

No. 809,228.

PATENTED JAN. 2, 1906.

A. A. STEPHENS.
WINDOW VENTILATOR.
APPLICATION FILED OCT. 28, 1904.

Fig. I.

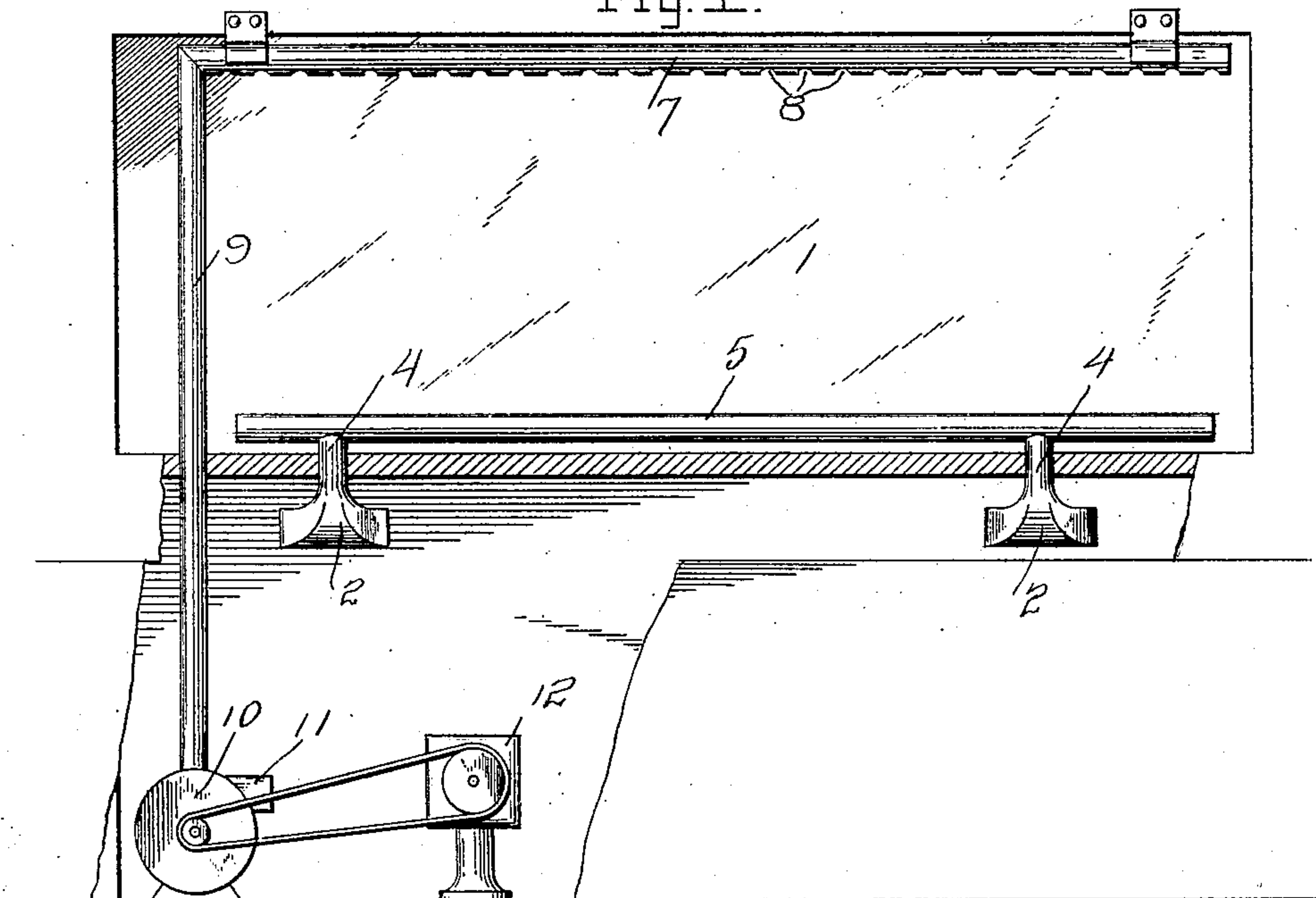
