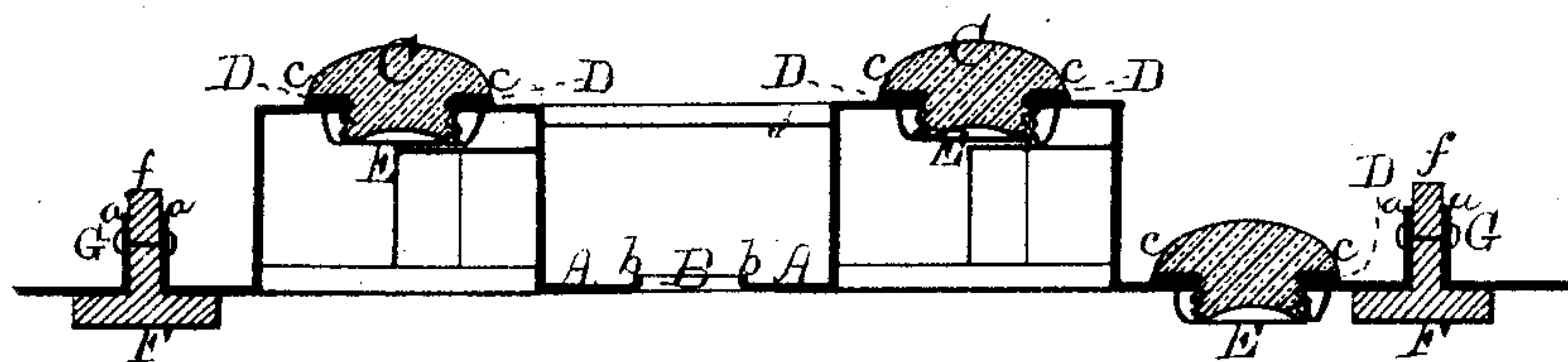
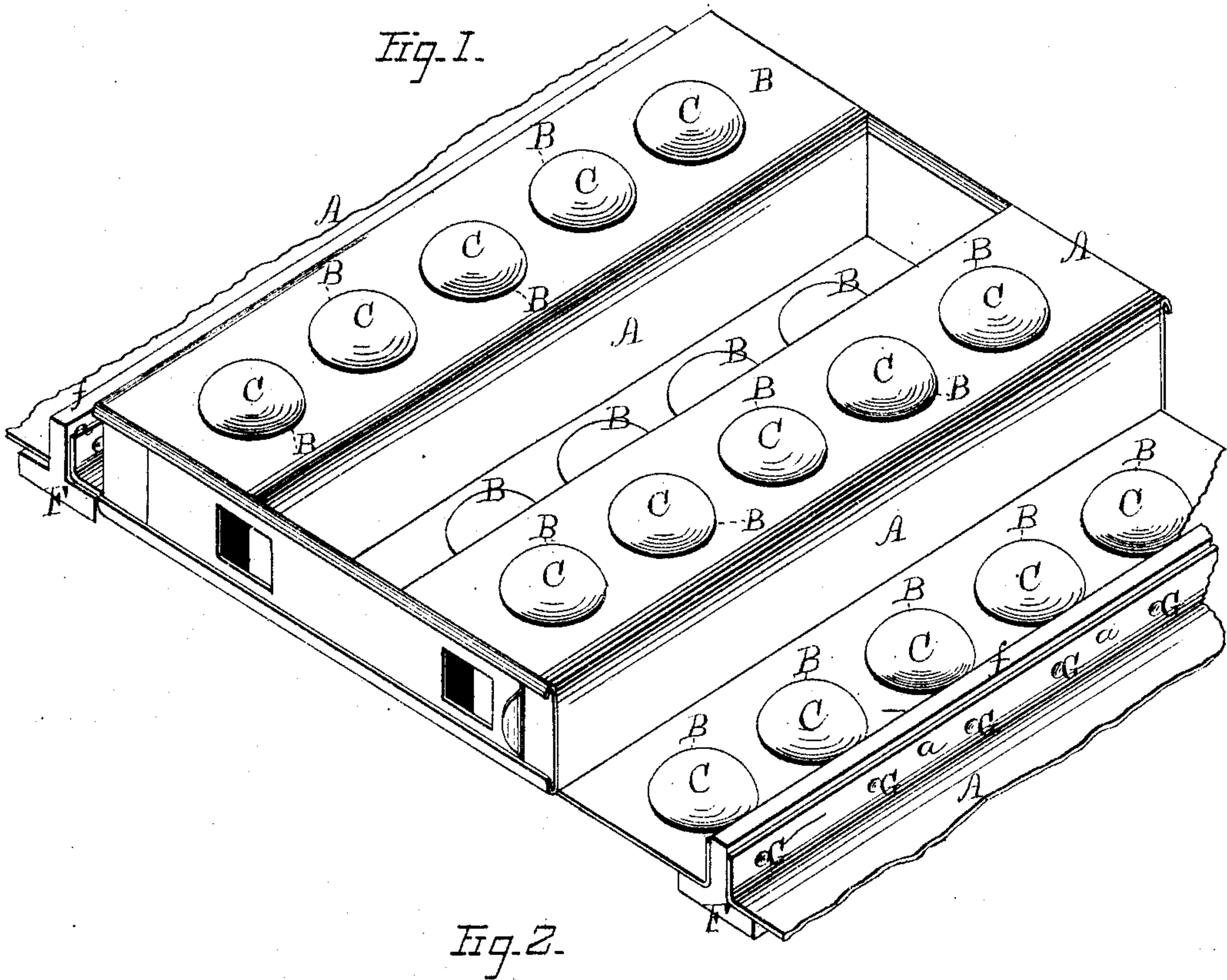


