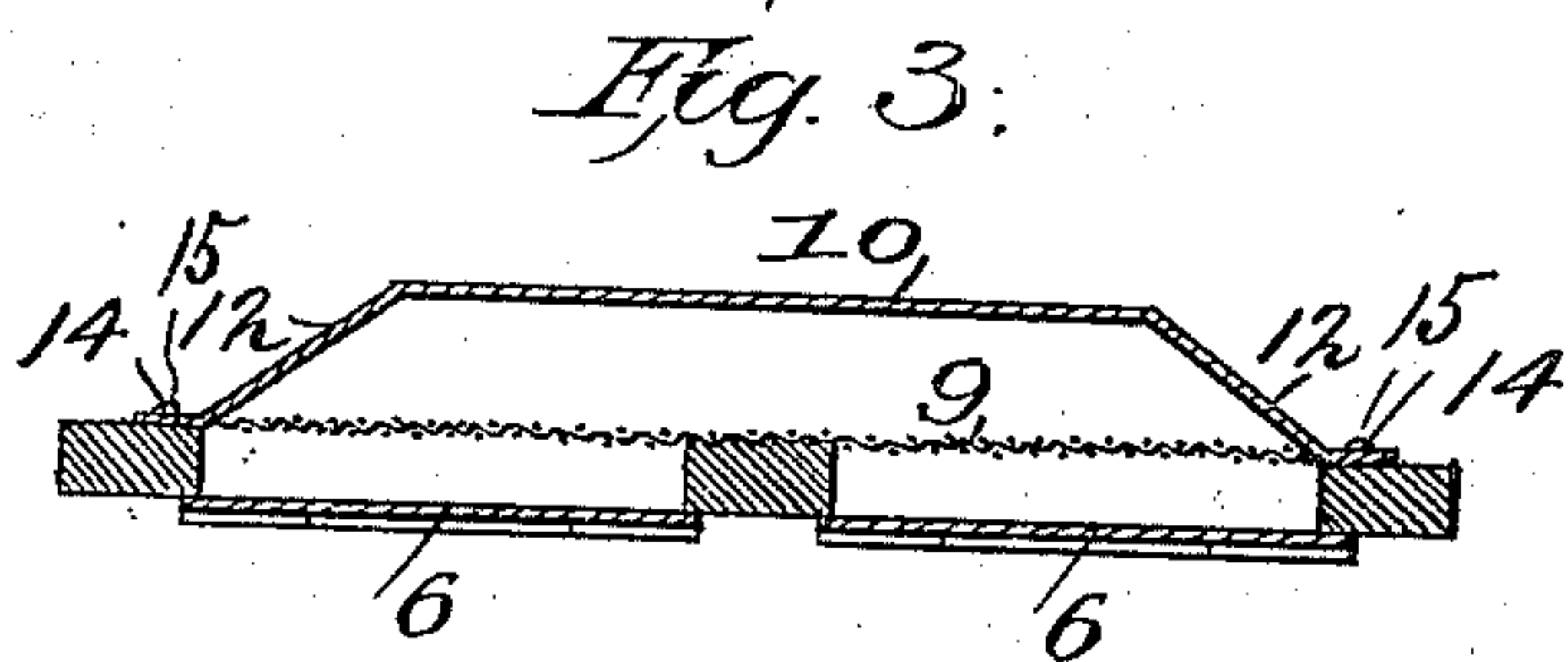
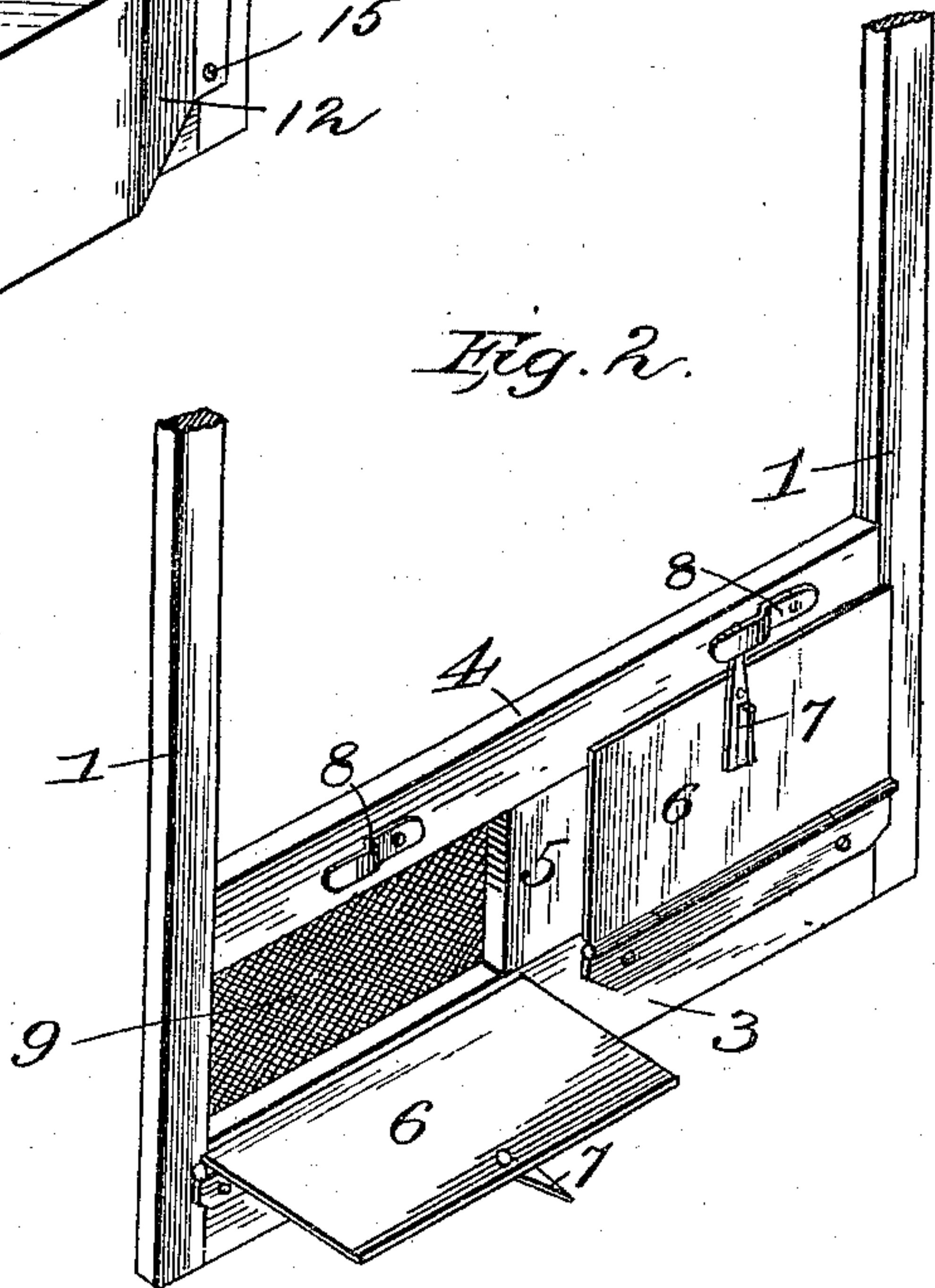
