

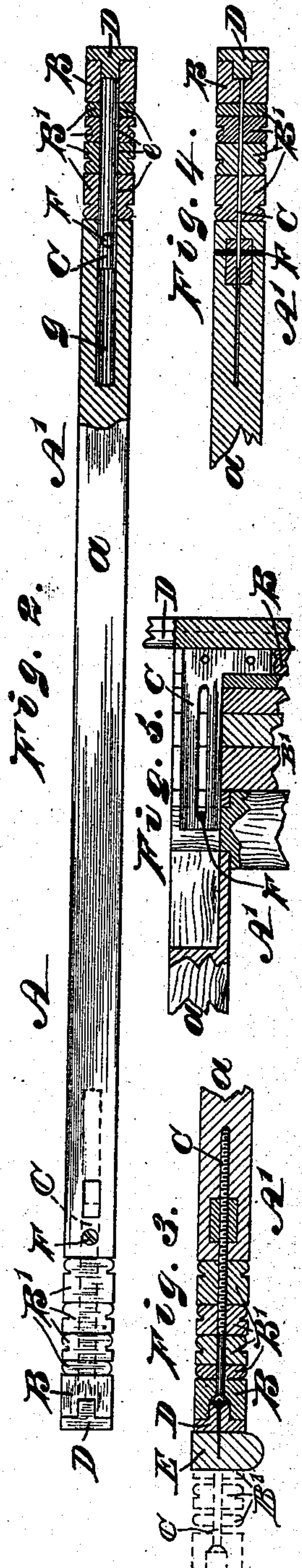
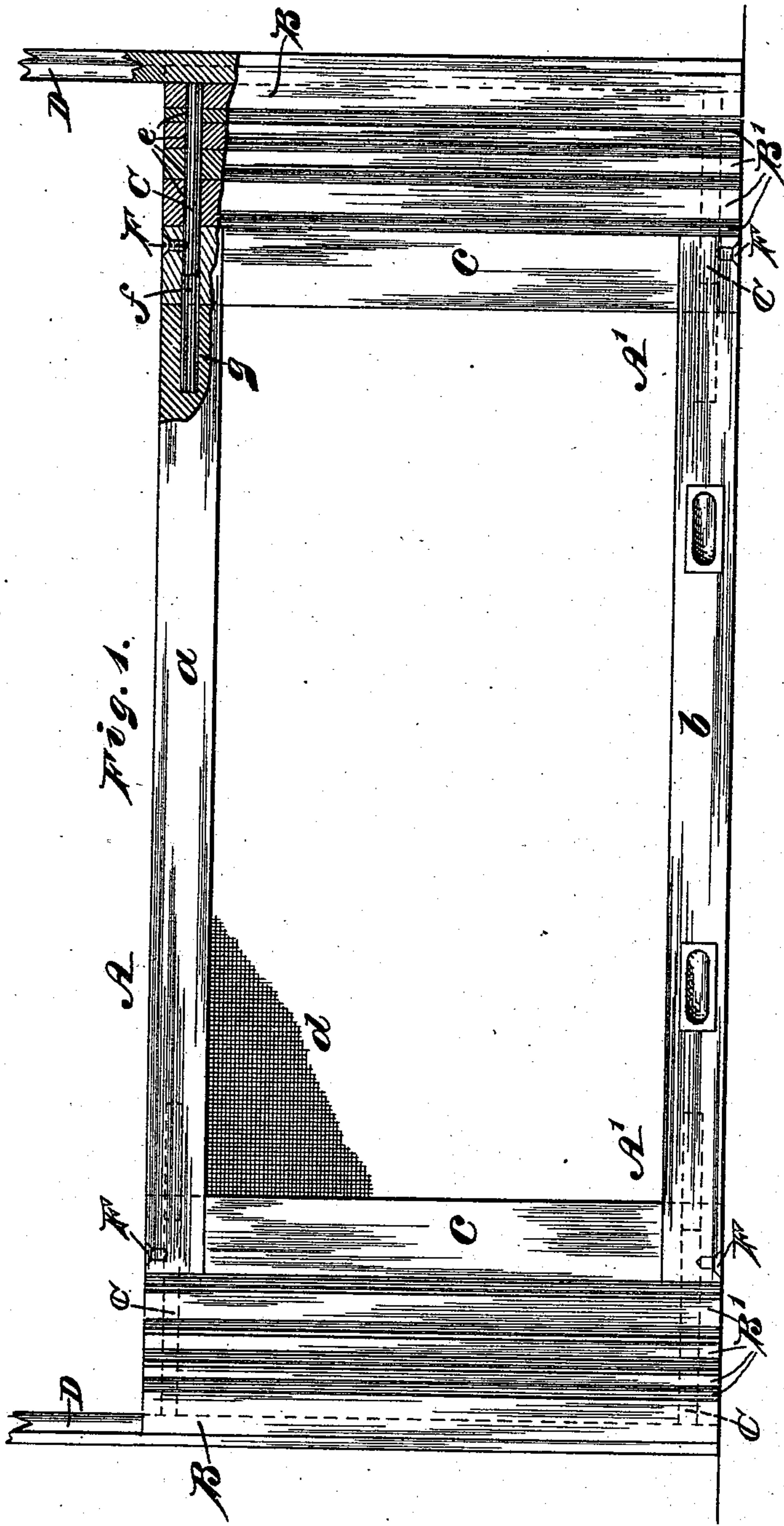
(No Model.)

