

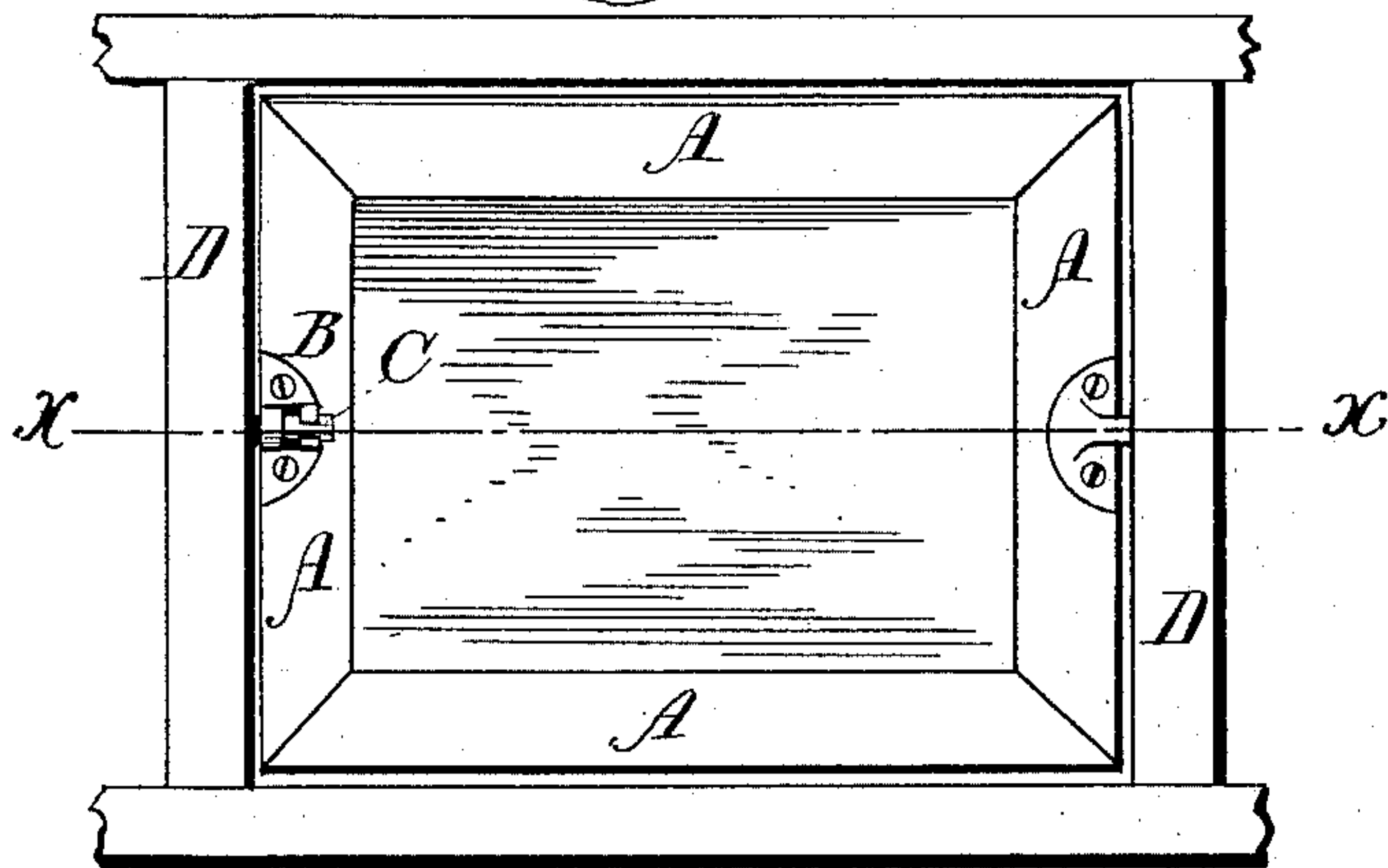
(No Model.)