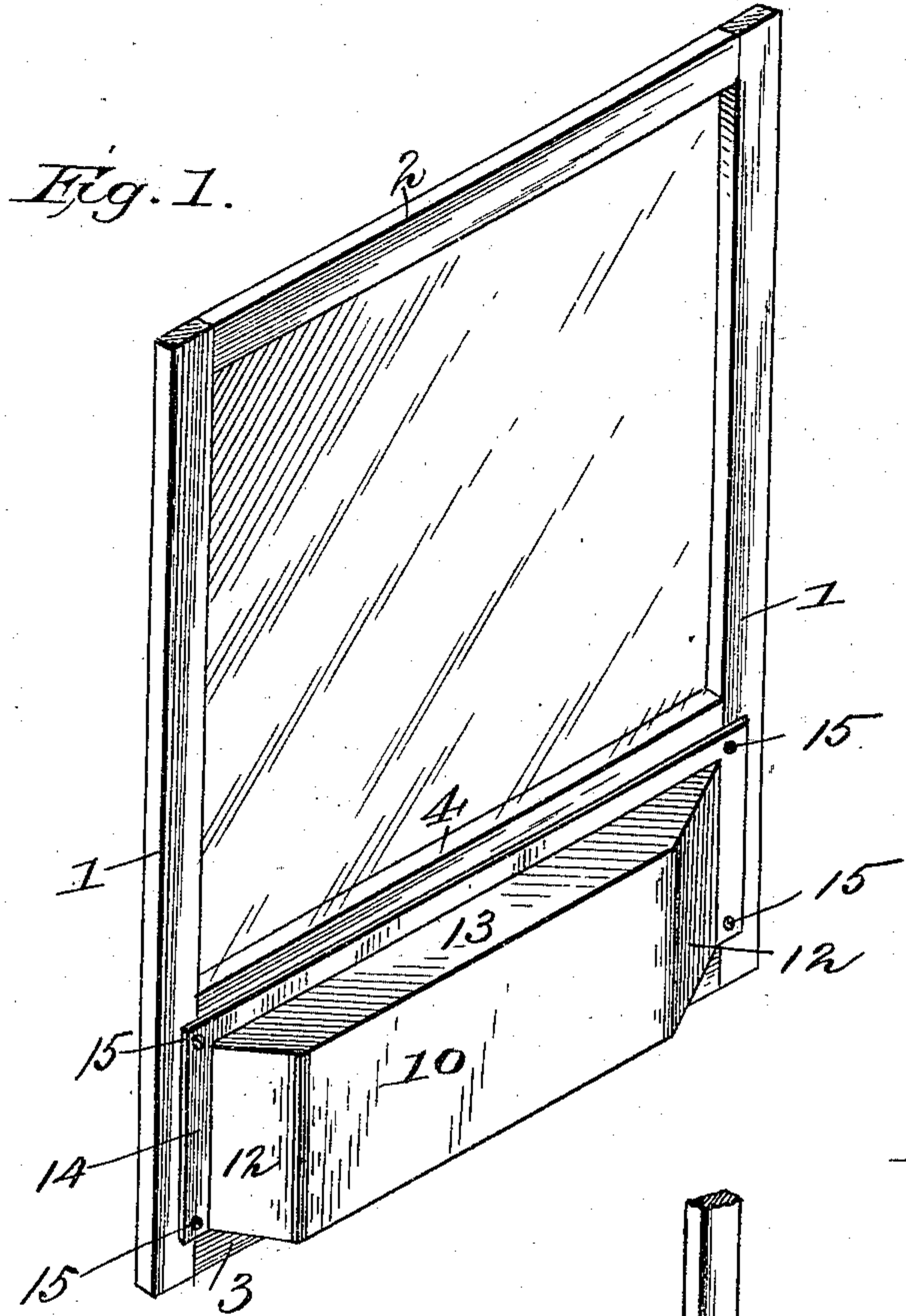


