

No. 641,608.

Patented Jan. 16, 1900.

R. J. ROSS & F. P. SMITH.

WINDOW SASH.

(Application filed Apr. 21, 1899.)

(No Model.)

Fig. 1.

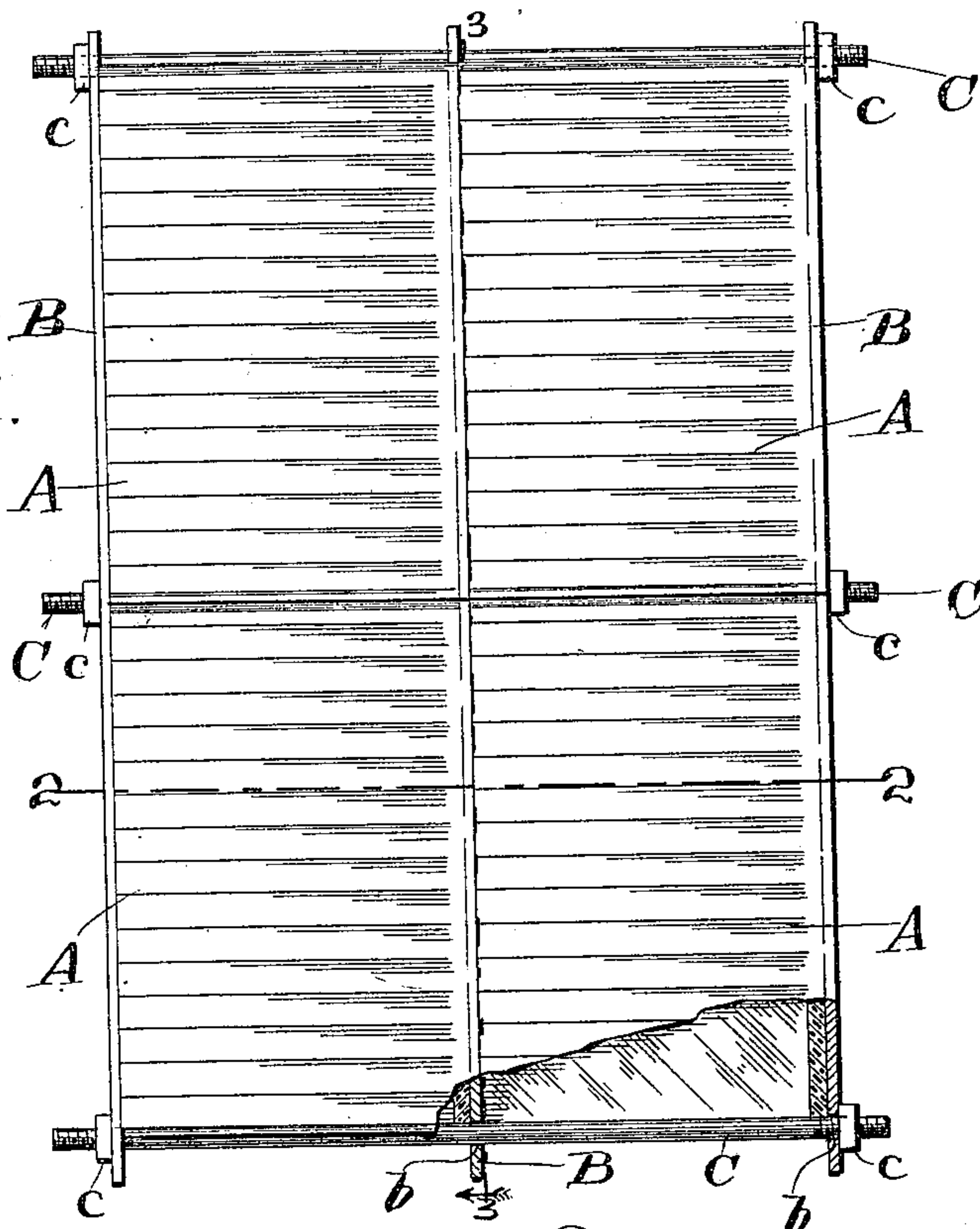


Fig. 2.