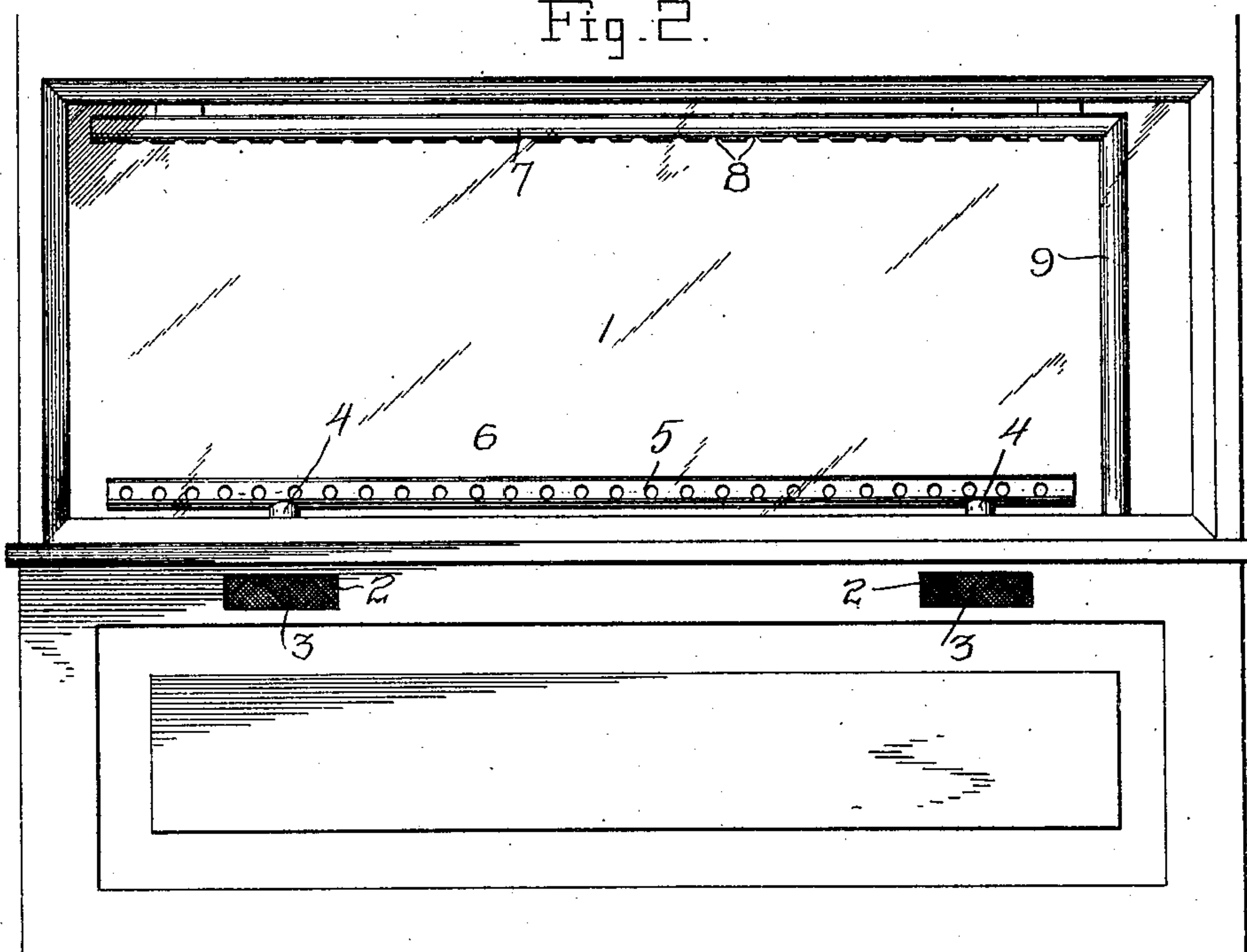


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

AUGUSTUS A. STEPHENS, OF BELLAIRE, OHIO.

