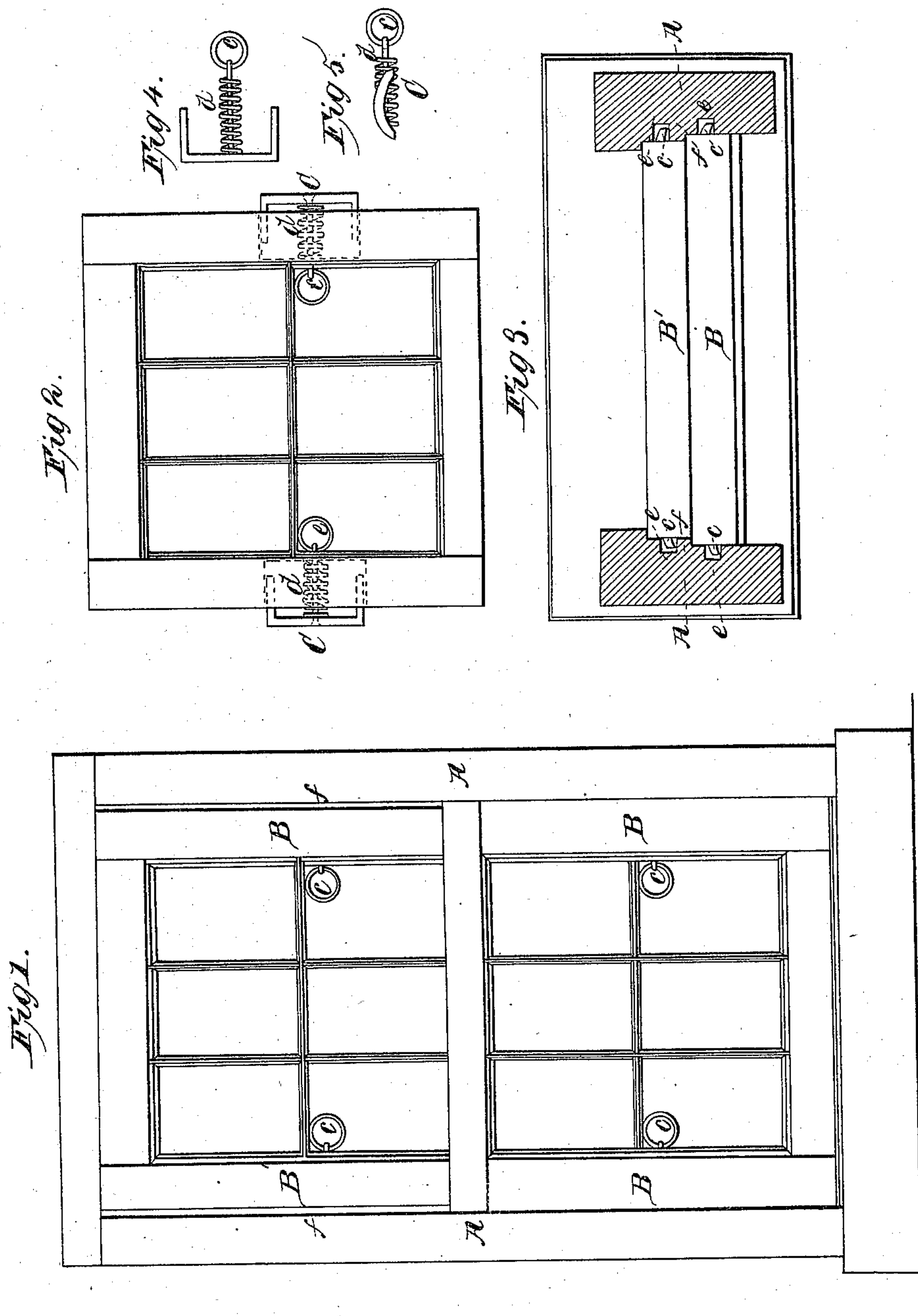


*D. Russell,
Sash Holder.*

N^o 12,785.

Patented May 1, 1855.



UNITED STATES PATENT OFFICE.

DAVID RUSSELL, OF DREWERSBURG, INDIANA.

WINDOW-SASH SUPPORTER.

Specification of Letters Patent No. 12,785, dated May 1, 1855.

To all whom it may concern:

Be it known that I, DAVID RUSSELL, of Drewersburg, in the county of Franklin and State of Indiana, have invented certain new and useful Improvements in Window-Sash Stop-Fasteners; and I do declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side elevation of a window frame with the sash inserted. Fig. 2 is detached view of a sash in elevation showing the stop fasteners and the arrangement for operating the same. Fig. 3 is a top view of the frame with the cap piece removed and the sash inserted, showing the manner in which the jambs are constructed and also the manner in which the stop fasteners act against the side of the groove of the jamb. Fig. 4 is a detached side view of the stop fastener. Fig. 5 is an edge view of the same.