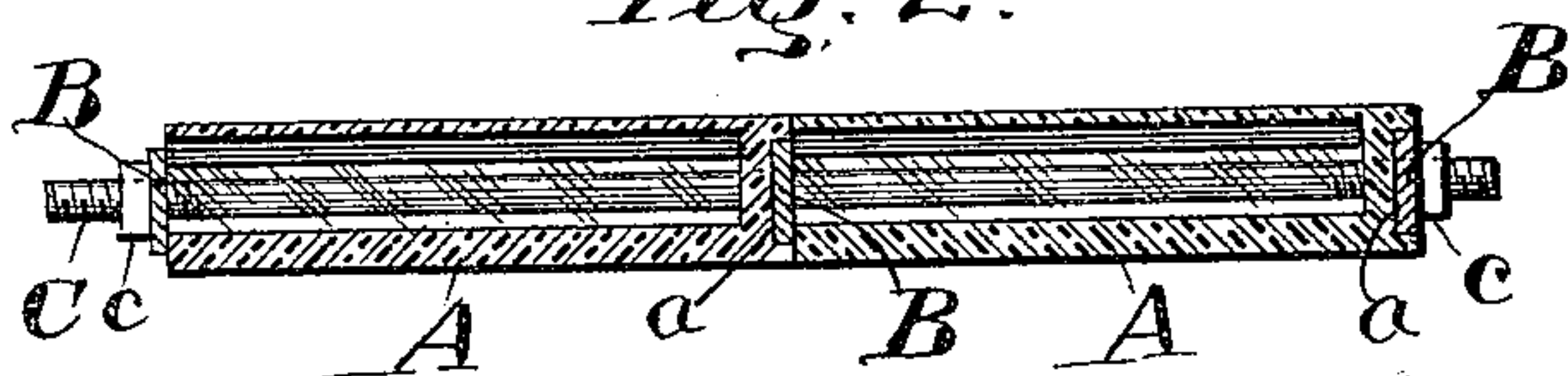
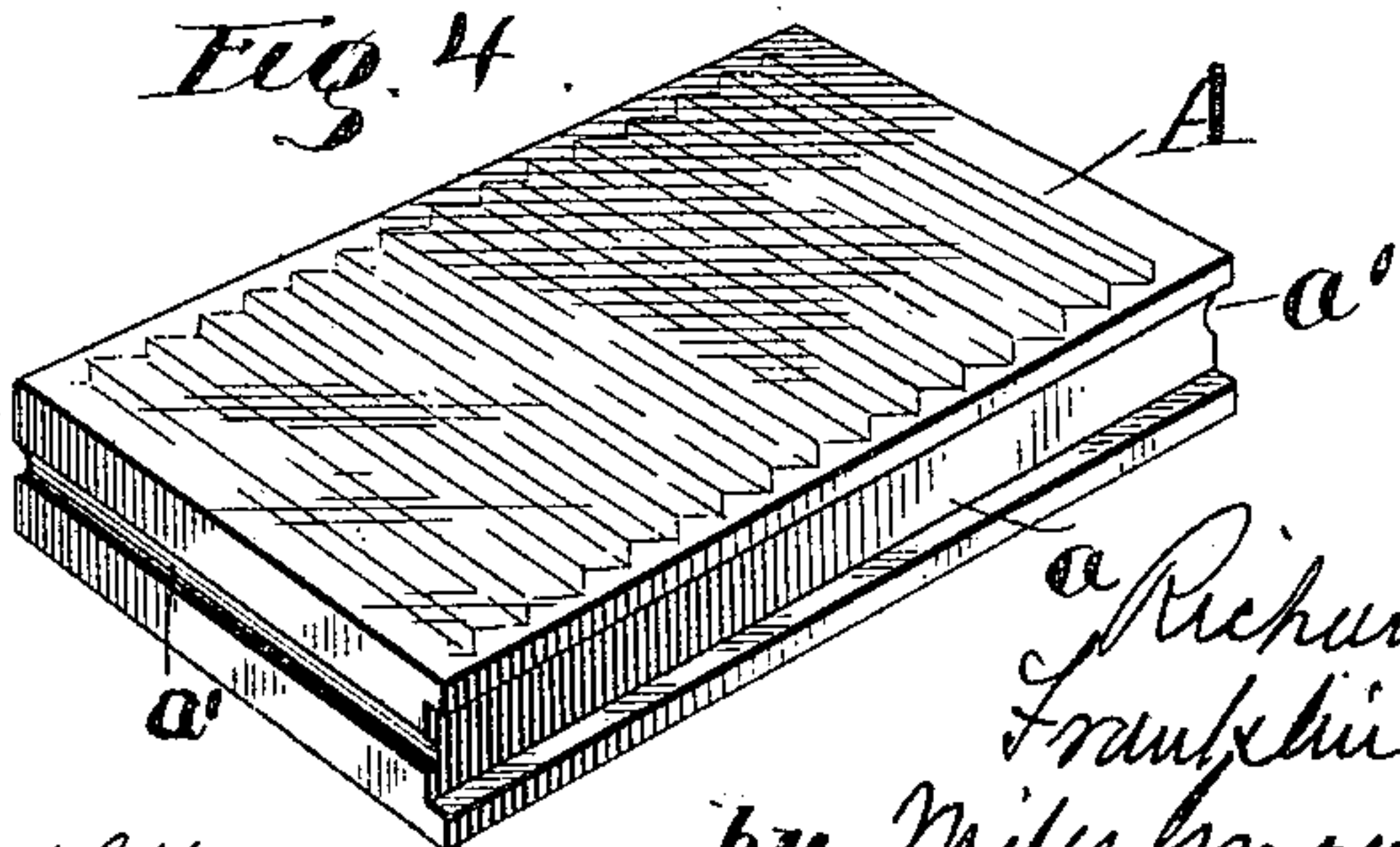