J. W. BOUGHTON.

INSECT SCREEN.

No. 377,987.

Patented Feb. 14, 1888.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN W. BOUGHTON, OF PHILADELPHIA, PENNSYLVANIA.

INSECT-SCREEN.

SPECIFICATION forming part of Letters Patent No. 377,987, dated February 14, 1888.

Application filed August 12, 1887. Serial No. 246,772. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. BOUGHTON, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Insect-Screens, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an insect-screen made adjustable in width in such manner that it presents the appearance of a solid screen, and the adjustability may be accomplished in a convenient manner, the device being an admirable substitute for a screen formed of parts sliding on each other.

Figure 1 represents a front view, partly broken away and sectional, of an insect-screen embodying my invention. Fig. 2 represents a top view, partly sectional. Fig. 3 represents a horizontal section showing certain parts of the screen separated in dotted lines. Fig. 4 represents a horizontal section of a modification. Fig. 5 represents a vertical section of the portion shown in Fig. 4.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A represents an insect-screen consisting of a frame, A', formed of top, bottom, and side bars, *a b c*, and netting *d*, the main portion of the latter being removed.

At the sides of the frame of the screen are vertical bars B B', which are parallel with the side bars, *c*, and detachably connected therewith by means of horizontally-arranged pins C, (see Figs. 1 and 2,) which pins are attached to the outer bars, B, and passed freely through openings *e* in the intermediate bars, B', near the ends thereof, said pins also passing through openings *f* in the side bars, *c*, and openings *g* in the top and bottom bars, *a b*, of the screen. The bars B are grooved on their outer sides and adapted to be fitted on the tongued bars D, which latter are secured to the sash stops or beads E of the window-frame, (one of said stops or beads being shown in Fig. 3,) whereby the screen may be raised and lowered.

F represents screws which are inserted in the frame A' and tighten against the pins C,

for preventing motion thereof and consequent separation of the bars B B' from the frame A'.

In Fig. 3 I show a screw, C, and in Figs. 4 and 5 I show a slotted plate, C, either of which is employed in lieu of the pins C, Figs. 1 and 2, the screw C being connected with the bar B and passing through the bars B' into the frame of the screen. The plate C is connected with the bar B and passed freely through slots or kerfs in the ends of the bars B', and also inserted in the adjacent portion of the frame A', to which it is attached by a screw or pin, F, which passes through the slot of the plate and is secured to the frame A'.

The operation is as follows: As many bars B B' are employed as may be necessary in connection with the bars B and frame A' to adjust the screen to the width of the window to which it is to be applied, or, in other words, the sides of the screen may be built up relatively to the required width. The pins, screws, or plates C are secured to the bars B and passed through the bars B' and frame A'. The screws F are then tightened, and thus the several bars are firmly connected as one with the frame A' as continuities thereof, producing a solid screen of the required width, and the screen being further adjustable in width either by removing some of the bars B' or applying additional bars, as required.

It is evident that door-screens may be made adjustable in width or height by the means hereinbefore set forth for adjusting window-screens.

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

1. An insect-screen consisting of a frame with netting and separate side bars, with pins for securing said side bars to said frame, whereby said frame may be increased in width, substantially as described.

2. An insect-screen having the sides thereof provided with detachable side and removable intermediate bars, whereby said screen may be adjustable in width by the removal of one or more of said intermediate bars, substantially as described.

3. An insect-screen, in combination with the bar B, bars B' intermediate of said bar B

and the frame of the screen, and pins C, connected with the bar B, passing through the bars B' into said frame and secured thereto, substantially as described.

- 5 4. An insect-screen having side and removable intermediate bars and fastening devices therefor, substantially as described, whereby

said side and intermediate bars are secured to the side stiles of the frame, substantially as and for the purpose set forth.

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Witnesses:

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