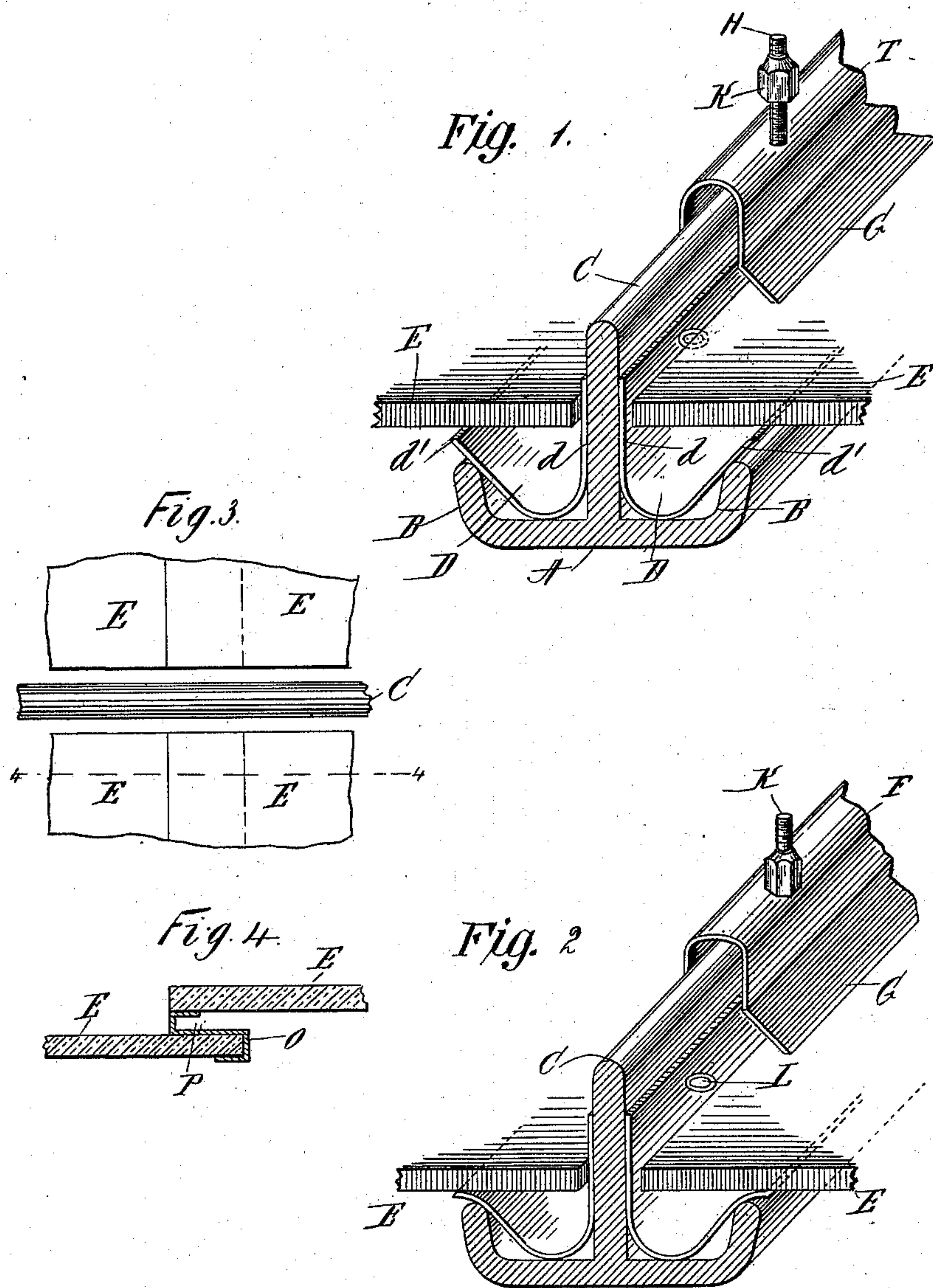


(No Model.)