Fig. 3.



Fig. 4.



Witnesses:

S. Bliss.

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UNITED STATES PATENT OFFICE.

RICHARD JOHN ROSS AND FRANKLIN PRATT SMITH, OF CHICAGO, ILLINOIS.

WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 641,608, dated January 16, 1900.

Application filed April 21, 1899. Serial No. 713,894. (No model.)

To all whom it may concern:

Be it known that we, RICHARD JOHN ROSS and FRANKLIN PRATT SMITH, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Window-Sash or the Like, of which the following is a specification.

Our invention relates to certain improvements in window-sash designed especially for the support of what are known as "inclosed" prisms, but which may also be used to advantage in a variety of similar applications.

The object of the invention is to unite into one rigid and substantial plate a number of small panes or blocks without materially interfering with the transparency of the combined plate and without rendering it unsightly or cumbersome in appearance; and to such end the invention consists in certain novel features or characteristics which will be apparent from the following description of the preferred specific construction, and the essential elements of which will be pointed out in the claim at the end of this specification.

The invention is illustrated by means of four figures, of which—

Figure 1 is a face view, partly in section, of a series of panes or lights secured together by means of our invention. Fig. 2 is a transverse section on line 2 2 of Fig. 1. Fig. 3 is a transverse section on line 3 3 of Fig. 1, and Fig. 4 is a perspective showing one of the panes or blocks of which the plate seen in Fig. 1 is composed.

Referring first to Fig. 4, the block or plate is lettered A and is provided along its side with a groove *a* and along each end with grooves *a'*. The groove *a* is adapted to receive a bar B, and the grooves *a'* are each adapted to receive half of a rod C, for which perforations *b* are provided in the bar B. To secure the panes or blocks together, they are

laid side by side, with the bars B between them within the grooves *a*, and the rods C are then passed through the perforations in the bars and the grooves in the ends of the blocks and clamped upon the outside bars by means of nuts *c*, threaded to the ends. This makes a rigid and substantial plate and at the same time one that can be taken apart easily for the substitution of a new pane or panes in case of breakage or other damage. The simplicity, together with the great rigidity and strength of the combined plate, makes it exceedingly desirable, and the ease with which it may be taken apart for repairs effects a considerable saving whenever such repairs become necessary.

We recognize the possibility of great variation in the form and construction of the invention, and we therefore do not limit ourselves to the exact details here described.

We claim as new and desire to secure by Letters Patent—

The combination with a framework made up of a series of longitudinal bars and a series of transverse rods passing through the longitudinal bars and provided with means for tightening them thereupon, of a series of panes or blocks of a size corresponding to the rectangular spaces of the frame, said blocks having grooves in their sides fitted to the longitudinal bars and grooves in their ends fitted to the transverse rods; substantially as described.

In witness whereof we have hereunto set our hands, at Chicago, in the county of Cook and State of Illinois, this 18th day of April, A. D. 1899.

RICHARD JOHN ROSS.
• FRANKLIN PRATT SMITH.

Witnesses:

WILLIS B. SMITH,
CHAS. O. SHERVEY.