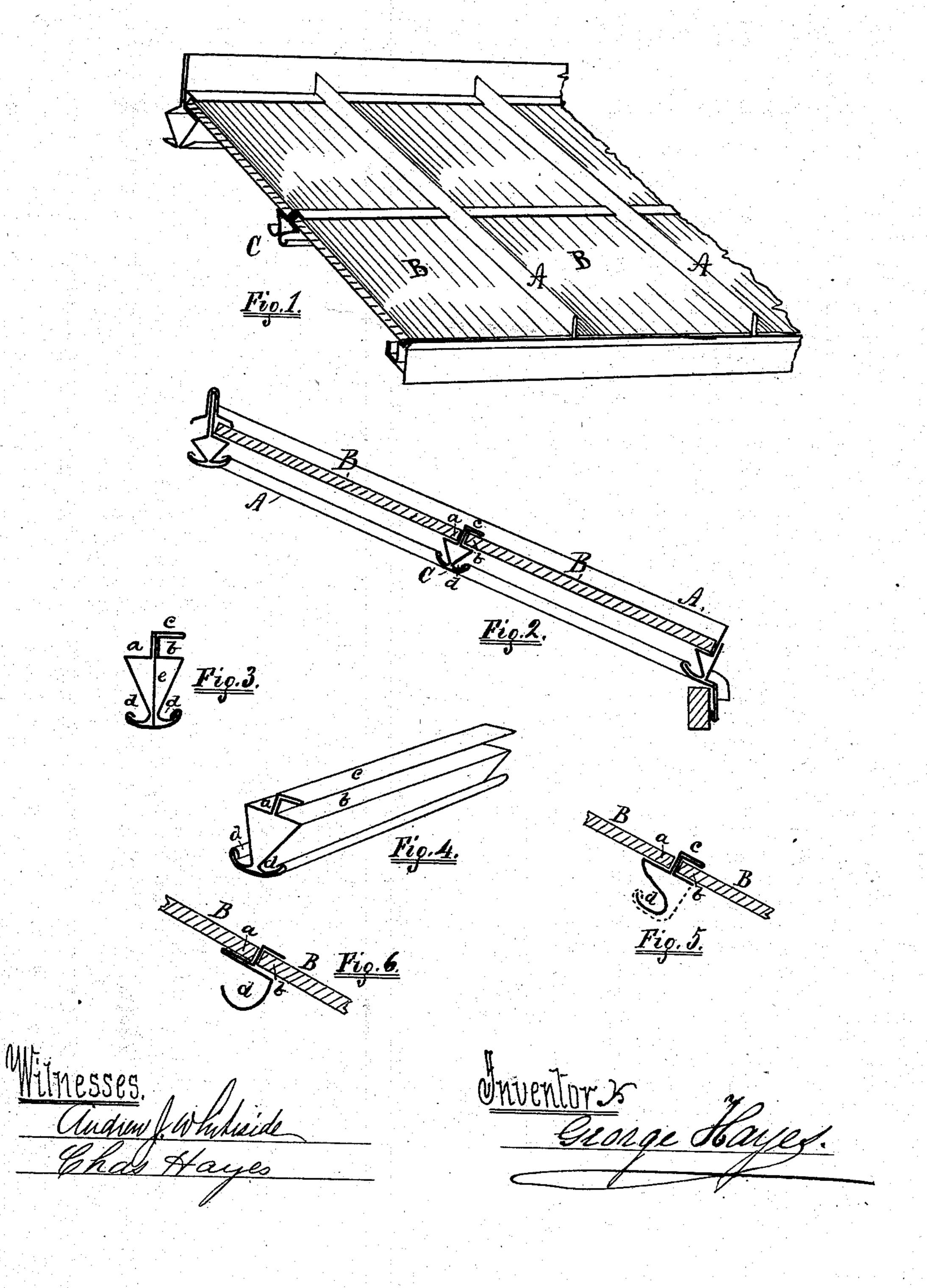
(No Model.)

G. HAYES.

CROSS CLIP FOR METALLIC SKYLIGHTS AND GLAZED ROOFS.

No. 291,342.

Patented Jan. 1, 1884.



United States Patent Office.

GEORGE HAYES, OF NEW YORK, N. Y.

CROSS-CLIP FOR METALLIC SKYLIGHTS AND GLAZED ROOFS.

SPECIFICATION forming part of Letters Patent No. 291,342, dated January 1, 1884.

Application filed March 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, George Hayes, a resident of the city, county, and State of New York, have invented a new and useful Cross-Clip for Metallic Skylights and Glazed Roofs, of which the following is a specification.

The object of this invention is to provide for the "butt-jointing" of the glass panes down the slope of the skylight or glazed roof, so that the glasses (when the span is so great as to require them to be used in section) will lie on the same plane down the slope and securely rest upon ledges or rabbets, also on a uniform plane, all the edges of the panes thus resting on a secure bed and the lapping of glass panes wholly avoided.

The invention consists of a cross-clip having a rabbet to receive the lower edge of the upper sheet of glass, and a groove to receive 20 the upper edge of the lower sheet of glass, and a gutter or gutters arranged so as to be wholly, or nearly so, beneath the ledges or rabbet and groove aforesaid, to collect drip of leakage or condensation and offer no obstruction to light. 25 The gutters of the clip communicate with gutters of the sloping rafters or bars of the skylight or roof, so as to discharge therein, and the water collected in the gutters of the clip escape thereby to some proper outlet at the 30 base of the skylight or roof. This clip is constructed of one or more pieces of sheet metal folded or bent up into the shape requisite.

In the accompanying drawings, Figure 1 shows in perspective a portion of a glazed 35 roof or skylight, illustrating the position of clips. Fig. 2 shows a section, giving the slope of sloping bars, glasses, and clips. Fig. 3 shows an enlarged view of the cross-clip. Fig. 4 shows the same in perspective. Fig. 5 shows in section a modified form of the same clip, one gutter only being formed therein. Fig.

6 shows another modified form of clip in section, the difference being in folding the metal to produce the same results.

A represents rafters or sloping bars of a skylight or glazed roof. B represents the glass panes, and C represents the cross-clip. The clip is adapted for use with any style of rafters or bars having gutters, so that its gutters may discharge therein, and the clip is made of 50 folded or bent sheet metal, so as to have the rabbet or ledge a, groove b, covering-flange c, and gutter or gutters d, the gutter or gutters d being thrown completely under the ledge and groove, so as to offer the least possible 55 obstruction to light, which is a great desideratum in many instances, especially photographic skylights.

An internal strengthening or core plate may be used wherever necessary for strength. One 60 is shown at e, Fig. 3.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

The sheet-metal cross-clip C, for abutting panes of glass in skylight and glazed roofs, 65 composed of one or more pieces, so bent that a rabbet or ledge, a, is formed to support the lower edge of the upper sheet of glass, and a groove, b, to receive and support the upper edge of the lower sheet of glass, and beneath 70 the said ledge a and groove b the metal bent backward from the upper edge of the ledge a, and then curved to constitute a gutter, d, located entirely beneath the glass-supporting parts of the clip C, so as not to obstruct light 75 entering through the glass panes, essentially as shown and described.

GEORGE HAYES.

Witnesses:

ANDREW J. WHITESIDE, CHAS. HAYES.