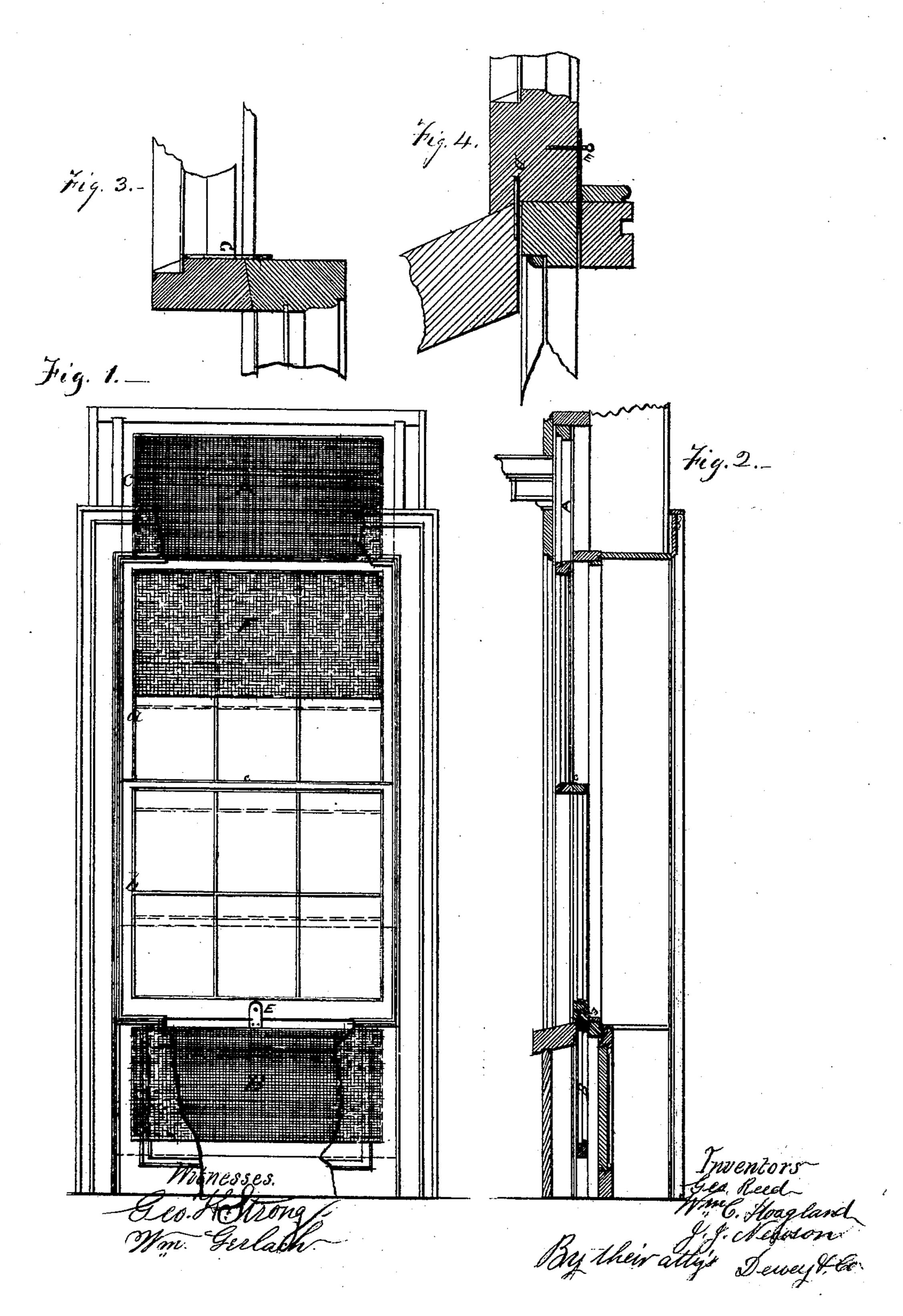
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## Anited States Patent Office.

GEORGE REED, WILLIAM C. HOAGLAND, AND JOHN J. NEWSOM, OF BROOKLYN, CALIFORNIA.

Letters Patent No. 102,154, dated April 19, 1870.

## IMPROVED SCREEN-ATTACHMENT FOR WINDOWS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, George Reed, William C. Hoagland, and John J. Newsom, all of Brooklyn, county of Alameda, State of California, have invented an improved Screen-Attachment for Windows; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains, to make and use our said invention or improvements without further invention or experiment.

The nature of our invention is to provide an improved attachment for windows, in order to exclude insects, the arrangement being such that the frame of the screen is continuous with the window-frame above and below, and, when not in use, the screen passes into a box-head or sill, as the case may be, so as to be entirely out of sight.

Our invention further consists in attaching to the meeting rails a guard, so that, when the window is opened, the space between the glass of one sash and the rail of the other shall not admit insects.

Referring to the accompanying drawings for a more complete description of our invention—

Figure 1 is a front elevation of a window with the screens attached.

Figure 2 a transverse section of the same.

Figure 3 a cross-section of the junction of the upper and lower sashes.

Figure 4 a cross-section of the bottom of the lower sash and the sill.

a is the upper and b the lower sash.

The upper one is extended up so as to form a frame, c, which holds the screen A.

The lower sash may also be extended downward, in a similar manner, so as to hold the lower screen B, or they may be made separate, but so as to follow in the same groove, and the screen-frame may then be attached to the sash by a metallic strap, E, so as to be used or not, at pleasure.

The upper frame works into a box-head formed above the window, in which it is entirely concealed from view when not in use.

The lower frame works into a box-sill, in a similar manner.

In order to keep out the wet, a strip of wood or metal, D, is screwed to the sill, and extends up into a groove in the bottom rail of the lower sash.

A guard or strip of elastic substance, C, is fastened to the meeting-rail of the lower sash, and reaches to the glass of the upper sash, thus preventing any entrance of insects when the window is opened.

What we claim as new, and desire to secure by Letters Patent, is—

The combination, with a double-sash window, of the top screen A, lower detachable screen B, and middle guard-strip C, constructed and arranged as herein described.

In witness whereof we have hereunto set our hands and seals.

GEO, REED. [L. s.] WILLIAM C. HOAGLAND. [L. s.] JOHN J. NEWSOM. [L. s.]

Witnesses:

J. L. BOONE, WM. GERLACH.