Similar characters refer to like parts in all the figures.

The nature of my invention, consists in a new and improved mode of constructing stop fasteners for window sash.

My invention further consists of constructing the jambs, in such a manner as to admit of the lower or front sash, being made wider than the upper or back one. This is accomplished by an offset in each jamb, said offset extending from the upper to the lower extremity of the frame.

The object of constructing the jambs, with offsets, and consequently requiring the lower sash to be wider than the upper, is to enable me (by the application of the stop fastener in conjunction with the offset jamb) to take or put either of the sash square from or in the frame, without the inconvenience of removing any part of the same, also to raise or lower either of them at pleasure and secure them in the desired position, as will be hereinafter described. And further, by forming an offset on the jambs, and making the lower sash wider than the upper, a strap or shoulder is formed, against which the lower sash is pressed by the stop fastener, answering every purpose of the stop strap generally placed between the sash. By this arrangement it will be seen that sash may be made to fit closely between the jambs, and yet be put in and taken out with perfect ease and facility, as will be hereinafter described.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

(A) represents the frame.

(B) represents the lower and (B') the upper sash.

(C) are the stop fasteners which are made in a curved form, as seen in Fig. 5, for a purpose that will be hereinafter described.

(c) are metallic rings connected with the stop fasteners by means of a wire, as clearly shown in the drawings.

(d) are spiral springs which occupy the position as shown in Fig. 2, the use of which is to press the fasteners against the groove in the side of the jamb.

(f) are offsets one of which is formed in each jamb, as clearly shown in Figs. 1 and 3.

(e) are grooves into which the fasteners take and by pressing against the side of the same, re-act against the sash, by which reaction two distinct offices are performed; 1st, they hold the sash in the frame thus performing the office of a fastener and; 2nd, they press the sash firmly against the edge of offset (f) for the purpose of making the joint between the sash and frame air-tight or nearly so, and also to prevent the window from being shaken by the wind.

It will be seen by referring to Fig. 3, that the jambs are made each of a single piece of timber or they may be made of several pieces to suit the convenience of the constructor. So also may the stop fasteners be made of any desired length.

Now in order to derive any advantage from the use of my stop fasteners it is indispensably necessary to form an offset in the jamb as at (f) for without said offset it would be necessary to use the strap which is ordinarily placed between the sash for the purpose of preventing the bottom of the lower sash from working outward. Now if we use a strap between the sash it would prevent the accomplishment of the object for which my fastener is intended, from the fact that the back sash could not be taken out unless the stop was previously removed. Now it will be seen by examining Fig. 3 that offset (f) will perform three distinct offices. 1st, it forms a jamb for the upper sash. 2nd, it substantially forms a stop strap (*i. e.* when used in combination with the stop fastener) to hold the upper sash in its proper place; and 3d, it forms a shoulder

against which the lower sash is pressed and kept in its proper place. It is therefore by the advantages gained by the use of the offset jambs (as above set forth) in combination with the stop fasteners, that I am enabled to take either or both of the sash from the frame without previously detaching any part of the fixtures of the same.

The object of making the stop fastener in a curved form is as follows: It will readily be seen that there is a great advantage gained by having the fasteners press against the side instead of the bottom of the groove (*e*) for by pressing against the side, the sash is kept constant pressed back against the edge of the offsets (*f*) thereby rendering the joint air-tight or nearly so. Now it will be seen that this side pressure could not be obtained without making the stop fastener in a curved form for it would be impossible to operate a straight fastener diagonally through the side of the sash against the side of the groove (*e*), from the fact that the thickness of the ordinary sash will not admit of such an arrangement.

Operation: To raise or lower the window we have only to slack the pressure of the

fasteners against the side of groove (*e*) by a moderate pull on rings (*c*). This relieves the sash so that it can be moved up or down with perfect ease. To take the sash out from the frame it is necessary to draw the fasteners entirely within the side of the sash, so that they will not come in contact with the side of the jamb, then take the sash straight forward out of the frame.

I do not claim operating the stop fasteners by means of spiral springs, as the same function might be performed either by elliptic springs or weights and pulleys, but

What I do claim as my invention and desire to secure by Letters Patent is—

1. The curved form of the stop fasteners constructed in the manner and for the purpose as herein described.

2. I claim the offset (*f*) in combination with the fasteners for accomplishment of the object as herein described.

In testimony whereof I have signed my name before two subscribing witnesses.

DAVID RUSSELL.

Witnesses:

JOHN L. SMITH,
O. C. WILLSON.