C. ESCHER.  
SKYLIGHT SUPPORT.

No. 568,194.

Patented Sept. 22, 1896.



WITNESSES:

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# UNITED STATES PATENT OFFICE

CHARLES ESCHER, OF JERSEY CITY, NEW JERSEY.

## SKYLIGHT-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 568,194, dated September 22, 1896.

Application filed July 6, 1895. Serial No. 555,111. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES ESCHER, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Skylight-Supports, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to skylights, or to roofs or parts of roofs composed of plates of glass or similar material, which are supported by metal rafters or bars, usually composed of iron and angular in cross-section; and the invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, and in which—

Figure 1 is a perspective view of a portion of a skylight and its support before the parts are clamped together; Fig. 2, a similar view showing the parts secured in position; Fig. 3, a detail showing the separate plates and the manner in which they overlap, and Fig. 4 a section on the line 4 4 of Fig. 3.

In the practice of my invention I employ a rafter or bar A of the usual form, this rafter or bar consisting of an angle-iron of the shape of an inverted T in cross-section.

Within the angular spaces formed by the vertical longitudinal flanges B and the vertical central flange C, and on each side of said vertical central flange, are placed troughs D, of spring metal, one side, *d*, of which is adapted to rest against the side of the vertical central flange, as clearly shown in Figs. 1 and 2, and the other side, *d'*, of which is adapted to project outwardly over the tops of the vertical longitudinal flange B.

In practice these supports or rafters are arranged parallel with each other, and the plates E are placed in position so as to rest upon the outwardly-directed sides or edges *d'* of the troughs D, as clearly shown in Fig. 1, and in order to secure them in place I provide a cap or cover of sheet metal F, which is bent into

the form of a yoke in cross-section and is adapted to be placed over the top of the vertical flange C, and the bottom edges or sides of which are turned outwardly, as clearly shown at G, so as to press down the plate E.

Securely connected with the central vertical flange C is a vertical screw-threaded rod H, on which is mounted a nut K. The plates E will be pressed downward, as shown in Fig. 2, and the outwardly-directed edges *d* of the troughs D will be pressed downward and curved over the tops of the flanges B, as shown in said figure. By this means a perfectly tight connection is made for the plates E, and if by any means the water should pass between said plates and the rafter or the support C the same would be received by the troughs D and carried off, as will be readily understood.

It will be understood, of course, that a number of plates E are usually employed between each of the rafters or supports, and when this is the case one of said plates overlaps the other, as shown in Fig. 4, and in order to provide a tight connection for these overlapping sections to drain off any water that may collect on the under side of the upper section I provide a strip of metal O, which is bent into the form of an S in cross-section, and the angles of which are practically right angles, and one of the loops formed by this strip is connected with the upper edge of the lower plate E, and the upper plate E rests upon the other, as clearly shown in Fig. 4. By means of this arrangement a channel P is provided, which will drain any water that may collect therein and crosswise of the plates and into the troughs D, as will be readily understood.

The troughs D may be secured to the vertical central flange C by means of holes or apertures L, which are formed in the vertical sides *d* of said troughs, and in said vertical extension by means of bolts, screws, or otherwise.

Having fully described my invention, I claim and desire to secure by Letters Patent—

The combination with a T-shaped rafter A, having the side flanges B, and the central flange C, of spring-metal troughs D supported on each side of said central flange and hav-

ing one side  $d$  thereof resting against said  
flange, and the other side  $d'$  projecting out-  
wardly over the top of the side flanges B, and  
the plates E resting upon the sides  $d'$  and  
5 against the sides  $d$  of said troughs, substan-  
tially as described.

In testimony that I claim the foregoing as

my invention I have signed my name, in pres-  
ence of two witnesses, this 3d day of July,  
1895.

CHARLES ESCHER.

Witnesses:

L. M. MULLER,

A. M. CUSACK.