No. 755,784. PATENTED MAR. 29, 1904.

F. LYSTER.

VENTILATING SASH BAR.

APPLICATION FILED JUNE 29, 1903.

NO MODEL.

Fig. 1.

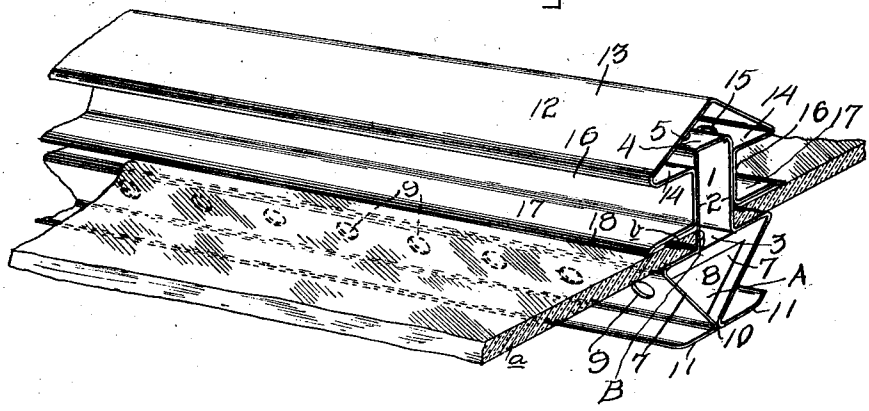
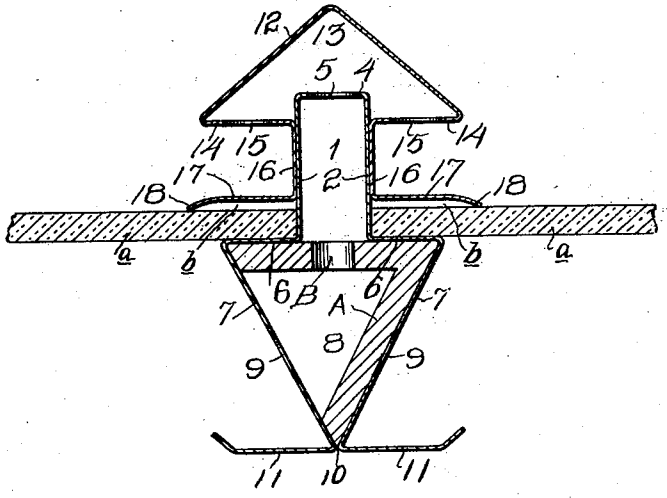


Fig. 2.



Inventor

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Witnesses

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No. 755,784. Patented March 29, 1904.

UNITED STATES PATENT OFFICE.

FRANK LYSTER, OF PHILADELPHIA, PENNSYLVANIA.

VENTILATING SASH-BAR.

SPECIFICATION forming part of Letters Patent No. 755,784, dated March 29, 1904.

Application filed June 29, 1903. Serial No. 163,555. (No model.)

To all whom it may concern:

Be it known that I, FRANK LYSTER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Ventilating Sash-Bars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improved ventilating sash-bar adapted for use for skylight and other sashes; and it consists in the construction and arrangement of devices hereinafter described and claimed.

One object of my invention is to effect improvements in the construction of the sash-bar whereby the same may be made of sheet metal and so effectually braced as to render the same exceedingly strong, while being light and very cheaply manufactured.

A further object of my invention is to effect such improvements in the construction of the sash-bar as to enable the same to afford means for ventilation and prevent condensation of moisture on the glass.

A further object of my invention is to effect improvements in the construction of the sash-bar whereby the same effectually prevents the entrance of rain-water.

A further object of my invention is to combine with the sash-bar a cap which coacts therewith in securing the glass thereto and which prevents the entrance of rain-water into the sash-bar.

A further object of my invention is to effect improvements in the construction of the cap whereby the same is rendered effective to exclude water from the joint between the glass and the sash-bar.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a ventilating sash-bar and cap embodying my improvements. Fig. 2 is a sectional view of the same, showing the glass secured between the sash-bar and the cap and also showing the cap secured to the sash-bar.