(No Model.)

W. W. ROBINSON.
VENTILATOR.

No. 542,501.

Patented July 9, 1895.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM W. ROBINSON, OF RIPON, WISCONSIN.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 542,501, dated July 9, 1895.

Application filed February 28, 1895. Serial No. 540,050. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. ROBINSON, a citizen of the United States, and a resident of Ripon, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Ventilators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to window-ventilators for railway-cars and houses and buildings of all classes and descriptions; but it is more particularly adapted for use in connection with railway-cars, and its object is to provide an improved device for such purpose which shall possess superior advantages with respect to efficiency in operation.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a window-sash, showing my improvements applied thereto, looking from the outside. Fig. 2 is a similar view looking from the inside. Fig. 3 is a transverse section of the lower part of the sash.

In the said drawings the reference-numeral 1 designates the side rails of a railway-car-window sash, 2 the top rail, and 3 the bottom rail, forming a rectangular sash adapted to engage with the window of a car. A short distance above the bottom rail is a longitudinal rail 4, extending from across the sash and secured to the sides thereof, and provided at its center with a vertical rail 5, secured thereto and to the bottom rail 3, forming two rectangular openings, which are closed by means of doors 6, hinged at their lower edges to said lower rail and

provided at their upper ends with pivoted latches 7, adapted to engage with keepers or catches 8 on the intermediate longitudinal rail. On the outside of the sash is secured a strip of wire-gauze 9, which serves to prevent dust or dirt from entering said openings. On the outside of the sash is also secured a hood 10, of metal or other suitable material, comprising the inclined ends 12, bent at an angle to the body portion, horizontal top 13, and the flanges 14, by which the hood is secured to the sash by screws 15 or other fastening devices. It will thus be seen that a hood or housing is formed closed at the top and open at the bottom.

In operation the air will enter through the open side of the hood and pass through the wire-gauze screen, which will exclude dust, dirt, and cinders. From thence the air will pass through the openings, the doors being opened and set at any angle desired, so as to prevent a direct draft into the car.

While the invention, as before stated, is more especially adapted for railway-cars, it may be used with equal advantage in schools, factories, dwelling-houses, and other buildings.

Having thus described my invention, what I claim is—

The combination with a window sash provided with a horizontal rail and a vertical rail near the lower end, of the hinged doors, the wire gauze screen and the hood or housing secured to the outside of the sash, open at the lower side and closed at the upper side, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM W. ROBINSON.

Witnesses:

W. T. RUVALS,
C. B. DICKINSON.