(No Model.)

P. MILLER.

WINDOW SCREEN.

No. 389,401. Patented Sept. 11, 1888.

Fig. 1.

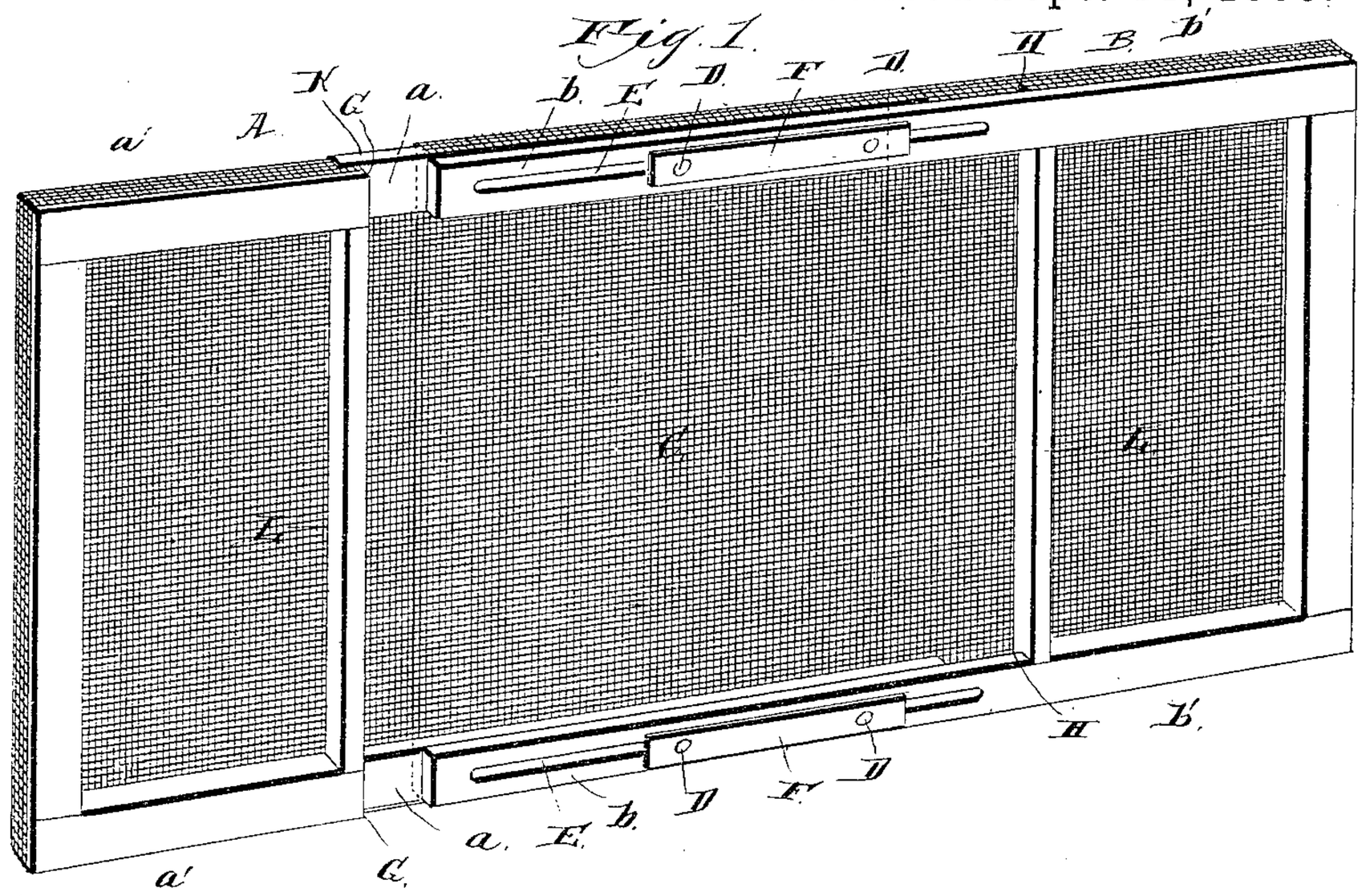


Fig. 2.

