## J. KLUENTER Window-Screen.

No. 206,181.

Patented July 23, 1878.

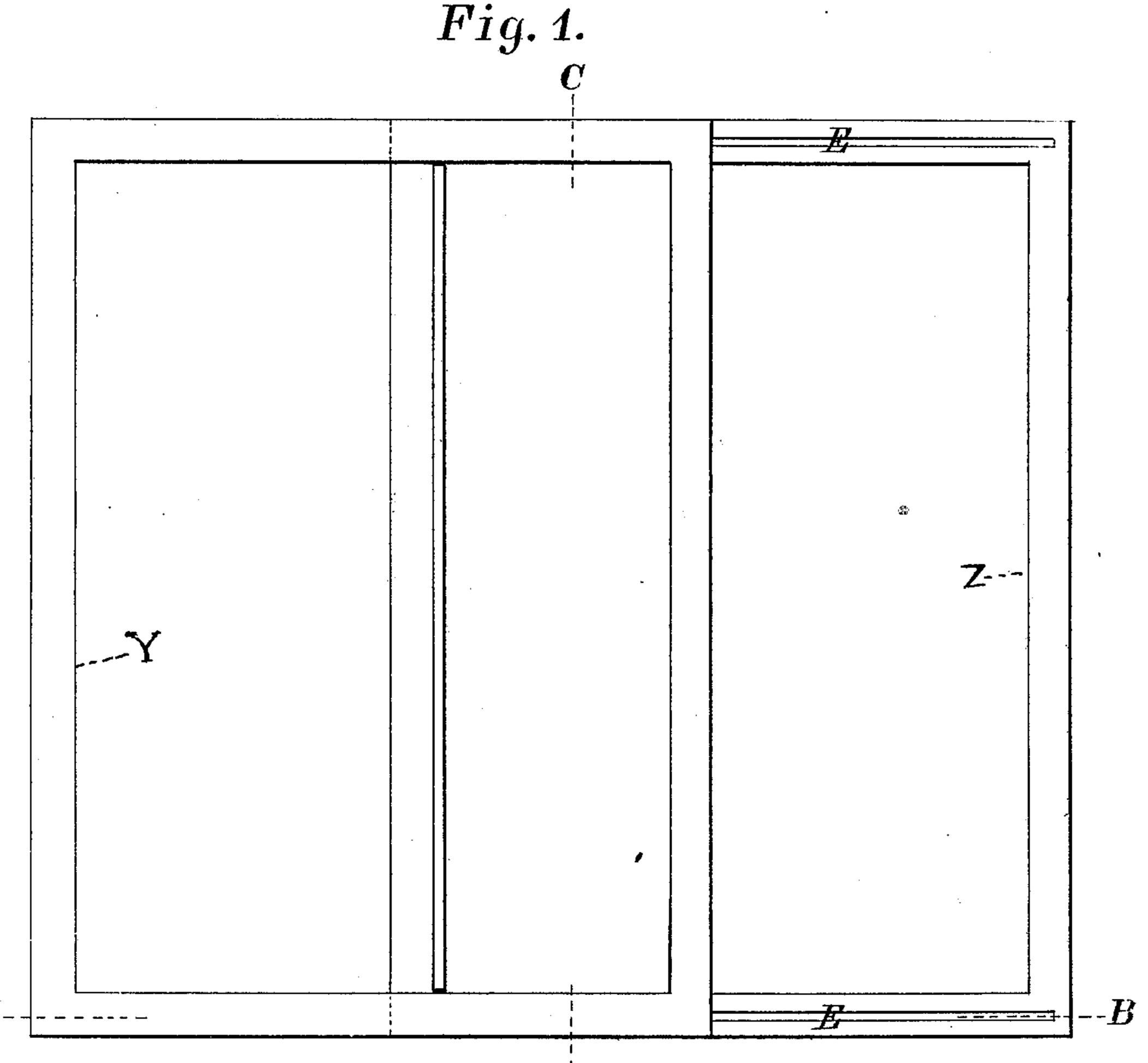
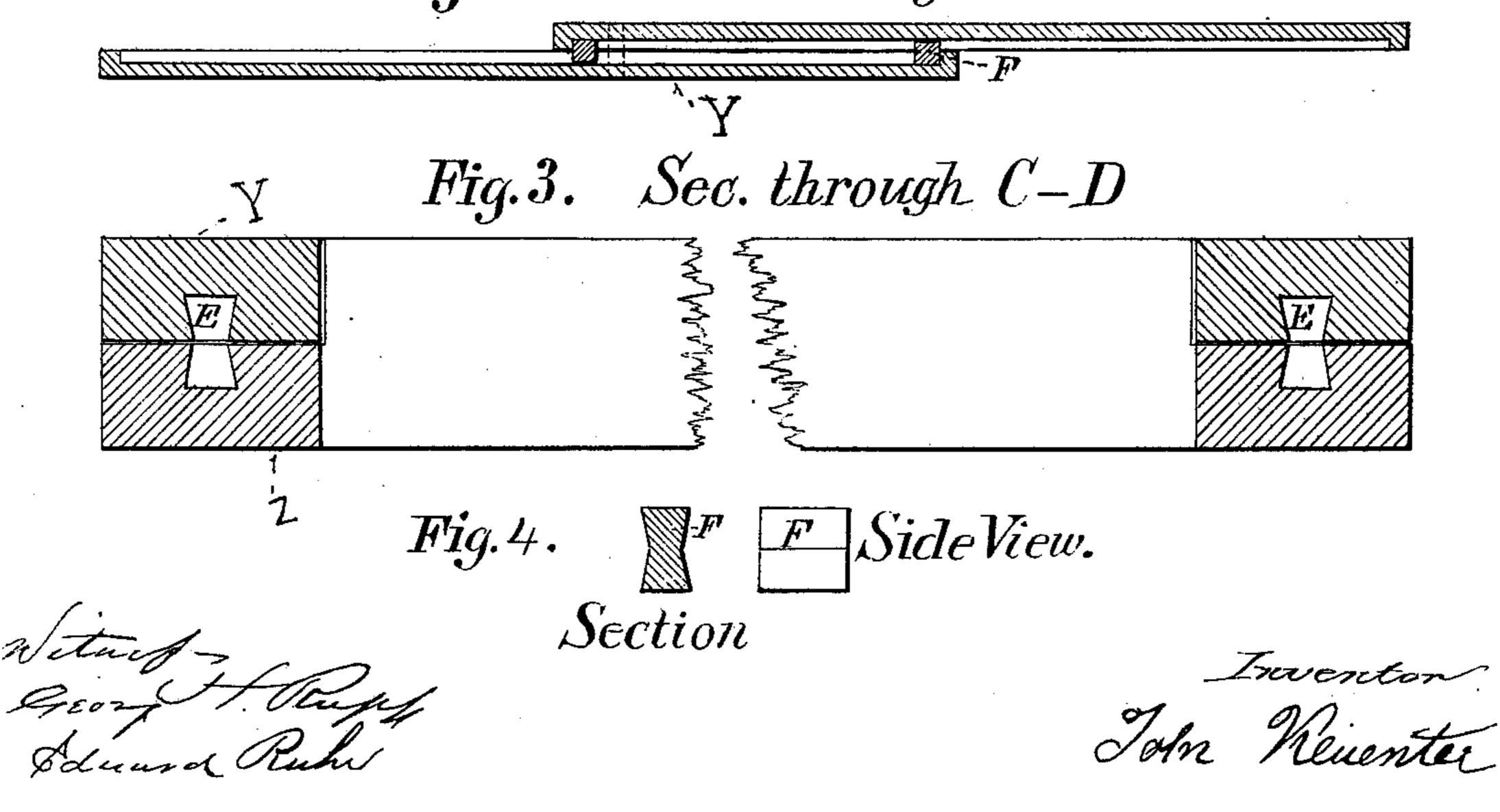


