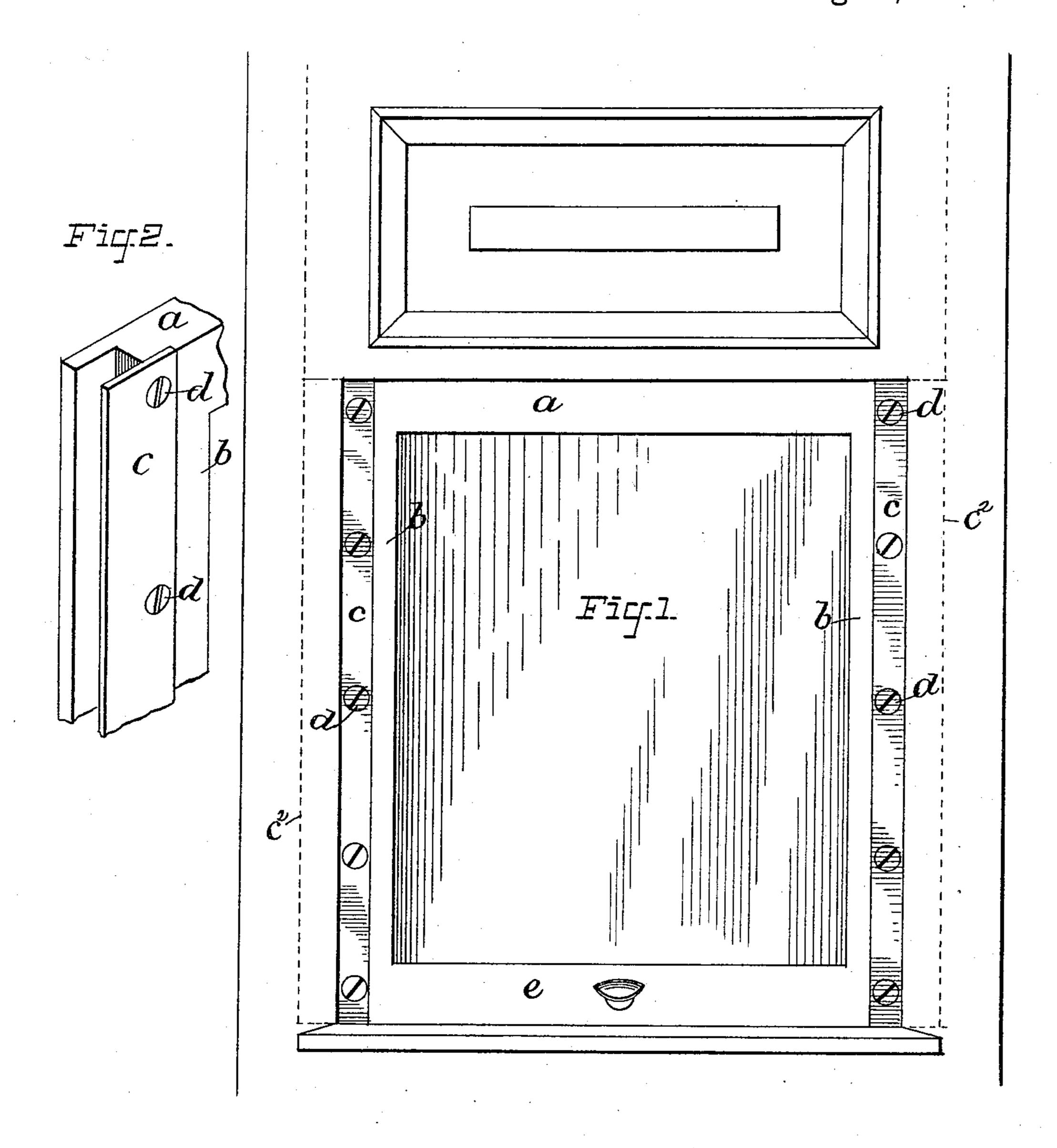
(No Model.)

E. MOORE. WINDOW SASH.

No. 480,203.

Patented Aug. 2, 1892.



ATTEST: Mentille West Capel. INVENTOR! Column Moore

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C

United States Patent Office.

EDWIN MOORE, OF BROOKLYN, NEW YORK.

WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 480,203, dated August 2, 1892.

Application filed February 8, 1892. Serial No. 420,811. (No model.)

To all whom it may concern:

Be it known that I, EDWIN MOORE, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Window-Sashes, of which the following is a specification.

This invention relates to movable window-sashes, more especially those used in railroad-

to cars.

It is well known that window-sashes of rail-road-carsespecially areso seriously affected by damp, wet, moisture, and change of temperature as to cause the sash to swell and so bind within its incasement as to render it difficult to move it therein; and it consists of devices, hereinafter fully explained, whereby the sash of a window fitted so closely to its casing as to exclude rain, wind, or dust from passing through it will nevertheless move in any direction within its casing with ease and facility and remain unaffected as to swelling within its incasement by moisture, damp, or change of temperature that might cause it to bind therein in its movement in any direction.

The object of my invention is to produce a window-sash so closely fitted within its incasement as to exclude rain, dust, or wind passing therethrough and yet easily movable in any direction. To attain this object I make use of the devices shown in the drawings accompanying this specification and forming a part thereof, in which—

Figure 1 is a vertical front view of my improved sash. a and e are the top and bottom of 35 the frame. b is the side of the same, and c the metallic yielding strips attached to b by screws d.

Fig. 2 is a perspective view of one corner of the window.

Similar letters refer to similar parts in both

figures of the drawings.

In Fig. 1 the dotted lines c^2 indicate the proper distance the yielding metallic strip c should extend from the side end of the sash 45 within its casing. In Fig. 2 is shown one side of the sash at its end, removed, and a metallic yielding piece attached to the sash, so as to form a groove, as shown in said Fig. 2.

What I claim as new and useful, and de- 50

sire to secure by Letters Patent, is—

A window-sash rabbeted or cut away at its front vertical edge and a yielding strip of metal attached thereto so as to form in conjunction with the uncut-away side edge a rectangular groove or edge to said sash, substantially as described, and for the purposes set forth.

Signed at Brooklyn, in the county of Kings and State of New York, this 30th day of No- 60 vember, A. D. 1891.

EDWIN MOORE.

Witnesses:

HERBEBT H. TAYLOR, JAS. D. ANDREW.