My improved ventilating sash-bar is made of sheet metal, preferably zinc, galvanized iron, copper, or the like, which is first bent to form the web 1, which is U-shaped in cross-section, hollow, with its side walls 2 appropriately spaced apart, open between their inner sides, as at 3, and with the connecting-wall 4, which forms the outer side of the hollow web, provided with ventilating-openings 5. At the bases of the side walls 2 of the web are outwardly-extended lateral shoulders 6 to support the glass, (indicated at *a* in Fig. 1,) and from the said shoulders are bent obliquely-disposed converging walls 7, which form a chamber 8, that communicates with the space in the hollow web. The said converging walls 7 are provided with ventilating-openings 9, are joined together, as at 10, by solder or the like, and gutters 11 are bent outwardly from the converging portions of the said walls 7, the said gutters being overhung by the said walls 7 when the sash-bar is used in a skylight and serving to collect and to carry off any drip of water due to leakage or condensation.

It will be understood that by the hollow construction of the web 1 of the sash-bar the provision of the openings 5 and of the chamber 8, formed by the inclined converging side walls 7, provided with the openings 9, my improved sash-bar is rendered exceedingly efficient for purposes of ventilation and to prevent condensation of moisture on the glass. It will be furthermore understood that the inclined converging walls 7 at the base of the web 1 effectually brace and strengthen the same, so that the sash-bar while being exceedingly light is also exceedingly strong. A core-bar A, angular in cross-section and having openings B to register with the space between the walls of the web 1, may be placed in the chamber 8 to still further strengthen the sash-bar, if necessary or desirable. This core-bar is removable from the bar at will. The cap 12 is also made of sheet metal similar to that employed in the construction of the sash-bar. This cap is formed with a head 13 to receive the outer side of the web of the sash-bar and inclose the same, the said head being of such width as to project laterally beyond the opposite side walls 2 of the web 1, and its inner

or under lateral walls 14 are provided with ventilating-openings 15. Side walls 16 are bent from the lateral walls 14, preferably at right angles thereto, as here shown, to bear against the outer sides of the side walls 2 of the web 1. Lateral flanges 17 are bent outwardly from the walls 16 and downwardly at their outer portions, as at 18, to bear on the glass and form spaces *b* between the glass and said flanges. The latter overhang the joints between the glass and sash-bar and prevent the entrance of water to said joints.

It will be understood that the cap may be readily detached from and applied to the sash-bar. When the sash-bar and cap are in use, as shown in Fig. 1, the cap is secured to the sash-bar. This may be done by passing wires through the walls 16 of the cap and the walls 2 of web 1 and soldering or otherwise securing the wire in place, or bolts or other devices may be used to thus secure the cap to the web of the sash-bar. I do not limit myself in this particular.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A ventilating sash-bar having a hollow web, provided with openings at its outer side, supporting-shoulders extending outwardly from opposite sides of the base of the web, converging apertured brace-walls extending obliquely from the outer sides of the shoulders, and gutter-flanges extending outwardly from the said brace-walls, substantially as described.

2. A ventilating sash-bar, having a hollow web provided with openings at its outer side, supporting-shoulders extending outwardly from opposite sides of the base of the web, and converging apertured brace-walls extending obliquely from the outer sides of the shoulders and forming a chamber which communicates with the interior of the hollow web.

3. A ventilating sash-bar, having a hollow web, open at its inner side and provided with ventilating-openings at its outer side, and a cap to engage and cover the projecting portion of said web, said cap having a head extending laterally beyond the sides of the web and provided on its inner side with ventilating-openings.

4. In combination with a ventilating sash-bar, having supporting-shoulders and a hollow apertured web, a cap having side walls to engage the outer sides of the web, and a lateral head to extend beyond opposite sides of the web and cover the outer side thereof, said head forming a chamber which communicates with the interior of the hollow web through the apertures of the latter, said head having ventilating-openings, substantially as described.

5. In combination with a sash-bar having supporting-shoulders and a hollow apertured ventilating-web, a cap having a laterally-widened head to cover the outer side of the web and formed with a ventilating-chamber which communicates with the interior thereof, side walls to engage those of the web, and outwardly-extending flanges to bear on the glass and cover the joints between the latter and the web.

6. A ventilating sash-bar having an apertured hollow web, a chamber below the web and having apertured walls, and an apertured core-bar in and removable from said chamber.

7. A ventilating sash-bar having an apertured hollow web, a chamber below the web, extending laterally from opposite sides of the base thereof and having downwardly-converging apertured side walls, and an angular, hollow apertured core-bar in and removable from the said chamber.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK LYSTER.

Witnesses:
HERMAN C. HORN,
F. M. DOERR.