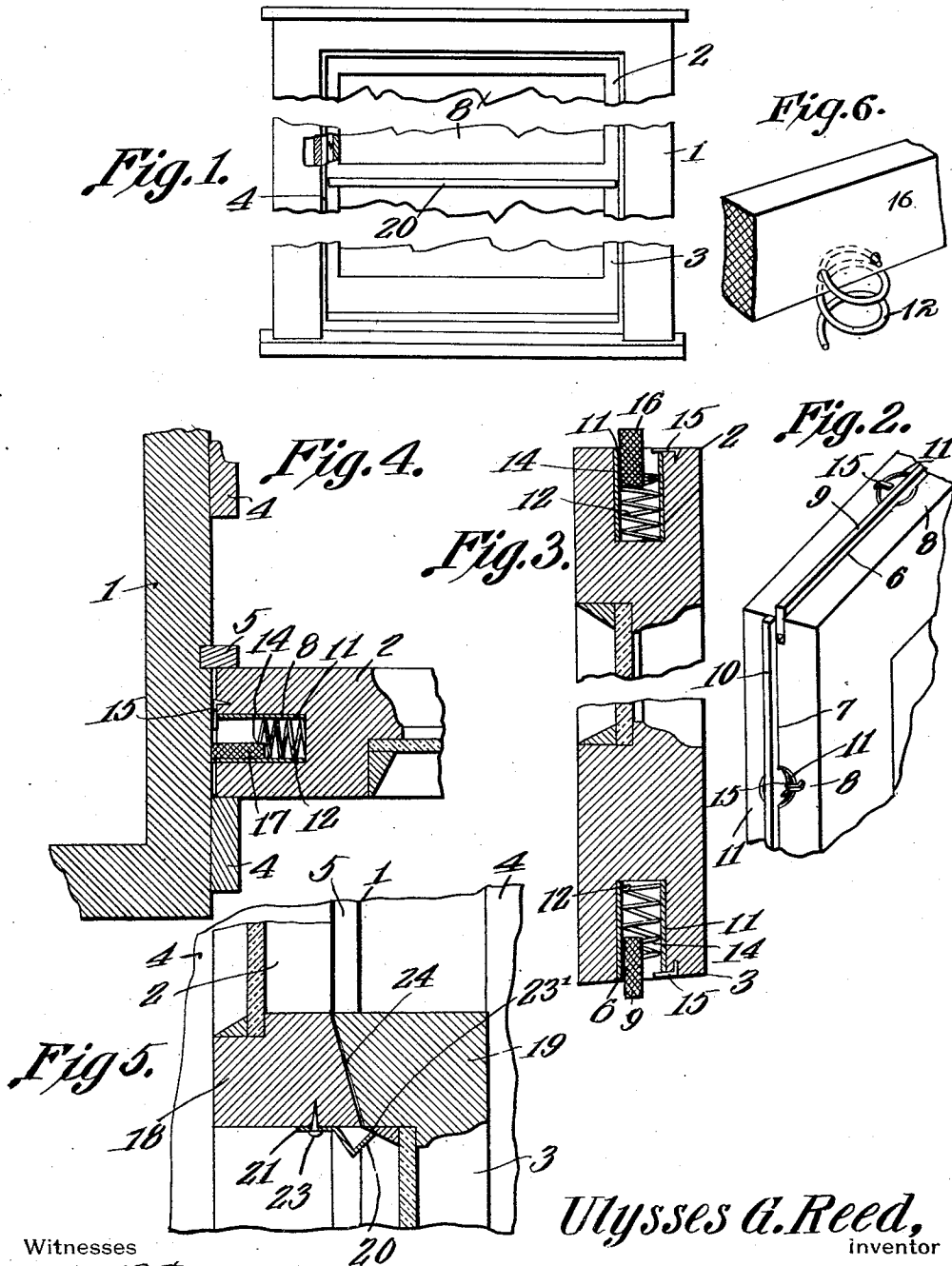


U. G. REED.
WEATHER STRIP.
APPLICATION FILED JULY 17, 1912.

1,120,972.

Patented Dec. 15, 1914.



Witnesses

J. P. Conley
L. H. Shaw

by

Ulysses G. Reed,
inventor

C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

ULYSSES G. REED, OF WICHITA, KANSAS.

WEATHER-STRIP.

1,120,972.

Specification of Letters Patent.

Patented Dec. 15, 1914.

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To all whom it may concern:

Be it known that I, ULYSSES G. REED, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented a new and useful Weather-Strip, of which the following is a specification.

