G. HAYES.

Skylights.

No. 143,150. Patented September 23, 1873.

Fig. 2

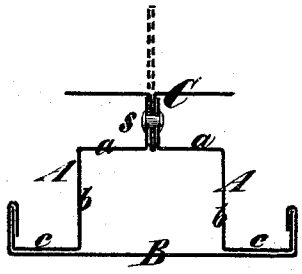
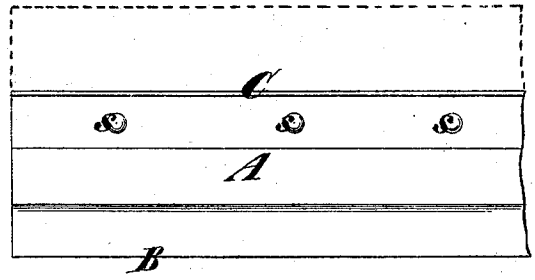


Fig. 1



Witnesses:
Michael Ryan
Fred Haynes

George Hayes
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

GEORGE HAYES, OF NEW YORK, N. Y.

IMPROVEMENT IN SKYLIGHTS.

Specification forming part of Letters Patent No. **143,150**, dated September 23, 1873; application filed July 14, 1873.

CASE F.

To all whom it may concern:

Be it known that I, GEORGE HAYES, of the city, county, and State of New York, have invented Improvements in Skylights, Conservatories, and other glazed structures, of which the following is a specification:

This invention consists in a combination, with a bar having a divided ridge along its top, of a folded cap-plate constructed of pliable metal doubled along its middle, but of single thickness otherwise, and arranged so that such doubled portion enters between the divided ridge of the bar, the whole forming a light, strong, and simple construction of sectionally-constructed hollow bar with cap-plate attached, together with every desirable provision for expansion and contraction of the parts, and for retaining the panes of glass in their places.

In the accompanying drawing, Figure 1 is a side view of a bar with attached cap-plate made according to my invention, and Fig. 2 is a transverse section of the same.

Similar letters of reference indicate corresponding parts in both figures.

This bar is composed of two pieces of sheet metal, A A, which from their top edges extend downward parallel with each other, and in proximity to constitute an upper ridge along the bar. From this ridge branch out laterally two shoulder-like portions, *a a*, and from these two parallel portions, *b b*, again extend downward. Base pieces *c c* extend out laterally, and the edges of these are turned up, and are clasped or embraced by the turned-over edges of a bottom plate, B, which extends along the bottom of the portions *c c* from one to the other, and stays the bar against lateral deflection. The general shape of the bar thus formed is that of an arch. The portions *c c* and their outer turned-up edges constitute side gutters to the bar to carry off water or moisture which may collect.

The double cap-plate which I alluded to before consists simply of a sheet of lead or other soft metal doubled along the middle, and it is fitted between the top parallel portions of the component parts A A of the bar, and is secured in place by rivets *s s* passing through them. This cap-plate is folded outward in opposite directions over onto the panes of glass supported by the bar to retain them in place.

By this construction and arrangement of the cap-plate C, relatively with the arched bar, said cap-plate, while double at its tongue or central portion, where the the same is braced by the divided ridge of the bar, is of single construction as regards its lateral extensions or wings, and thus combines lightness and economy of metal with great strength.

What I claim as my invention is—

The combination, with the bar having a divided ridge at its top, of the cap-plate C folded to give it a double thickness along its middle or tongue, but of single thickness throughout its lateral extensions or portions, substantially as shown and described.

GEORGE HAYES.

Witnesses:
MICHAEL RYAN,
FRED HAYNES.