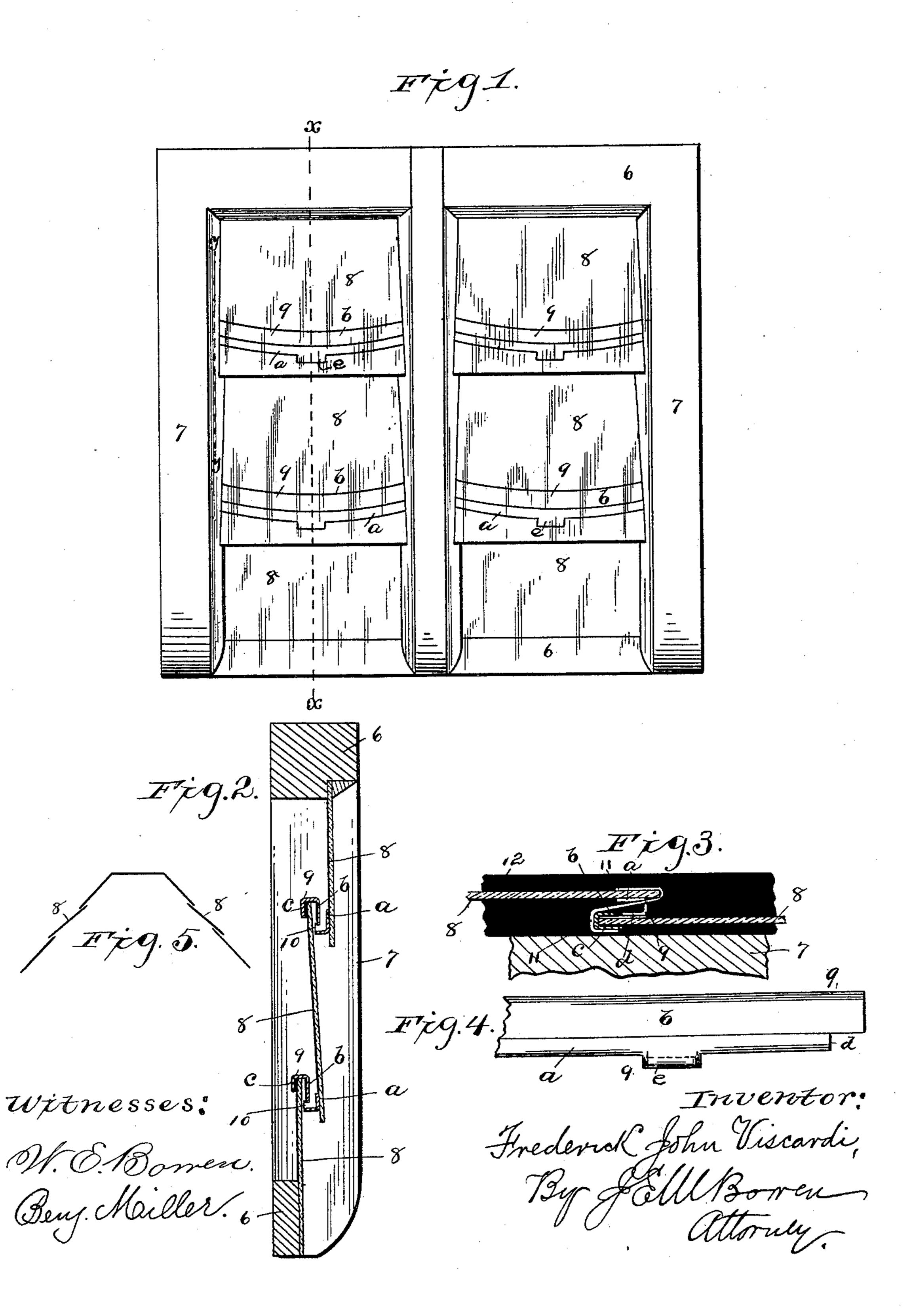
(No Model.)

F. J. VISCARDI.
SASH FOR HOT HOUSES, SKYLIGHTS, &c.

No. 462,783.

