C. H. Dana,

Sash Holder.

No. 15,476. Patented Aug. 5, 1856.

Fig. 2.

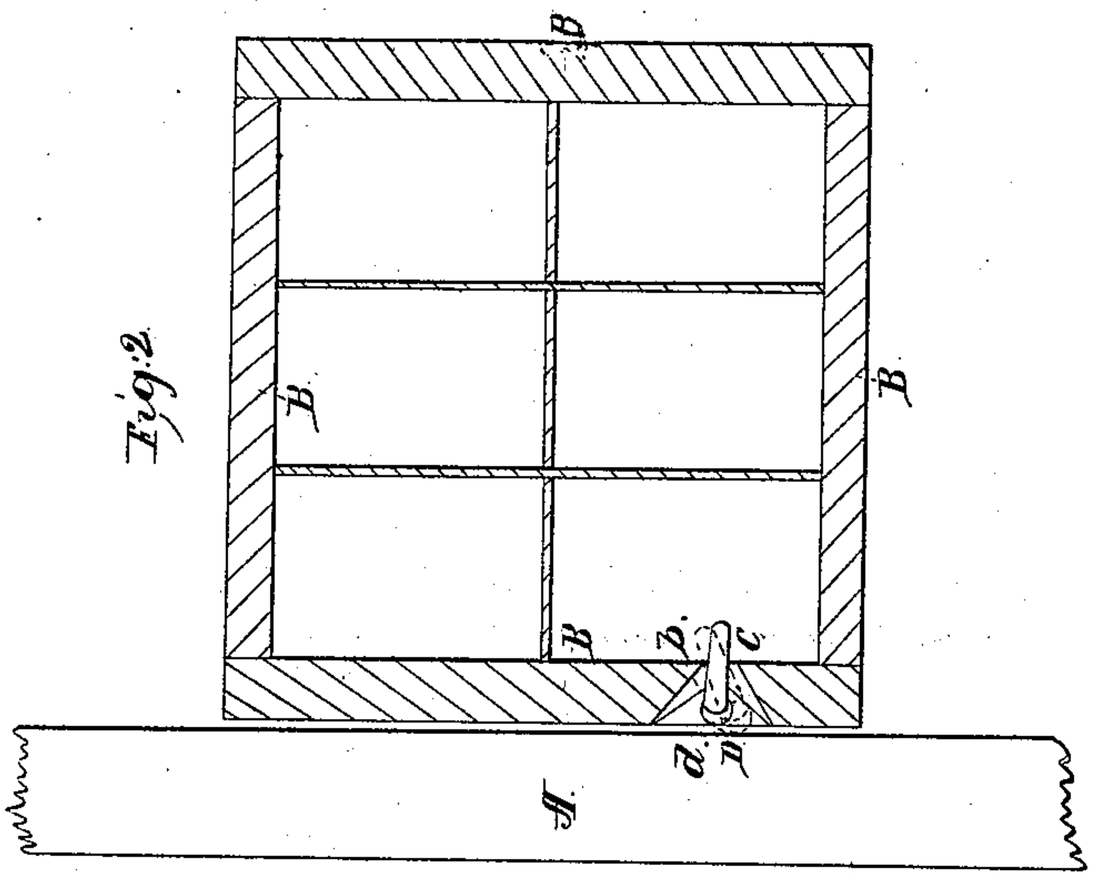


Fig. 3.