T. HYATT.

Illuminating Roof-Plates.

No. 147,401.

Patented Feb. 10, 1874.



WITNESSES=

Geo. E. Hutchinson  
John R. Young

INVENTOR.

Theodore Hyatt, by  
Prindle and Beane, his Attys



# UNITED STATES PATENT OFFICE.

THEODORE HYATT, OF NEW YORK, N. Y.

## IMPROVEMENT IN ILLUMINATING ROOF-PLATES.

Specification forming part of Letters Patent No. **147,461**, dated February 10, 1874; application filed January 15, 1874.

*To all whom it may concern:*

Be it known that I, THEODORE HYATT, of New York city, in the county of New York and in the State of New York, have invented certain new and useful Improvements in Illuminating Roof-Plates; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a perspective view of a section of a roof constructed in accordance with my improved method, and Fig. 2 is a transverse section of the same upon a line passing through the center of a series of illuminating-lenses.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is mainly to increase the strength and lessen the weight of a metal roof; to which end it consists, principally, in an illuminating sheet-metal roofing-tile, corrugated in the manner and for the purpose substantially as is hereinafter specified. It consists, further, in a roofing-tile having its edges turned upward, so as to be riveted upon the vertical portion of a supporting-beam, substantially as and for the purpose hereinafter shown. It consists, finally, in an illuminating roofing-plate, in which the edges of the lens-openings are turned upward, so as to form a curb for the reception of a rubber gasket, which is interposed between said plate and the projecting head of an illuminating-lens, substantially as and for the purpose hereinafter set forth.

In the annexed drawing, A represents a sheet-metal plate, corrugated in one direction, so as to form a series of elevations and depressions, which have vertical walls, and are of substantially equal width. Extending longitudinally through the center of each elevation and depression is a series of illuminating-openings, B B, &c., the edges of which are turned upward, so as to form a curb, *b*, that encircles each of said openings, as shown, and within each opening is placed an illuminating-lens, C, which has an enlarged or button-shaped head, *c*, that extends horizontally outward over the plate A. Between the lower side of the head *c* and the plate A is placed a

rubber or other elastic gasket, D, which rests upon the upturned edge or curb *b*. A nut, E, fitted upon or over the threaded shank of the lens C, and bearing against the lower side of the plate A, enables said lens to be drawn downward, and the gasket D to be compressed until a water-tight joint is produced between the head of said lens and said plate. The edges *a* of the plate A are turned upward at a right angle, and when said plate is in place said edges bear against and are secured to the vertical portion *f* of a roof-beam, F, a series of rivets, G, being placed within corresponding openings formed in said flanges *a* and said beam.

The advantages possessed by this construction are as follows: First, the corrugations of the plates afford largely increased strength, and enable a corresponding reduction to be made in their weight, and in the number and size of the supporting-beams, while, from the shape of the corrugations, the lenses are as readily placed in position as though said plates were plain; second, by means of the flanged edges of the plates the latter can be secured upon or to the vertical portions of the supporting-beams, and a better joint produced with much less labor than by the usual method, each opening through said beam being used for containing a rivet that confines two plates, while, in case of the usual horizontal joint, a separate opening must be formed in the beam for each rivet-hole in the roofing-plates; third, the upturned edge or curb around each lens-opening furnishes a bearing for the gasket, and enables a water-tight joint to be produced with greater certainty and far less pressure than would be possible if the plate immediately around said opening were plain.

If desired, the corrugations may be used for the purpose of ventilation, suitable openings being provided within their ends, and said openings closed, when desired, by means of a slide.

I am aware of the patents issued to Thaddeus Hyatt, upon the 8th day of July and the 22d day of October, 1873, numbered, respectively, 140,708 and 145,198, for improvements in vault-covers, and do not claim the features therein shown.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. An illuminating sheet-metal roofing-tile corrugated upon angular lines, so as to form a series of ridges and grooves, substantially as and for the purpose specified.

2. A roofing-tile having its edges turned upward, so as to be riveted upon the vertical portion of a supporting-beam, substantially as and for the purpose shown.

3. The illuminating sheet-metal roofing-tile

A, provided with curbed light-openings B b, and combined with the button-headed lenses C and rubber gaskets D, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of January, 1874.

THEODORE HYATT.

Witnesses:

E. P. STARR,

WILLIAM ACKERMANN.