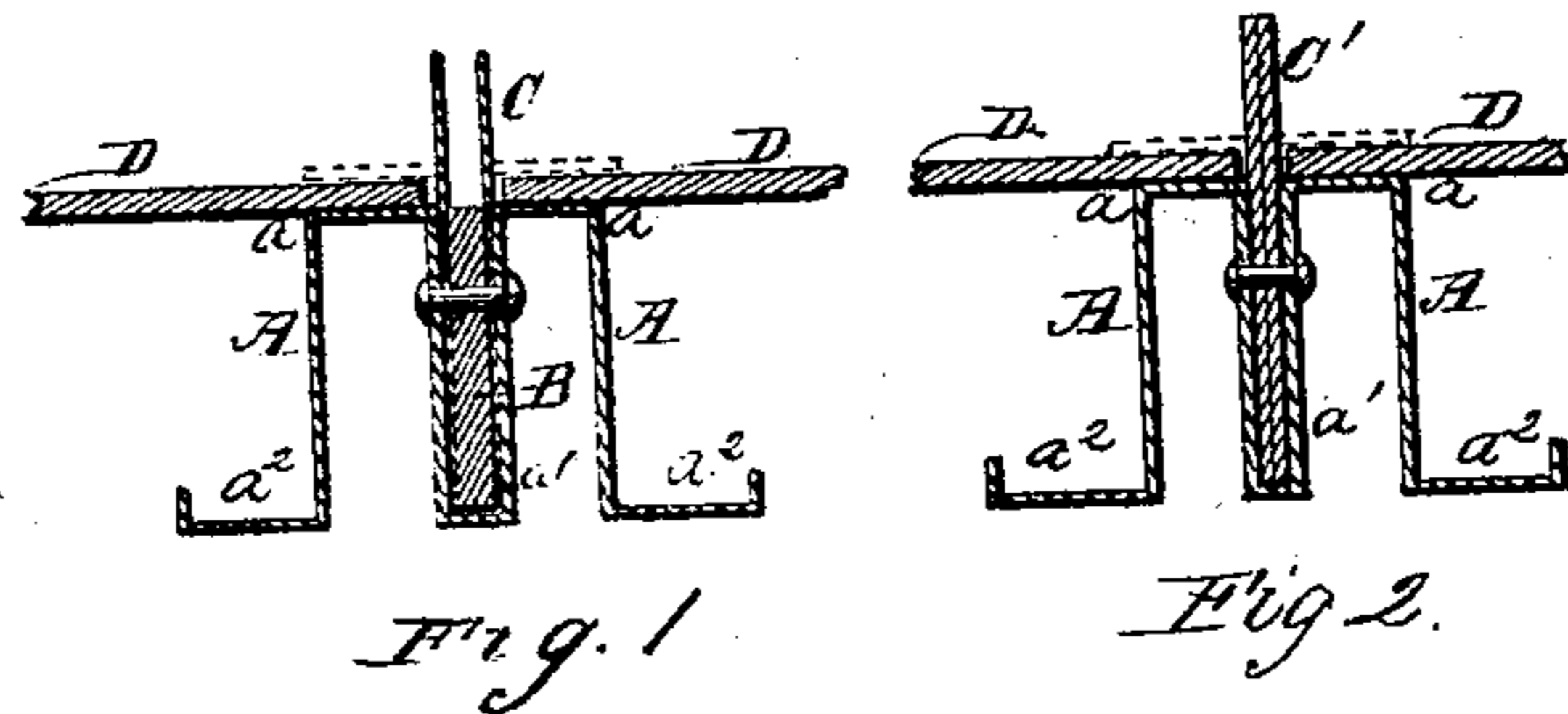


G. HAYES.  
Skylight-Bars.

No. 147,130.

Patented Feb. 3, 1874.



Witnesses

Robert Weather  
Mr. Lawler.

Inventor.

George Hayes

# UNITED STATES PATENT OFFICE.

GEORGE HAYES, OF NEW YORK, N. Y.

## IMPROVEMENT IN SKYLIGHT-BARS.

Specification forming part of Letters Patent No. **147,130**, dated February 3, 1874; application filed November 6, 1873.

### CASE B.

*To all whom it may concern:*

Be it known that I, GEORGE HAYES, of the city, county, and State of New York, have invented a certain new and useful Improvement in Skylights, of which the following is a specification:

This invention relates to improvements in means for supporting and securing the glass plates of skylights; and it consists in the employment of supporting-bars, which are composed of a single piece of sheet metal, formed with gutters at their lower ends, and with shoulders at their upper ends for supporting the glass plates, the same being retained in position by means of a cap-piece, which may be the upper termination of a stiffening-plate inserted into a continuous channel or trough, formed by bending the supporting-bar into the required shape; or said trough may be omitted, and the glass-retaining device be applied to the top of the bar.

In the accompanying drawing, Figures 1 and 2 are transverse sections of the supporting-bar, with means for holding the glass plates in position.

I propose to lessen the cost of manufacture, and also the weight, of the bars A, which comprise the frame of a skylight, by making the same of a sheet-metal plate, which is bent in such a manner as to form vertical side walls, the lower ends of which are bent in an outward and upward direction, so as to constitute gutters  $a^2$ , which are designed to serve as receptacles for condensed vapors and rain. The top of the bar, or the horizontal portion intervening between the side walls of the same, is made level or flat, as shown at  $a a$ , so as to form shoulders for supporting the ends of two adjacent glass sections, D, and the central por-

tion of the bar A being depressed or bent so as to form a continuous channel or trough,  $a^1$ , as shown in Figs. 1 and 2, the glass-supporting shoulders  $a a$  being located at both sides of said trough. The glass plates, which rest upon the supporting-bar, are secured in position by means of a fastening device, which is designated by letters C in the various figures. The portion of the trough or channel  $a^1$  is to receive a strengthening or stiffening plate, B, and also to retain the lower portion of a pair of fastening-plates, C, the upper ends of which are capable of being turned down upon the ends of the glass plates D for securing the same in position, as shown in Fig. 1. Instead of the solid stiffening-plate for strengthening the glass-supporting bar, I may employ, as shown in Fig. 2, a doubled plate, C', or a pair of connected plates, the upper ends of which can be turned down upon the glass, said plate serving, in this instance, both as a stiffening medium and as a glass-retaining device.

The present invention is specially designed to furnish a glass-supporting bar which is light and simple in construction, and easily manufactured at a comparatively small cost.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a skylight, a glass-supporting bar, A, constructed of a single piece of metal bent into shape to form a trough,  $a^1$ , base gutter or gutters  $a^2$ , and top glass-supporting shoulders  $a$ , combined with a suitable glass-retaining device, substantially as described.

GEORGE HAYES.

Witnesses:

ROBERT MATHIE,  
PETER KAUSCH.