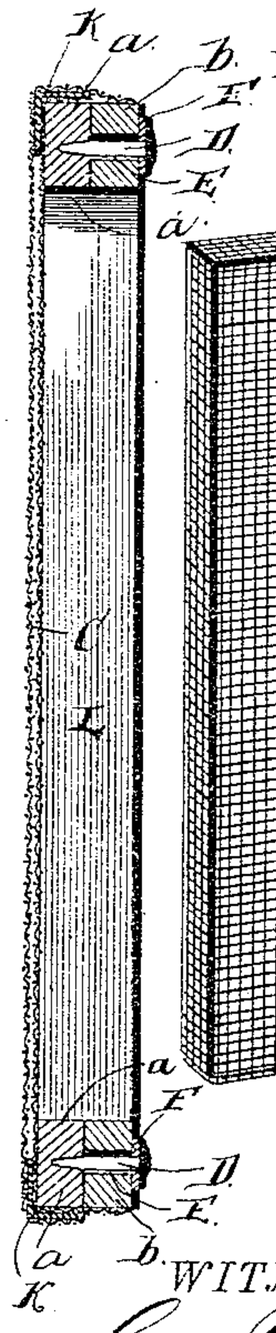
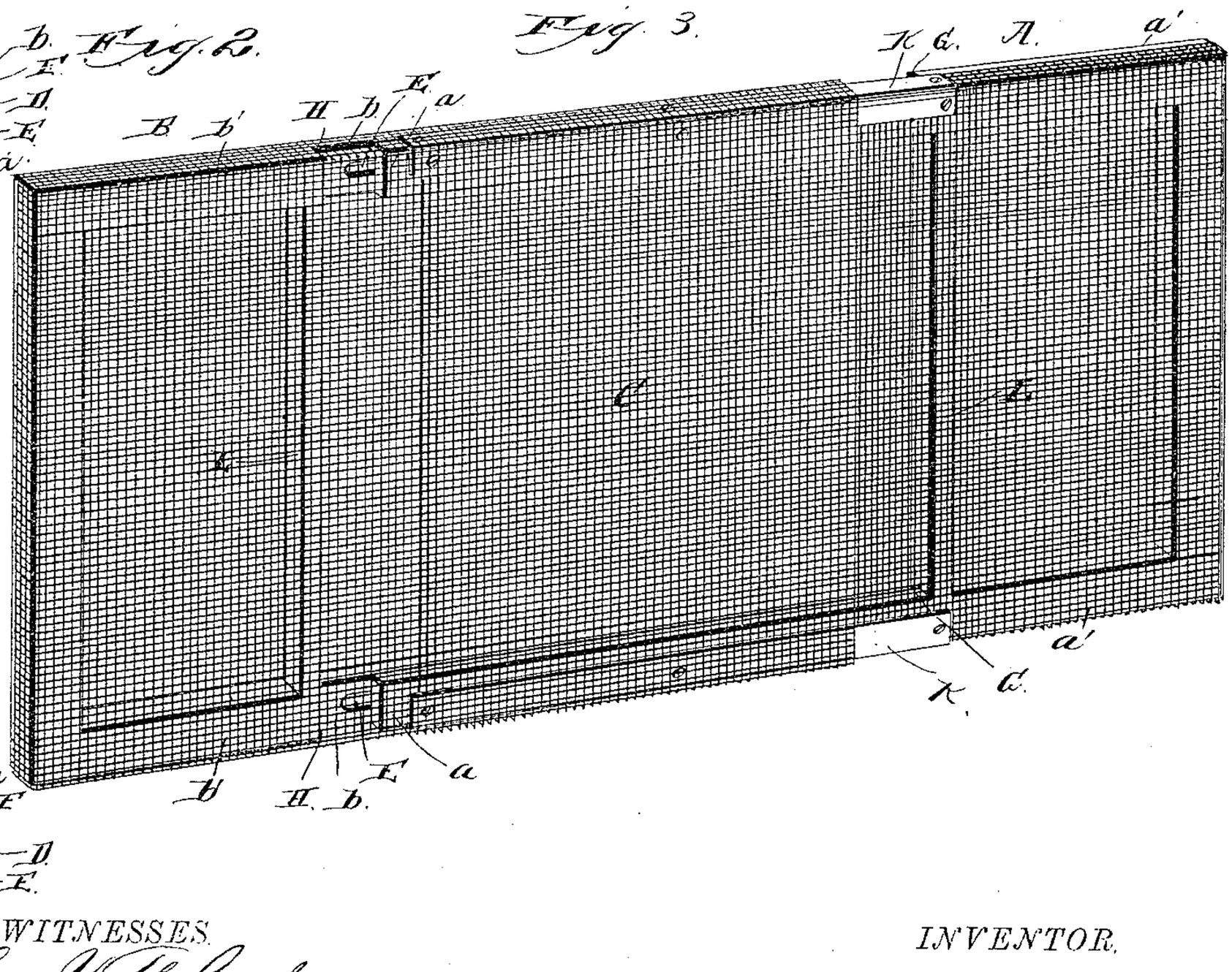


Fig. 3.



WITNESSES.

Geo. G. Hoyle.

C. E. Doyle.

INVENTOR.

