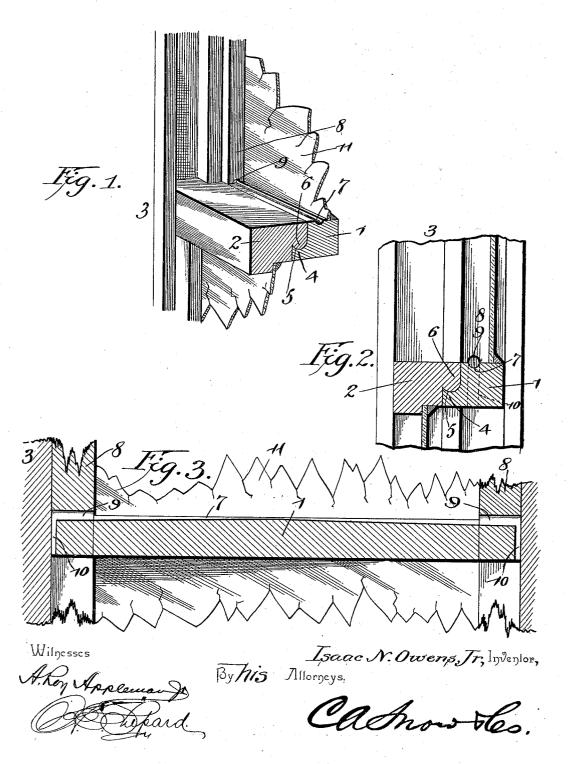
## I. N. OWENS, JR. WINDOW SASH.

(Application filed May 19, 1899.)

(No Model.)



## UNITED STATES PATENT OFFICE.

ISAAC N. OWENS, JR., OF HANNIBAL, MISSOURI, ASSIGNOR OF ONE-HALF TO WILLIAM A. OWENS, OF SAME PLACE.

## WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 643,151, dated February 13, 1900.

Application filed May 19, 1899. Serial No. 717,498. (No model.)

To all whom it may concern:

Be it known that I, ISAAC N. OWENS, Jr., a citizen of the United States, residing at Hannibal, in the county of Marion and State of Missouri, have invented a new and useful Window-Sash, of which the following is a specification.

This invention relates to window-sashes, and has for its object to provide improved to means for draining the moisture which may accumulate upon the inner sides of the window-glass.

To this end 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 claim, it being understood that the improvement is susceptible of various changes in the form, proportion, size, and the minor details of construction without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a sectional per5 spective view of the meeting-rails of an upper and lower window-sash having the improvements applied thereto. Fig. 2 is a transverse sectional view thereof. Fig. 3 is a detail
sectional view taken longitudinally through
the meeting-rail of the upper sash, showing
the means for draining the moisture from the
same.

Corresponding parts are designated by like reference characters in all the figures of the drawings

Referring to the accompanying drawings, 1 and 2 designate, respectively, the meeting-rails of the upper and lower sashes, and 3 the window-frame inclosing the sashes, and upon 40 which the latter are slidably mounted in the common or ordinary manner. The upper inner edge of the upper meeting-rail 1 is cut away, as shown, so as to provide an inwardly-projecting shoulder 4, extending entirely 45 across the length of the rail, and the upper face of said shoulder is grooved, as at 5, for the entire length thereof. The adjacent face of the meeting-rail 2 is provided with a longitudinal shoulder 6, extending a suitable distance of the vertical thickness of the rail and having its lower face convexed, as shown, and

adapted to fit snugly within the complementary groove 5 of the meeting-rail 1, thereby interlocking the sashes together and preventing movement and consequent rattling of the 55 same. By reason of this interlocking connection it will be seen that an angular or broken joint is provided which is adapted to exclude wind, dust, rain, &c., as will be readily understood. In view of the fact that the 60 upper and lower portions of the adjacent faces of the meeting-rails are straight the sashes readily come together when closed without binding, and the joint or interlocking connection may be as readily separated 65 when either sash is being opened.

To drain the window-glass from moisture which may collect thereon, the upper face of the meeting-rail of the upper sash is provided with an open longitudinal groove 7, extending 70 the entire length of the rail and gradually increasing in depth from the center thereof outwardly in opposite directions. The opposite side rails 8 of the upper sash are each provided with a transverse slot 9, communi- 75 cating longitudinally with the respective opposite ends of the groove 7, and the outer edges of the side rails are each provided with a vertical groove 10, communicating with the outer end of the slot 9 and opening out through 80 the bottom of the rail. By reason of this construction it will be understood that any moisture collecting upon the glass 11 of the sash and running down thereupon will be received within the groove 7, and in view of the incli- 85 nation thereof the moisture will be conveyed through one of the transverse slots 9 and the groove 10 to the upright stile or side of the window-frame and thence to the window-sill, whereby the meeting-rail will be effectively 90 drained from all moisture, and thereby be preserved and protected from rotting. It will be understood that the lower sash may be provided with similar means for draining moisture therefrom.

The present invention provides a simple and improved construction in window-sashes in which the joint between said rails, and furthermore the window-panes, are effectually drained of all moisture, so as to protect the 100 frame of the sashes against being rotted thereby.

What I claim is-

A window-sash, having an open longitudinal groove provided in the upper face of the lower rail thereof, and inclined downwardly in opposite directions from an intermediate point, transverse slots formed through the respective side rails of the sash, communicating with the adjacent ends of the longitudinal groove, and alined longitudinally there-10 with, and downwardly-extending grooves formed in the outer edges of the side rails, communicating at their upper ends with the

outer ends of the transverse slots, and having their lower ends opening downward through the lower ends of the respective rails, sub-stantially as and for the purpose set forth. In testimony that I claim the foregoing as

my own I have hereto affixed my signature in

the presence of two witnesses.

ISAAC N. OWENS, JR.

Witnesses:

MORTIMER G. SELLECK, JOHN H. FRANKLIN.