WINDOW-VENTILATOR.

No. 809,228.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed October 28, 1904. Serial No. 230,340.

To all whom it may concern:

Be it known that I, AUGUSTUS A. STEPHENS, a citizen of the United States, residing at Bellaire, in the county of Belmont, State of Ohio, have invented certain new and useful Improvements in Window-Ventilators; and I do hereby 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.

This invention relates to means for preventing moisture accumulating upon show or other windows.

One object of the invention is to provide a very simple means of overcoming moisture settling upon windows and affecting the transparency thereof.

Another object resides in an inexpensive, durable, and effective means of accomplishing the purpose stated without causing an undue draft through the interior of the window, store, or dwelling with which the invention may be equipped.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the present invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a sectional view of a store-window looking from the inside, and Fig. 2 is a similar view looking from the outside, of the window.

Let it be understood at the outset that I do not force the outside air into a window, thereby causing undue draft therein or through the store or dwelling, but that, on the other hand, I draw the warm air by suction from the window and permit the cool air to enter the interior by natural draft and in fine quantity rather than by a broad stream under pressure, the latter manner being unnecessary and causing entirely too much draft.

The reference character 1 designates a store or other window casing having funnel-shaped

air-inlet openings 2, preferably provided with the wire mesh 3 over their mouths for the purpose of excluding dust, dirt, and other foreign matter. Leading from the funnel-shaped openings 2 are short pipe connections 4, communicating with the elongated cold-air drum, pipe, or tubing 5, arranged along the base of the interior of the window, the member 5 permitting the escape of the cool air therefrom into the window through the perforations 6, which latter are arranged to direct the air against the window-pane. The pipes just alluded to may be of any desired shape in cross-section, and, if desired, it is obvious that the pipe or drum 5 may be extended upon all sides of a square or like window.

Arranged at the top of the window-casing is an elongated pipe, drum, or tubing 7, having perforations 8 therein, the latter being arranged in the bottom of the former to take in warm air from the interior of the window, from which it is drawn downwardly through the pipe 9, connected therewith at one end in any suitable manner, through the instrumentality of the fan 10 of any suitable type, and discharged through the exhaust 11, the fan being connected up in any suitable manner to the motor 12 of any desired variety. As shown, the vertical pipe 9 extends through the bottom of the window, the fan and motor being disposed beneath the latter.

As is well known, the windows of stores, dwellings, and the like are in the winter time often exposed to a cold atmosphere on one side and a warmer atmosphere on the other, resulting in the collection of moisture or mist on the window-pane, which affects the transparency of the latter either by the mist itself or by its becoming frozen upon the glass; but if a window be equipped with my improved device the inconvenience and annoyance occasioned by the mist or frost will be obviated.

What is claimed is—

The combination with a window-casing having screened openings beneath its bottom which openings lead from the outside; of a perforated tubing arranged within the casing at the bottom thereof, said tubing having a depending pipe extension at each end adapted to extend through the bottom of the casing and having flaring mouths fitting over the corresponding openings beneath the bottom of the casing; a second perforated tubing ar-

ranged at the top of and within the casing
and independent of the other tubing, the per-
forations of the latter tubing being arranged
in the bottom thereof, a pipe leading from
5 one end of the upper tubing through the floor-
ing of the casing, a fan in communication with
the lower end of the last-named pipe, and means
for operating the fan to draw warm air out of

the casing through the tubing, the pipe and
the fan. 10

In testimony whereof I affix my signature in
presence of two witnesses.

AUGUSTUS A. STEPHENS.

Witnesses:

JAMES STEWART,

EDWARD J. STEGER.