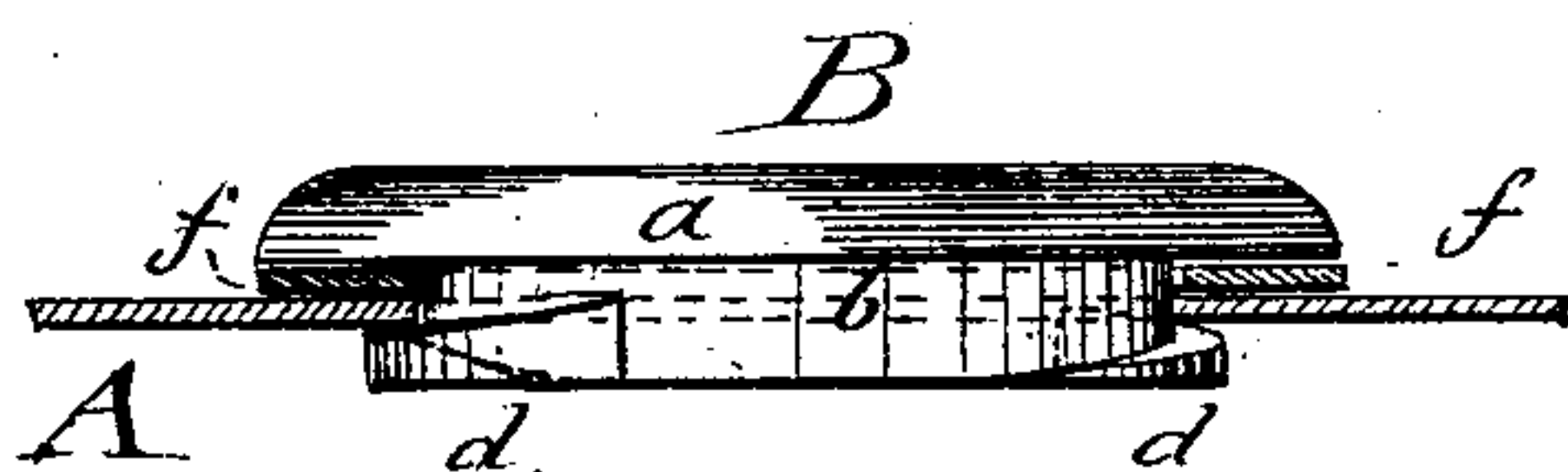
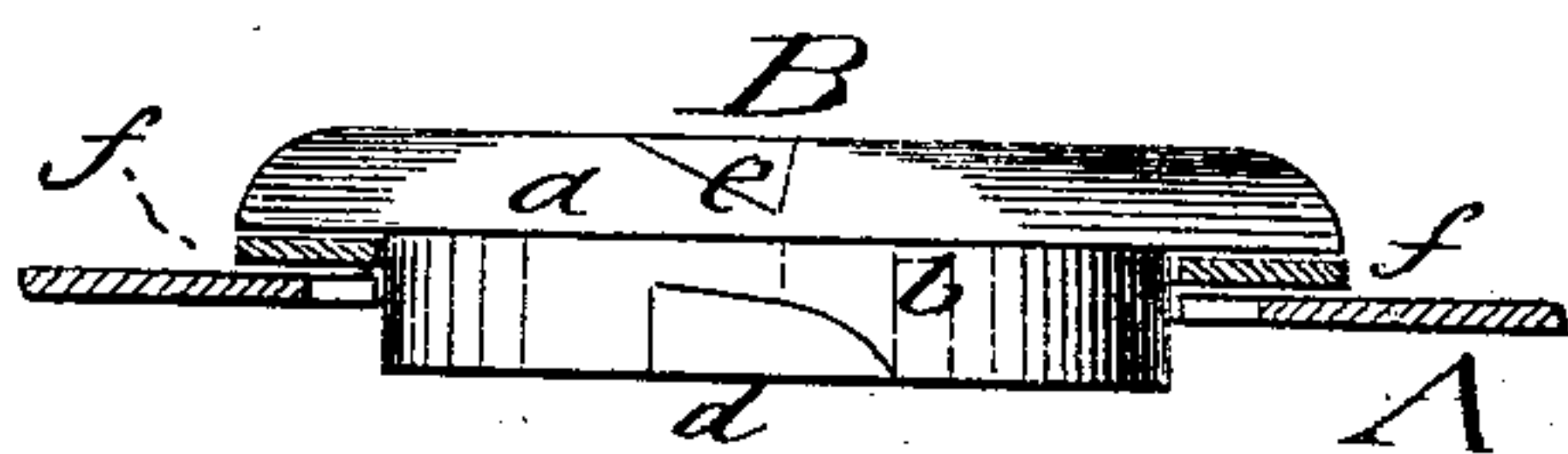


Fig: 2.



WITNESSES:

*Wingquist*  
*Alex F. Roberts*

INVENTOR:

*N. Poulson*

BY

*Wm. H. H.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE

NIELS POULSON, OF NEW YORK, N. Y.

## IMPROVEMENT IN ILLUMINATING ROOF-PLATES.

Specification forming part of Letters Patent No. **149,153**, dated March 31, 1874; application filed January 10, 1874.

*To all whom it may concern:*

Be it known that I, NIELS POULSON, of New York city, in the State of New York, have invented a new and Improved Metallic Illuminating Roof-Plate; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figures 1 and 2 show side views of the plate or bull's-eye applied to a metal plate, the latter being in section.

The invention is an improvement in illuminating-plates for roofing purposes; and consists in providing the shanks of the bull's-eyes or translucent lenses with lugs or shoulders, inclined upon their upper side or edge, to adapt them to be firmly clamped to the metallic plate, in openings in which they are inserted, as hereinafter described.

In the drawing, A represents a fragment of a metal plate, which is provided with a series of openings, arranged in suitable regular or ornamental design. Glass plates or bull's-eyes B are inserted in these openings. Each is formed of an enlarged head, *a*, and a cylindrical shank, *b*. The shanks are provided

with lugs *d*, which are inclined on the upper side, or made spiral in form, as shown. When the lugs project from the side of the shank, as represented in the drawing, it is evident that the metal plate A must be cut out at corresponding points around the edge of the openings to allow the shank to be inserted, and, having been thus inserted, the bull's-eye is turned till the metal plate is firmly wedged between the inclined lugs or shoulders and the flange or rim of the head *a*.

To form a perfectly tight joint and allow for expansion and contraction, a rubber ring is arranged as shown.

Notches *e* may be likewise provided in the head of the plate or bull's-eye, to enable it to be turned with a wrench.

What I claim is—

The combination, with the metal plate A, of the glass plates or bulls-eyes B, having head *a* and a shank, *b*, provided with lugs or shoulders, which are inclined on the upper side, as shown and described.

NIELS POULSON.

Witnesses:

PAUL GOEPEL,  
T. B. MOSHER.