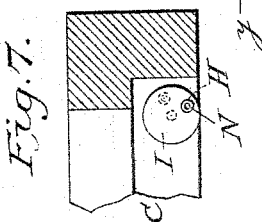
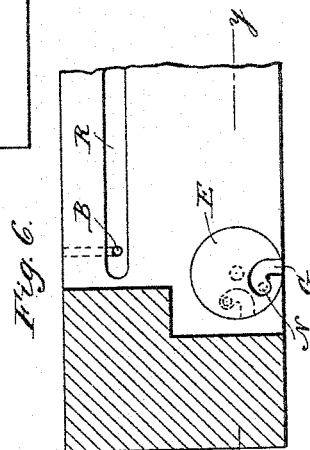
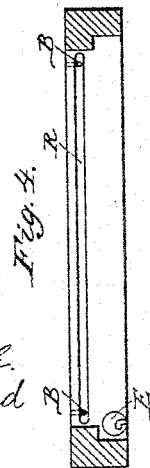
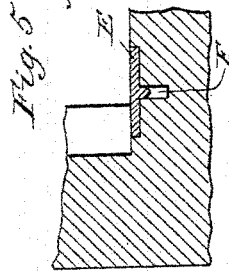
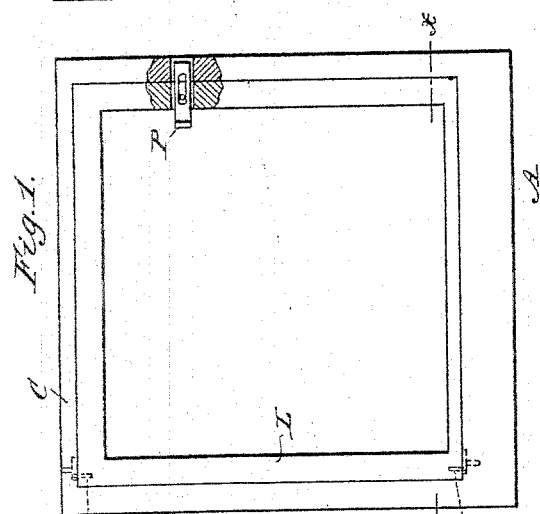
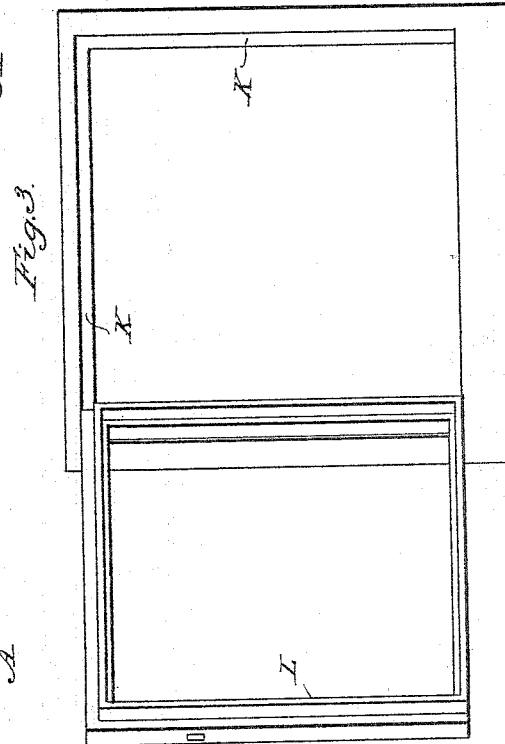
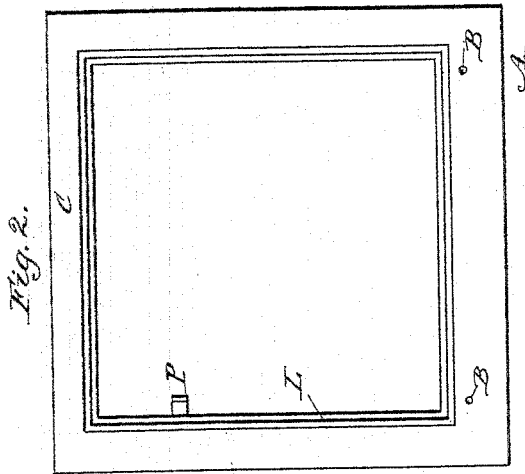


(No Model.)

A. HITT.
WINDOW.

No. 491,310.

Patented Feb. 7, 1893.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ADRIAN HITT, OF ANDERSON, INDIANA.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 491,310, dated February 7, 1893.

Application filed February 24, 1890. Serial No. 341,440. (No model.)

To all whom it may concern:

Be it known that I, ADRIAN HITT, a citizen of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented new and useful Improvements in Windows, of which the following is a specification.

My invention relates especially to the construction and arrangement of window sashes, and has for its object the provision of a sash wherein the portion in which the glass is secured may be opened upon concealed hinges for the purpose of washing the glass, &c., and may be readily removed from the main sash without disturbing the sash, sash-cords or fastenings, whenever it is found necessary.

To attain the desired end, my invention consists essentially in certain novel and useful combinations or arrangements of parts, and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is an interior view of my improved window-sash, and Fig. 2 is an exterior view thereof. Fig. 3 is an interior view with the swinging sash opened. Fig. 4 is a plan view of the lower rail of the main sash. Fig. 5 is a vertical sectional view of the lower left hand corner of the main sash. Fig. 6 is an enlarged plan view of the left hand extremity of the lower sash rail, the left hand vertical stile being in section. Fig. 7 is a view of the under side of the upper sash rail, the stile being shown in section.

Like letters of reference indicate corresponding parts.

A is the bottom rail of the sash, provided with a longitudinal groove R, with perforations, B at each end, for carrying away any water which might blow under the lower rail of the glass-holding frame, L.

E is a circular plate, loosely fitting into a depression in the rail A, and provided with a central pivot, F.

G is a slot, cut in plate E. The top rail C, of the main sash also bears a similar plate, I, but instead of the curved slot, a simple perforation H, is made therein. The side stiles, and top rail of the sash are rabbeted, as at K, and the frame L, is also rabbeted to fit there-

in, thus breaking the joint. At the top and bottom of frame L are pins, N, illustrated by the dotted lines in Fig. 1.

P is a catch for holding the frame L in place when closed.

When constructed and arranged as above described, the frame L, is glazed in the usual manner. In placing it in position, the plates E and I are turned so that the slot G, and perforation H will be brought inward; the upper pin in the frame L is slipped into the perforation H, and the lower pin passed into the curved slot, G; the frame L is then closed, and at the same time pushed to the left, turning the plates E and I, and throwing the pins and plates to the positions indicated by the dotted lines in Figs. 6 and 7. By this means, the frame L, may be made to fit into the sashes tightly as if pushed directly into place, while at the same time it may swing freely upon the pivots, when it is desired to clean the glass upon the outside, or swing the frame for any purpose, and at the same time it may be instantly removed by simply reversing the operation by which it was inserted.

Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is:—

1. The combination with the main sash having a rabbet in the top, and side rails, and a groove in the top of the lower rail, said groove being provided with outlets through the body of the sash, as set forth; of the hinged frame for holding the glass, fitting into the main sash, and concealing the groove in the lower rail of the main sash, substantially as shown and described.

2. The combination with the main sash, of the pivoted perforated plate on the under side of the top rail, the pivoted slotted plate on the upper side of the bottom rail, and the swinging, removable inner frame provided with pins at the top and bottom for engaging with the plates in the main sash, substantially as shown and described.

ADRIAN HITT.

Witnesses:

A. M. PIERCE,
GERTRUDE WARD.