W. BALLMAN.  
CAR VENTILATOR.

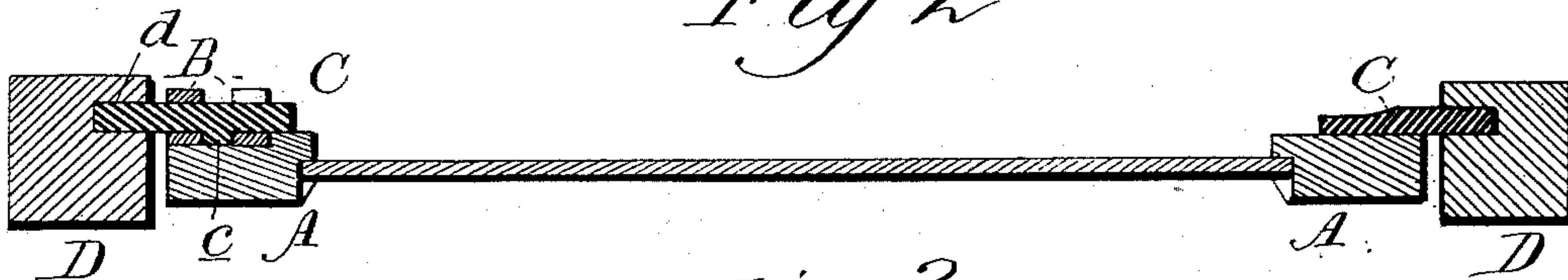
No. 375,721.

Patented Jan. 3, 1888.

