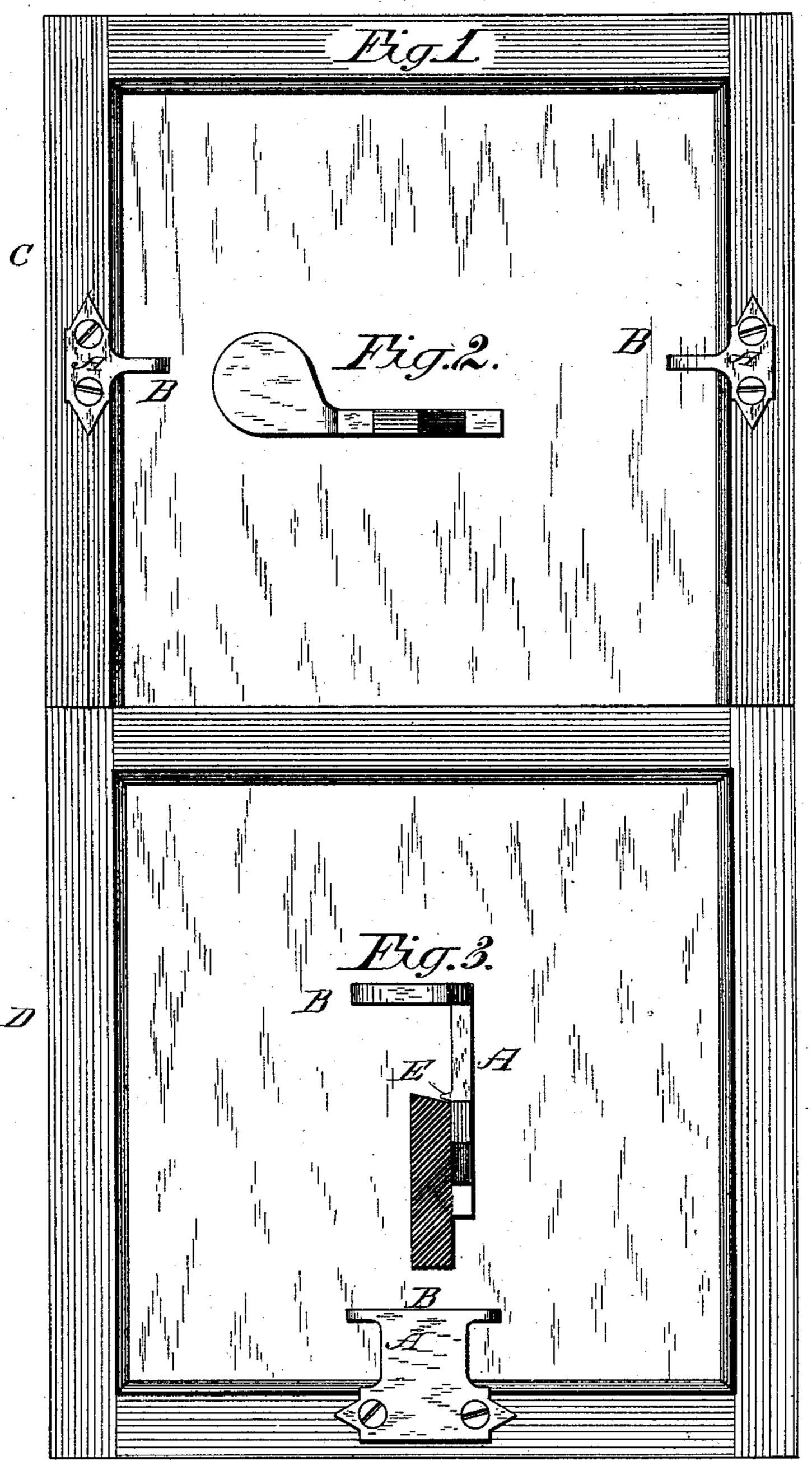
(Model.)

C. E. STELLER.

SASH LIFT.

No. 301,933.

Patented July 15, 1884.



Witnesses: Org. Story. W. J. Simmott.

Trezentor;
Charles & Stiller,
By, Jast S. Emril,
Altomey;

United States Patent Office,

CHARLES E. STELLER, OF MILWAUKEE, WISCONSIN.

SASH-LIFT.

SPECIFICATION forming part of Letters Patent No. 301,933, dated July 15, 1884.

Application filed May 1, 1883. (Model.)

To all whom it may concern:

Be it known that I, Charles E. Steller, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Sash-Lifts; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in devices for raising and lowering window-sashes.

Since it has become common to use large panes of glass extending from the bottom to the top rail of the window, thereby dispensing with the horizontal cross-pieces by which the sash might be moved, it becomes necessary to provide a device by which such sash may be raised and lowered, a common method being to provide a socket in the front surface of the upper rail of the upper sash and one or more sockets in the front surface of the lower rail of the lower sash, and to employ a long bar or pole having a hook or shoulder adapted to engage in the socket of the upper sash when opening or closing it.

I am also aware that sash-lifts have previously been made with a base or fastening-plate adapted to be fastened to the inner side or edge of the stile. It is obvious, however, that as the inner edge of the sash-stiles are beveled at a great variety of angles and curved in a great variety of what is known as "ogee" forms it is impossible to construct any one form of lift of this class which will fit the in-

40 ner edges of all forms of stiles.

The object of my improvement is to provide a lift adapted to be attached to the plane front surface of the stile, whereby a single form only of fastening-plate is required, and the same may, without cutting or fitting, be attached to all forms of sash-frames.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a window provided with 50 my improved lifts, each sash being provided

with a peculiar form of lift adapted to it. Fig. 2 represents a top view of the peculiar form of lift best adapted to the upper sash. Fig. 3 represents a side view of the peculiar form of lift adapted to the lower sash.

Like parts are represented by the same reference-letters throughout the several views.

The lift consists in a vertical fastening-plate, A, and horizontal lifting-plate B, which features are common to both forms of lifts, 60 the vertical plate being adapted to be attached with screws to the vertical surfaces of the window-sashes, while the lifting-plate in both forms preferably projects toward the window-pane.

C represents the upper sash. D is the lower

sash.

The vertical fastening-plates of the respective forms of lifts and the front surface of the lifting-plates B are formed in a straight line 70 on the same plane with each other. In neither form does the lift project in front of the fastening-plate, but instead extends rearward toward the glass, whereby the lifts upon the upper sash will permit of the lower sash moving 75 upward and downward past them without coming in contact therewith, while the rearward-extending lift of the lower sash is less in the way.

E is a bead, which forms a bearing for the 80

edge of the rail.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

The combination, with the frame of a win- 85 dow-sash, of a lift having a vertical fastening-plate adapted to be attached to the front surface of such frame, and a lifting-plate projecting past and rearward from the front surface of the frame outwardly, and extending 90 inwardly toward and along the surface of the glass, substantially as and for the purpose specified.

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

CHARLES E. STELLER.

Witnesses:

JAS. B. ERWIN, H. W. WILSON.