(No Model.)

E. L. LLOYD.

ADJUSTABLE WINDOW SCREEN.

No. 269,075. Patented Dec. 12, 1882.

FIG. 1.

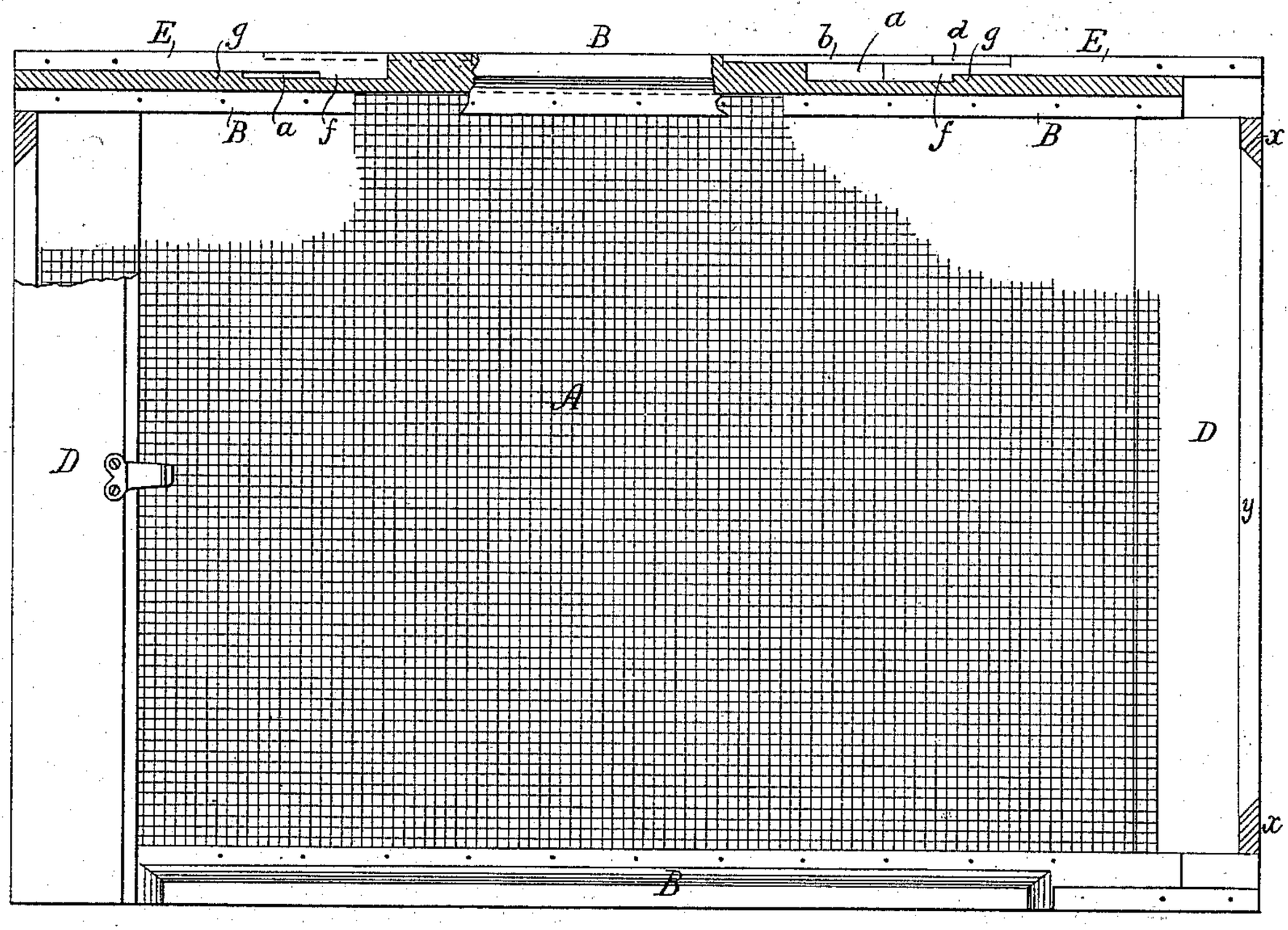

FIG. 2.