Fig. 2. Section through line A-B z



## UNITED STATES PATENT OFFICE.

JOHN KLUENTER, OF ALLENTOWN, PENNSYLVANIA.

## IMPROVEMENT IN WINDOW-SCREENS.

Specification forming part of Letters Patent No. 206,181, dated July 23, 1878; application filed May 15, 1878.

To all whom it may concern:

Be it known that I, John Kluenter, of the city of Allentown, in the county of Lehigh and State of Pennsylvania, have invented a new and useful Improvement in Extension Window-Screens, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to secure a more free and easy working of the extension slides, and prevent the frequent clogging and severe friction of the slides in wet or damp weather; and the invention consists in the use of metallic dovetail blocks in the grooves of the rails of the frames, which slide upon each other, one such metal block being rigidly fixed in one end of each groove, and, by reason of their dovetail form, keeping the two frames in sliding contact with each other.

In the drawings, Y and Z represent two frames to be covered with netting, and adapted to slide upon one another in the direction of two parallel sides thereof, in order to fill the space of open windows of different widths; but that these frames may be retained in sliding contact, and always parallel relative to each other, I fix in one end of a dovetail groove in each upper and lower rail of the frames a metal block of corresponding double dovetail form. These blocks are fixed in the

ends of the grooves that approach each other, as the frames are slid out to fill a wide space. If made of wood they are apt to swell in damp weather and stick fast, so that the frames cannot be adjusted on each other.

To obviate this difficulty I form them of metal, and the parts in which the grooves are made I may form of wood or metal, so that there may be no swelling or binding, whatever the state of the atmosphere.

In the drawing, the grooves are shown by

letter E, and the blocks by F.

I am aware that frames of netting have been arranged to slide in contact with each other by dovetail and tongue-and-groove joints to render them adjustable. I therefore do not broadly claim such; but

What I do claim, and desire to secure by

Letters Patent, is—

The combination, with sliding frames for adjustable window-screens, having dovetail grooves E in their sliding rails, of dovetailformed blocks of metal, F, whereby the frames are retained in sliding contact with each other, and are not liable to swell and stick fast in damp weather, all as described.

JOHN KLUENTER.

Witnesses:

GEORGE H. RUPP, JACOB S. DILLINGER.