Patented Nov. 10, 1891.



## United States Patent Office.

FREDERICK JOHN VISCARDI, OF GREAT BARRINGTON, MASSACHUSETTS.

## SASH FOR HOT-HOUSES, SKYLIGHTS, &c.

SPECIFICATION forming part of Letters Patent No. 462,783, dated November 10, 1891.

Application filed February 7, 1887. Renewed April 17, 1891. Serial No. 389,271. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK JOHN VISCARDI, of Great Barrington, in the county of Berkshire and State of Massachusetts, have invented a certain new and useful Improvement in Sashes for Hot-Houses, Skylights, and Such other Like Structures; and I hereby declare the following to be a full and clear description thereof.

My invention relates to sashes designed for hot-houses, skylights, &c.; and it has for its object the construction of the transverse muntings of the sash of metal, preferably sheet metal, and of a form whereby gutters are provided for receiving and carrying off the condensed moisture collected on the inside or bottom of the panes of glass, and the muntings are also constructed so as to securely hold the panes of glass in place.

The invention is hereinafter described, and is shown in the accompanying drawings, which form a part of this specification, and wherein like features are indicated by like figures of reference in the several views, and wherein—

Figure 1 is a general plan of a sash embodying my invention. Fig. 2 is a longitudinal section through the line x x of Fig. 1, showing the form of the transverse muntings and the relation that the panes of glass bear to said muntings when placed in position. Fig. 3 is a section on the line y y of Fig. 1, showing the metallic strapembedded in putty and which is intended to assist in holding the glass in place. Fig. 4 is a fragmentary top plan view of one of the muntings; and Fig. 5 is a diagram intended to convey a proper conception of the manner in which the several panes of glass in a sash will appear when placed in position on the roof of a hot-

Referring to the drawings, 6 indicates the styles, and 7 the end rails, of the sash, and these are constructed in the usual manner for skylight purposes, and may be made of metal or wood. The transverse muntings are indicated by 9, and they divide the sash laterally, their number depending upon the number of panes of glass in the sash. These muntings are preferably of the form shown in Fig. 1, being curved instead of straight. Each munting 9 consists of the flange a, upon which the outer end of the pane of glass is adapted to rest, (and which projects slightly beyond its front edge, as shown in Fig. 2,) and

the flange b on a lower plane than the flange 55 a, and also of the under flange c, all as shown in Fig. 2. Midway between the ends of the munting and on a level with the flange b there is made an opening 10, having its outlet in the extended portion e, Fig. 4, of the 60 flange a of said munting. The drip-opening 10 is at the bottom of the extended portion e of the flange a. As the moisture accumulates on the inside of the pane of glass Sit will fall upon the flange band drip through 65 the opening 10 onto the top surface of that pane of glass immediately below the firstmentioned pane, and from which it will drip on the top of the next succeeding pane and then pass to the ground. The function of 70 the flange c is, as shown in Figs. 2 and 3, to receive the inner end of the pane of glass and support the same in proper relation to the under surface of the flange b and the drip-opening 10 at the bottom of extension e. 75

In Fig. 3 I show a fragmentary sectional view illustrating the manner of supporting the inner and outer ends of the panes of glass, the former, as shown, resting upon the flange c and the latter upon and projecting over the 80 top surface of that part of the munting forming the flange a.

By the construction herein described moisture is prevented from accumulating on the glass and the panes of glass are held securely 85 against displacement.

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

In a sash for hot-houses, &c., the combina- 90 tion, with the styles and end rails, of transverse muntings consisting of upper and lower flanges a c for supporting the panes of glass, and intermediate flange b for receiving the drip from the glass, the said flange a having 95 a central extension e, which is provided with an opening 10, adapted to receive the drippings from drip-flange b and deposit the same on the inner end of pane of glass 8, which is supported on flange c beneath flange b and 100 said drip-opening 10, substantially as set forth.

In witness whereof I hereunto set my hand in presence of two witnesses.

FREDERICK JOHN VISCARDI. Witnesses:

H. C. JOYNER, N. W. SHORES.