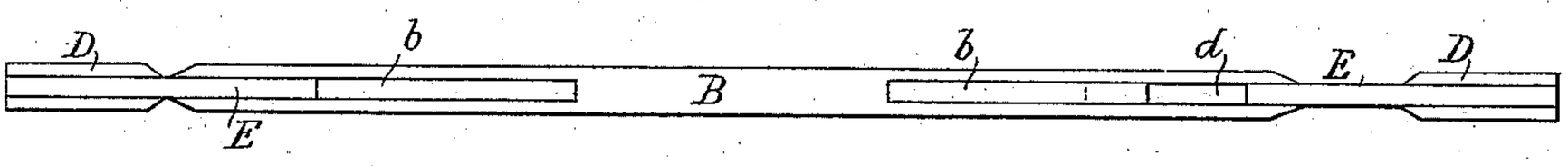

FIG. 3.

WITNESSES:

Harry Drury

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INVENTOR:

Edwin L. Lloyd

by his attys.

Howson & Howson

UNITED STATES PATENT OFFICE.

EDWIN L. LLOYD, OF PHILADELPHIA, PA., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO EDWIN LOUDERBACK, OF SAME PLACE.

ADJUSTABLE WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 269,075, dated December 12, 1882.

Application filed August 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWIN L. LLOYD, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Adjustable Window-Screens, of which the following is a specification.

The main object of my invention is to so construct an adjustable window-screen that the guidance of the end bars of the frame will be effected without the use of any of the usual external guiding appliances, a further object being to prevent the binding of the end frames on the screen. These objects I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a side view, partly in section, of my improved adjustable window-screen; Fig. 2, a plan view of the same; and Fig. 3, a perspective view of part of a top and end bar of the frame, showing the guiding slots and strips.

A is the gauze body of the screen; B B, the top and bottom bars, and D D the end bars, the top and bottom edges of the sheet of gauze being confined in slots in the bars B, and the end bars, D, being recessed for the reception of the ends of the sheet of gauze and the ends of the bars B.

To the top of each bar D is secured a strip, E, which projects inward beyond the bar, and is adapted to a recess, *a*, in the upper edge of the top bar B, a tongue, *b*, secured to said bar projecting over the inner portion of the recess *a*, and being adapted to a recess, *d*, in the upper edge of the strip E. A precisely similar arrangement of recesses, strips, and tongues is employed in connection with the bottom bar B and the lower ends of the bars D, so that said bars D are firmly guided at each end in the longitudinal movements necessary for expanding or contracting the screen-frame. Each of the recesses *a* in the bars B is deepened at the inner end for the reception of a lug or projection, *f*, on the strip E, which works in said recess, a shoulder, *g*, being thus formed, which, by contact with the lug *f*, acts as a stop to prevent undue expansion of the frame.

The tongues *b* serve to guide the strips E vertically as well as laterally, thus preventing said strips from projecting beyond the outer edges of the bars B.

In place of the lugs *f* and shoulders *g* shown and described, transverse pins adapted to slots in the strips E may be used; but the construction shown is preferred, as it does not weaken the strips, as slots would.

It will be observed that the guidance of the end bars, D, is effected without the use of any of the usual external guiding appliances, and the unsightly appearance of the frame, due to the presence of such guides, is overcome.

If desired, but one end of the screen-frame may have an adjustable bar, D, the bar at the opposite end being secured to the bars B.

It will be observed that the back *x* of each end bar D has formed in it a slot, *y*, extending throughout almost the entire length of the bar. If the back of the bar consists of a solid strip, the swelling of the same in damp weather causes the front edges of the bar to spring inward and bind upon the screen A, so as to prevent the adjustment of the bars D. The slotting of the back *x* of each bar, however, prevents this, as will be readily understood.

By forming the recesses *a* in the outer edges of the bars B, and making the projections E of limited depth, the entire lower edges of the bars B from end to end are available for the reception and retention of the edges of the screen A, said edges being confined from one end of the screen to the other—a plan which cannot be adopted when the projections E are of the same depth as the bars B, and the latter are slotted from top to bottom for the reception of said projections.

I claim as my invention—

1. The combination of the recessed end bar D, having projecting strips E, the top and bottom bars, B, having slotted inner edges, and having in their outer edges recesses *a* for the projections E, and the screen A, the upper and lower edges of which are adapted to and confined in the slots of the bars B, from end to end of the same, as set forth.

2. The combination of the end bar D, having strips E, with recesses *d*, and the top and

bottom bars, B, having recesses *a*, with overhanging tongues *b*, as set forth.

3. The combination of the screen A and its bars B, with the end bar D, recessed to receive the screen, and having in the back strip, *x*, a slot, *y*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN L. LLOYD.

Witnesses:
HARRY DRURY,
HARRY SMITH.