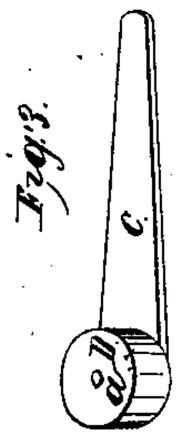
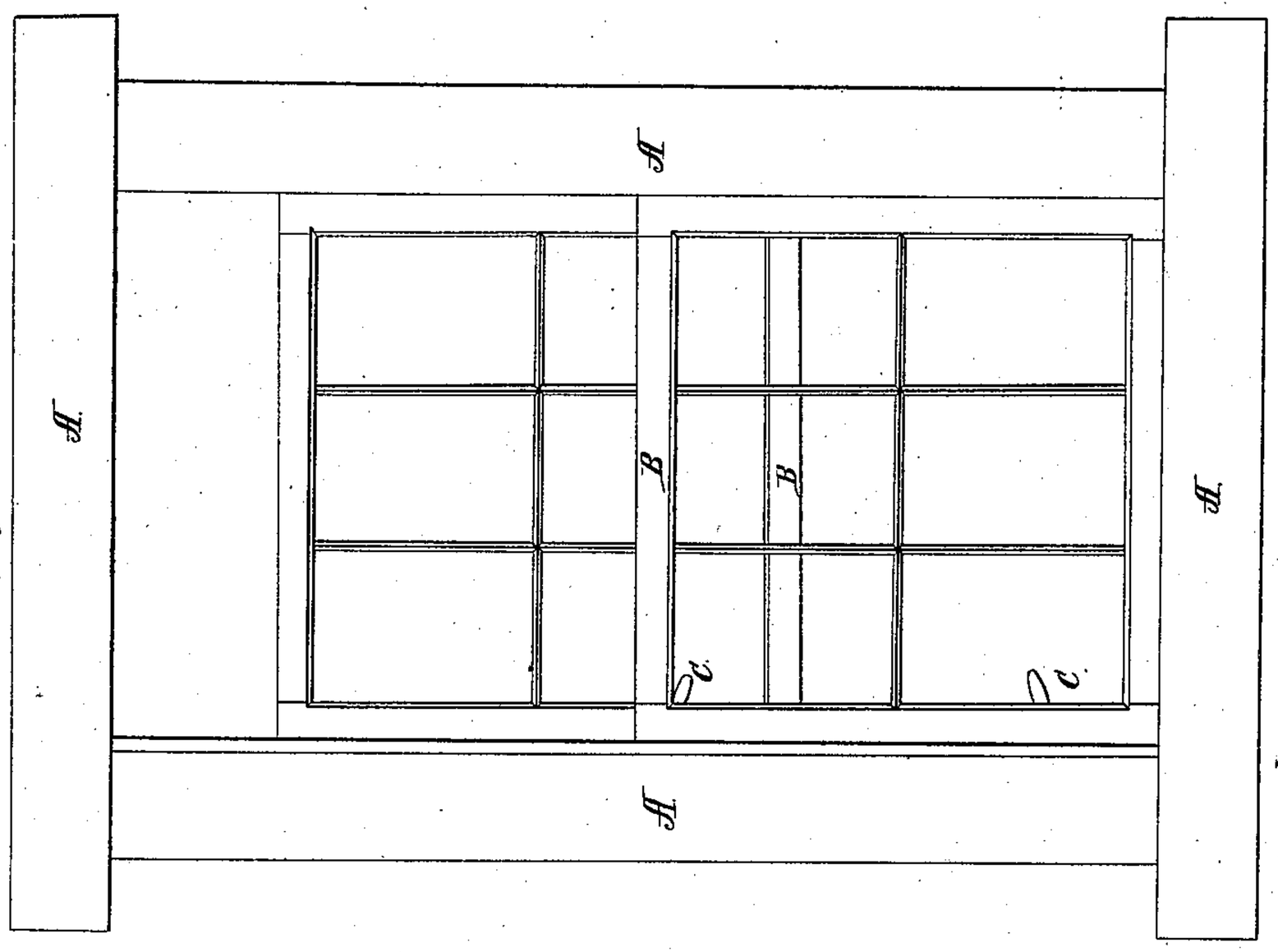


Fig. 1.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES H. DANA, OF WEST LEBANON, NEW HAMPSHIRE.

SASH-SUPPORTER.

Specification of Letters Patent No. 15,476, dated August 5, 1856.

To all whom it may concern:

Be it known that I, CHARLES H. DANA of West Lebanon, in the State of New Hampshire, have invented an Improved, new, and useful Supporter for Window-Sashes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in constructing a "sash supporter" as hereinafter described, so that it may be made to hold the sash either up or down.

Figure 1 is a view showing the window frame with the upper sash held up, and the lower one fastened down by my arrangement. Fig. 2 is a vertical section of the sash, showing the operation of the fastener working against an edge of the window frame. Fig. 3 is a detached view showing a full sized fastener.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

In Fig. 1, A, the frame in which the window sash slides; B, B, the sashes; C, C, the thumb pieces or levers which are to be held at right angles to the sides of the sashes, when it is desired to raise or lower the same.

In Fig. 2 A, one side of the window frame, against which the arrangement for fastening, works; B, the sash frame; C, a lever having a stud or pivot *a*, at its end, at right angles with it (see Fig. 3); D, a small roller or wheel having pivot *a*, for its axle; *b*, is a slot through the side of the sash, and is somewhat wider than lever C, which passes through it; *d*, a groove in the side of the frame, not quite so deep, as the diameter of the roller D, working in it, but about three or four times as long (at the edge of the frame) as the diameter of the said roller, and tapering downward, almost to a point, being however rounded instead of acute, so that roller D, can pass from one side of the said groove to the other with ease. The red lines show the position which my arrangements occupy when fastening down the window.

In Fig. 3, C, the lever; D, the roller; *a*, the axle, or pivot at right angles to lever C, and on which roller D, revolves.

The operation of my invention is as follows: I will suppose that the sash is in the position shown in Fig. 1; if then it is desired to raise the lower sash (now fastened down) it will only be necessary to place a thumb or finger on lever C, press it downward until at right angles to the sash stile, and keeping in that position, then raise the sash in the ordinary manner and when at the desired height remove the hand from the lever C, and let go the sash, for it will now be supported by the action of the roller between the window frame, and the inclined plane groove; the roller in this position, combined with the inclined plane and window frame acts as a wedge by rolling either up or down on the inclined plane groove in the stile, and against the window frame; consequently it will act the more forcibly, in proportion to the weight of and the power applied to the sash, and the harder one tries to raise or lower the window without first operating the fastener, the tighter will it be held in its position, as it only increases the power of the wedge force. If now, it be desired to let down the window, we have only to put the lever in the same position as before (at right angles to the stile) and we can then move the sash up, or down, after having lowered the window, by turning the lever C, upward the sash will be fastened down.

Having thus fully described the construction and operation of my invention, what I claim as new and desire to secure by Letters Patent is:

The lever C, with roller D, on axle, or pivot *a*, arranged, and operating in the inclined groove *d*, as herein described, and for the purpose set forth.

CHARLES H. DANA.

Witnesses:
J. W. KENDRICK,
D. J. ABBOTT.