One object of the present invention is to provide novel means for assembling a series of stops with a window sash, and for actuating the stops, so that there may be no space between the periphery of the sash and the frame in which the sash is mounted.

Another object of the invention is to provide novel means for preventing a draft between the mid rails of the sashes, and to provide novel means for preventing the sweat from the pane of the upper sash, from running down upon the pane of the lower sash.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings, Figure 1 shows in elevation, a window pane in which the device constituting the subject-matter of the present invention has been mounted, parts being broken away; Fig. 2 is a perspective detail of the lower sash; Fig. 3 is a transverse vertical section of a portion of both sashes; Fig. 4 is a horizontal section of a portion of the upper sash; Fig. 5 is a vertical section through the mid rails of both sashes; and Fig. 6 is a perspective view illustrating the manner in which the spring coöperates with the stop strip.

In the drawings, the frame of a window is shown, and is denoted generally by the numeral 1.

The upper sash is indicated by the numeral 2 and the lower sash by the numeral 3.

The side strips are denoted by the numeral 4, and the parting strip is denoted by the numeral 5.

The lower sash 3 is equipped along its lower edge with a slot 6, there being slots 7 in the vertical edges of the lower sash 3. Circular spring seats are formed in the edges of the sash 3, the spring seats 8 communicating with the slots 7. A stop, de-

noted by the numeral 9, and preferably taking the form of a bar, is mounted in the slot 6, and a similar stop 10 is mounted in each of the vertical slots 7. In the spring seats 8 thimbles 11 are disposed, helical compression springs 12 being located within the thimbles, the springs 12 at their inner ends abutting against the sash, and at their outer ends inserted through the stops 9 and 10, as indicated at 14. At the lower corners of the sash 3, the stops 9 and 10 overlap. Angular detents 15 are inserted into the edges of the sash 3, the detents 15 overhanging the ends of the thimbles 11, to hold the thimbles in place. The outer ends of the springs 12 are engageable by the detents 15, so that when the window sash is removed from the frame, the stops 9 and 10 cannot drop out of the sash. The detents, however, do not interfere with the compression of the springs 12, and, as will be understood readily, the springs serve to force the stops 9 and 10 outwardly, so that the stops will engage with the frame 1 and prevent a draft around the edges of the sash 3. Extended along the upper edge of the upper sash 2 is a stop 16, stops 17 being located along the vertical edges of the sash. The construction of the stops 16 and 17, and the manner of mounting and operating them, does not differ from the construction heretofore set forth with respect to the stops 9 and 10.

The mid rail of the upper sash 2 is indicated by the numeral 18, and the mid rail of the lower sash 3 is indicated by the numeral 19. A trough-shaped member 20 is provided, the same having a lateral flange 21, which, as indicated at 23, is secured to the lower face of the mid rail 18 of the upper sash 2. The trough 20 extends across the line of abutment 24 between the rails 18 and 19, the trough being a resilient structure, so that its free edge is yieldably held in engagement with the lower face of the mid rail 19 of the lower sash 3, as indicated at 23.

Owing to the fact that the free edge of the trough 20 is yieldingly pressed, as indicated at 23, against the under face of the mid rail 19, and owing to the fact that the trough extends across the line of abutment 24 between the mid rails, it will be seen that draft between the mid rails will be prevented. Furthermore, any sweat formed upon the inner face of the pane of the upper sash will find its way into the trough 20, and be carried laterally thereby, so that the

moisture or sweat thus collecting upon the pane of the upper sash, cannot flow downwardly upon the outer face of the lower pane and obscure the same.

5 Referring specifically to Fig. 6 it will be observed that the spring 12 may be rotated in the stop strip 16 as is the case with all of the springs and the stop strips, to vary the effective length of the spring. A portion of each stop strip is bound between successive convolutions of the spring, and the rotation of the spring to vary the effective length thereof, does not serve to loosen the grip of the spring upon the stop strip.

10 Having thus described the invention, what is claimed is:—

In a device of the class described, a sash

having a groove; a penetrable stop mounted in the groove; and a helical spring terminally supported in the groove, one end of the spring being extended through the stop and a portion of the stop being bound between successive convolutions of the spring, the spring being rotatable to adjust the effective length of the spring, the axis of the spring lying in a plane substantially coincident with one side face of the strip. 25

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

ULYSSES G. REED.

Witnesses:

JOHN T. TOWNSEND,

JOHN H. BUTTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."