P. Miller.

by C. A. Snow & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

PERCIVAL MILLER, OF KINGSTON, PENNSYLVANIA.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 389,401, dated September 11, 1888.

Application filed June 8, 1888. Serial No. 276,432. (No model.)

To all whom it may concern:

Be it known that I, PERCIVAL MILLER, a citizen of the United States, residing at Kingston, in the county of Luzerne and State of Pennsylvania, have invented new and useful Improvements in Window-Screens, of which the following is a specification.

My invention relates to improvements in adjustable window-screens, having for its object to provide a simple, cheap, and durable device which may be easily adjusted and applied to the window-frame; and it consists in a certain novel construction and combination of devices, fully set forth hereinafter in connection with the accompanying drawings, wherein—

Figure 1 is a perspective view of a screen embodying my improvements. Fig. 2 is a vertical central sectional view. Fig. 3 is a perspective view looking at the outer side.

Referring to the drawings, the screen consists, mainly, of the sliding frames A B, which are provided at their inner or adjacent sides with the inwardly-extending parallel arms *a a* and *b b*, respectively, the said arms being preferably formed as continuations of the upper and lower bars, *a' a'* and *b' b'*, of the said frames, and the frames and the arms are covered on their outer sides with the wire gauze or netting, C, which extends to the inner ends of the said arms.

The arms *a* are provided on their inner sides with the sliding pins D D, which operate in longitudinal slots E E in the arms *b*, and thus allow the said arms to slide longitudinally on each other, and the bearing-plates F F are affixed to the inner ends of the said pins D and slide on the inner sides of the arms *b* to hold the arms in contact. Shoulders G G are formed at the outer ends of the arms *a a*, and similar shoulders, H H, are formed at the outer ends of the arms *b b*, and the free ends of the arms *a* and *b* abut, respectively, against the shoulders H and G when the sliding frames are closed together. Thus the inward movement of the sliding frames is limited.

The shoulders G are formed on the inner sides of the arms *a*, and the shoulders H are arranged on the outer sides of the arms *b b*, and as the arms are made of one-half the thickness of the upper and lower bars of the sliding frames the frames fit snugly and neatly together when closed or folded.

It will be seen by reference to the drawings, Fig. 2, that the wire-gauze on the frame B is affixed at its upper and lower edges to the arms *b b*, and that the body or main portion of the said gauze is not in contact with the outer sides of the said arms, as it is extended out flush with the outer face of the frame B to enable the arms *a a* to slide between the gauze and the arms *b b*. To protect the gauze on the frame A from rubbing on the said outwardly-extended portion of the gauze on the frame B, and thus wearing the same and rendering the operation of the screen difficult, the outer sides of the arms *a a* are provided with the longitudinal angular wear-plates K K, which also cover the upper and lower sides, respectively, on the upper and lower arms *a a*.

The operation and manner of adjustment of the improved screen to a window will be readily understood without a detailed description thereof, as it is similar in these respects to screens heretofore used.

The screen is simple in construction, and may therefore be readily and cheaply manufactured. The parts which are subjected to wear are protected so as to prevent injury. The vertical bars L L, which form the adjacent sides of the sliding frames A B, respectively, serve as handles to enable the screen to be opened or closed. The portions of the gauze which cover and extend between the sliding arms *a a* and *b b* slide very close together, and thus prevent the entrance of insects, and the sliding frames require no locking means to hold them in the desired positions, as the frictional contact between the sliding arms caused by the bearing-plates F F is sufficient for this purpose.

Having described my invention, I claim—

1. In a window-screen, the combination of the sliding frames A B, connected to and sliding on each other, the sheets of wire screen or gauze secured, respectively, on the outer sides of both frames and sliding adjacent to each other, and the angular wear-plates K K, interposed between the sheets of wire screen or gauze and secured to the outer side of the

frame A, whereby the sheets of screen or gauze are held out of contact, substantially as specified.

2. In a window-screen, the combination of the frame A, covered on its outer side with wire screen or gauze and provided with a vertical handle-bar, L, the frame B, connected to and sliding on the frame A, covered on its outer side with wire screen or gauze, and provided with the vertical handle-bar L, and the wear-plates K K, interposed between the contacting-bars of the frames to hold the screens out of contact, substantially as specified.

3. In a window-screen, the combination of the sliding frames A B, having their upper and lower bars, *a a*, *b b*, extended and halved to form the sliding arms *a' a'*, *b' b'*, whereby the outer faces of the frames are flush, the wire-screen secured to the outer sides of the frames and their arms or extensions, and thereby arranged close together, and the interposed angular wear-plates K K, adjusted to hold the screens out of contact, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

PERCIVAL MILLER.

Witnesses:
WM. R. GATES,
LEWIS GOOKSTETER.