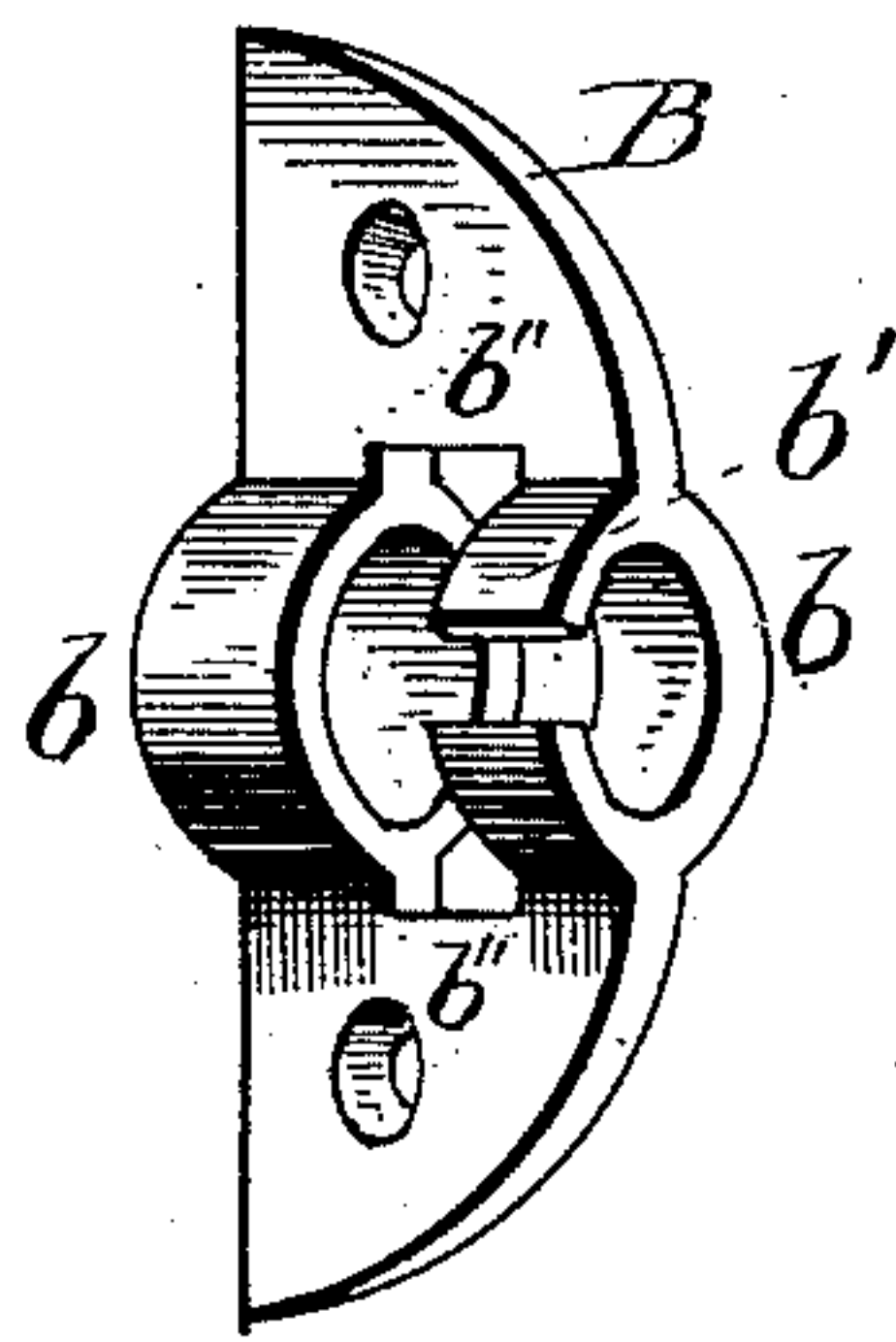
*Fig. 1.*



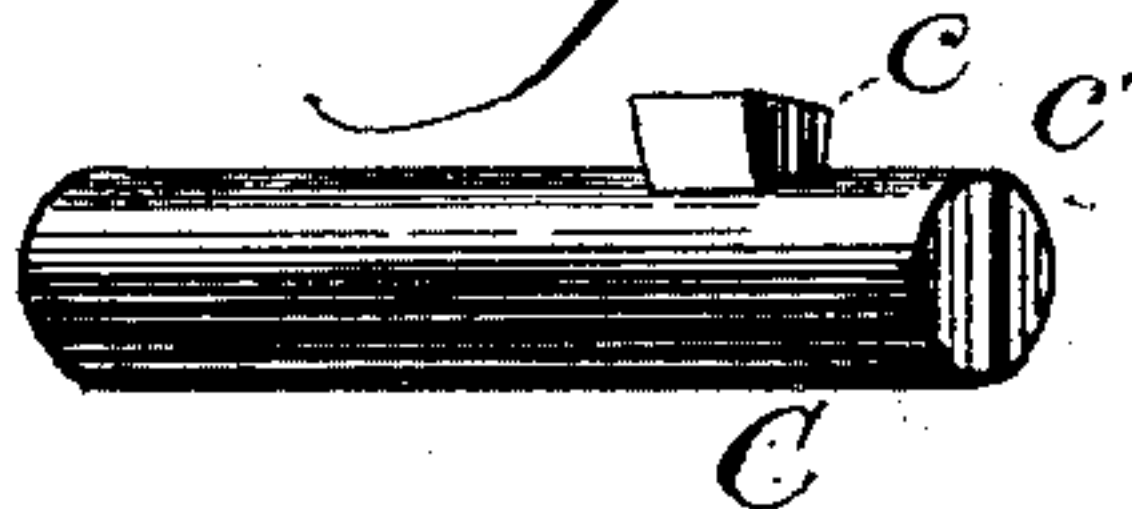
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM BALLMAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF  
ONE-HALF TO JOHN T. KIEHNER, OF SAME PLACE.

## CAR-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 375,721, dated January 3, 1888.

Application filed March 30, 1887. Serial No. 233,083. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM BALLMAN, of the city and county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Car-Ventilators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part hereof, and in which—

10 Figure 1 is an elevation of an ordinary car-ventilator when in position; Fig. 2, a somewhat enlarged sectional view on line X Y of Fig. 1; Fig. 3, an enlarged view in perspective of my improved trunnion, and Fig. 4 a  
15 similar view of the trunnion-pin.

A, Fig. 1, is the frame of an ordinary street-car. Secured to one side of said frame is my improved trunnion B, the same being provided with a sleeve, *b*, slotted at *b'* and *b''*, as shown  
20 in Fig. 3.

C, Fig. 4, is my improved trunnion-pin, provided with a projection or lug, *c*. The said pin is passed through the sleeve *b* (lug *c* having first been brought into line with slot *b'*)  
25 into the recess *d* of the jamb D, and is then given a turn sufficient to throw the said lug *c* down into slot *b''*, as shown in Fig. 2, thus securing the ventilator in position, the other side being mounted in a similar way, or as heretofore, as may be preferred.  
30

Now, when for any purpose it is desired to

remove the ventilator, it is only necessary to insert a key into the groove *c'* of pin C, and by a turn of the latter bring the lug *c* into line with slot *b'*, when said pin C can be withdrawn and the ventilator removed without any further trouble. 35

Inasmuch as pin C can only be withdrawn by bringing its lug *c* into line with slot *b'*, it is evident that the ventilator is practically proof  
40 against any accidental displacement.

I do not limit myself to the use of my improvements as applied to car-ventilators, since it is manifest that they may be applied to other ventilators of like character; but, 45

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

A hollow trunnion provided with a longitudinal slot, *b'*, and a communicating transverse slot, *b''*, in combination with a pivoted frame, A, to which it is attached, a jamb, D, having a recess, *d*, in its inner side, and a longitudinally and axially movable pivot, C, arranged in said hollow trunnion and adapted  
50 to enter said recess, said pivot being provided with a lateral lug, *c*, which is adapted to move in slots *b' b''*, substantially as set forth. 55

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