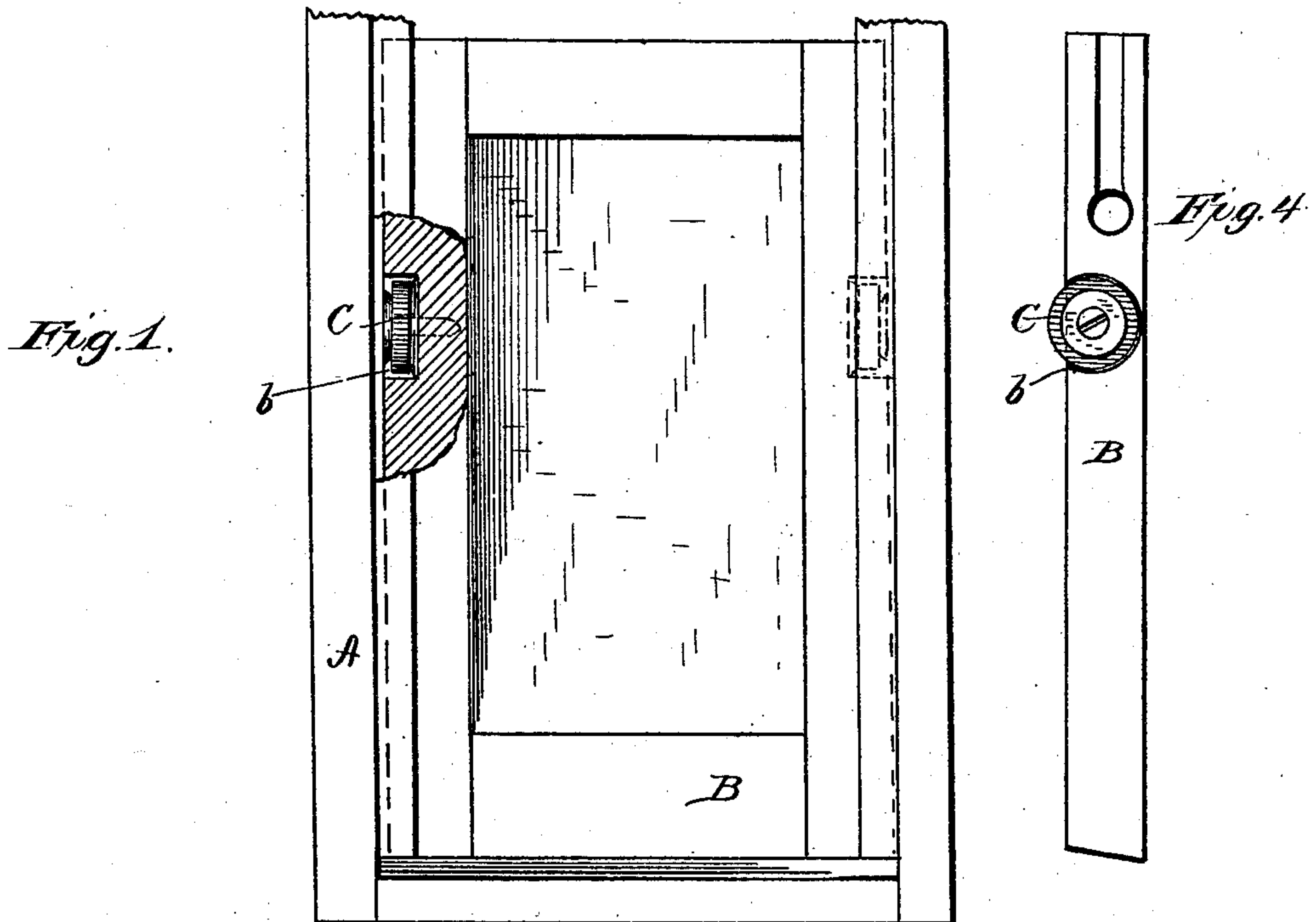


(No Model.)

L. SCHNEIDER.  
Window Sash Tightener.

No. 237,913.

Patented Feb. 15, 1881.



Witnesses.  
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George Cornell

Inventor.  
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his atty

# UNITED STATES PATENT OFFICE.

LOUIS SCHNEIDER, OF WILLIAMSPORT, PENNSYLVANIA.

## WINDOW-SASH TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 237,913, dated February 15, 1881.

Application filed January 11, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS SCHNEIDER, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Window-Sash Tighteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a front elevation, showing present invention applied to use in a window-sash, parts of the sash being broken away to disclose all this more clearly. Fig. 2 is a perspective of the several parts of the tightener in position to be put together and applied to the sash. Fig. 3 is a central sectional view of the tightener; Fig. 4, a side elevation of tightener in position.

This invention relates to that class of devices known as sash-tighteners, and the novelty consists in the peculiarity of the construction, whereby, in a very simple structure composed of easily-made parts, a cheap, strong, and efficient device is afforded, all as will now be more fully set out and explained.

In the accompanying drawings, A represents a window-frame, and B the sash containing the glass. In one or both sides of this sash are open-mouthed mortises *b*, of proper shape and size to contain the tightener C. This tightener is composed of the following pieces or parts, viz: An inner flat plate, *c*, a revolving disk, *d*, a rubber ring, *e*, fitting on said disk, and a screw, *f*. The plate *c* is provided on the side coming against the wood of the sash with projections *x*, which serve to prevent it from moving laterally, and on the other side has a boss, *c'*, projecting from about the hole in its center. The disk *d* has a central opening of such shape and size as to fit on said boss *c'*, so as to be

easily revolved thereon. The outer edge of said disk is flanged, so that while a sufficient space may be left on its periphery to hold or contain the rubber or elastic band *e*, said outer flanged edge will serve to prevent the band from coming off. The screw *f* is passed through the central holes in *d* and *c*, and when screwed into the wood-work will bring all these parts, as aforesaid, of the tightener, properly and securely into position to operate as designed.

It will be observed that the boss *c'* of the inner plate is beveled a little toward the end, and the central hole in disk *d* is also beveled slightly to adapt it to make a good fit on said boss. This serves to make the parts play better on each other; also insures a proper adjustment of the parts when applying it, because as thus made they will fit on each other only in one way.

When, now, the tightener is applied to and properly fastened in the open-mouthed mortises *b*, its rubber rim will project far enough to press the sash firmly against the guide-strip, and so securely bind all the parts as to stop the sash from rattling as well as prevent the admission of air or dust.

It is evident that I can use as many tighteners on each sash as may be desired. Larger ones may need as many as four. Smaller ones will require less.

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

A window-sash tightener composed of the following elements or parts, viz: a plate, *c*, having boss *c'*, revolving disk *d*, fitting on said boss, rubber ring *e*, and screw *f*, substantially in the combination shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS SCHNEIDER.

Witnesses:

CLINTON LLOYD,  
HARRY S. MEYER.