W. F. CONNOLLY.

WEATHERPROOF WINDOW.

APPLICATION FILED AUG. 4, 1910.

1,175,713.

Patented Mar. 14, 1916.

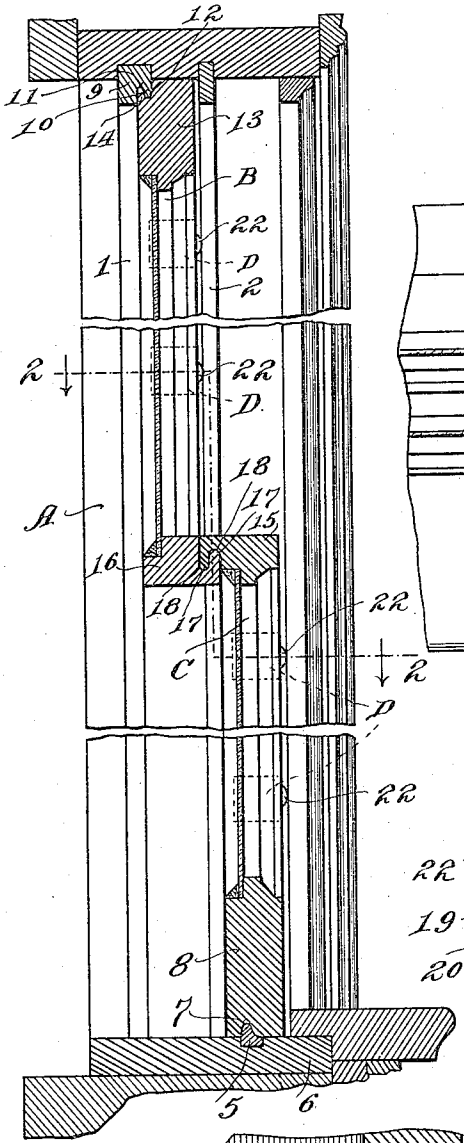
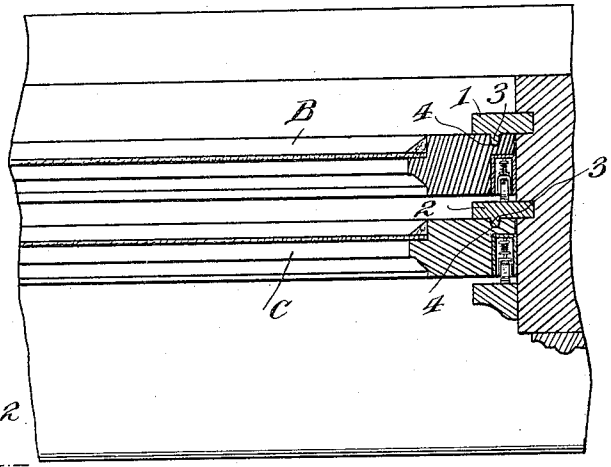



Fig. 1.

Fig. 2.



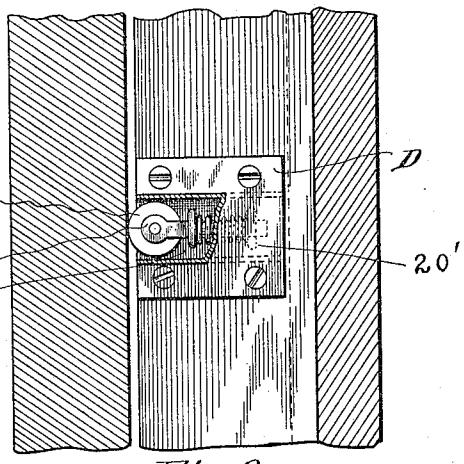




Fig. 3.

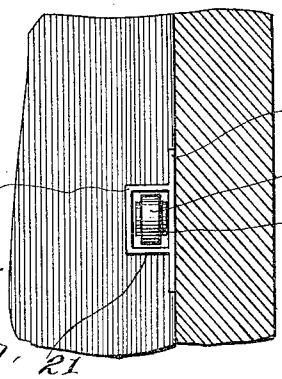



Fig. 4.

Witnesses
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# UNITED STATES PATENT OFFICE.

WILLIAM F. CONNOLLY, OF DAYTON, OHIO, ASSIGNOR OF ONE-HALF TO FRANK SPRAUER, OF DAYTON, OHIO.

## WEATHERPROOF WINDOW.

1,175,713. Specification of Letters Patent. Patented Mar. 14, 1916.

Application filed August 4, 1910. Serial No. 575,410.

*To all whom it may concern:*

Be it known that I, WILLIAM F. CONNOLLY, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented new and useful Improvements in Weatherproof Windows, of which the following is a specification.

This invention relates to window frames and sashes, and the invention has for its primary object to provide means for effectively preventing the entrance of cold air, rain, dust or sleet through the crevices between the window sashes and frame, and between the sashes where they meet.

Another object of the invention is the provision of a window frame and sashes which have interfitting tongues and grooves so arranged that the sashes can be readily opened and closed and tight joints obtained at all points around the sashes.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claim appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention, Figure 1 is a vertical section of a window constructed in accordance with the invention. Fig. 2 is a section on line 2—2, Fig. 1. Fig. 3 is a side view of one of the pressing devices for holding the sashes against the strips of the window frame. Fig. 4 is an end view of one of the said devices.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawing, A designates a window frame which is of ordinary construction except that the vertical guide strips 1 and 2 for the sashes are provided with longitudinal tongues 3 on their inner faces which enter grooves 4 in the outer surfaces of the tiles of the sashes B and C, and another difference is the use of a tongue strip 5 set into the window sill 6 and arranged to enter a groove 7 in the bottom surface of the bottom rail 8 of the lower sash. The horizontal outside strip 9 at the top of the window frame is formed at its inner edge with a tongue 10 and a groove 11, the tongue entering a horizontal groove 12 in the top rail 13 of the upper sash, while the groove 11 receives the horizontal tongue 14 on the said upper rail 13. The meeting rails 15 and 16 of the sashes are formed with tongues 17, the tongue 17 of each rail entering the groove 18 of the other rail. The tongue and groove joints between the sashes and also between the frame and sashes are weathertight when the sashes are closed and by means of any approved sash lock, the said joints can be kept as tight as desired.

In order to close the joints between the tongues 3 and grooves 4 at the sides of the window sashes, each window sash has set into each stile a pressing device D which includes a spring-pressed follower 19 mounted in a housing 20 set into a socket 21 in the edge of the stile, and on this follower is a roller 22 which bears against the adjacent guide strip of the window frame so as to press the sash outwardly and cause the tongue 3 of the window frame to tightly fit in the groove 4 of the sash. The free end of the follower 19 is adapted for slidable engagement through the guide eye 20′ which is arranged within the casing adjacent the rear wall thereof. By means of these rollers, the sashes will always be kept under tension and yet they can be readily opened or closed.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claim appended hereto.

Having thus described the invention, what I claim as new, is:—

In a device as described, in combination, a window frame, spaced apart parting strips therein, a sash sliding snugly between said parting strips, a housing embedded in said sash flush with one edge thereof and adapted to contact the window frame, longitudi-

nal ribs extending at right angles upon one of said strips and disposed in alinement with said housing, said sash having a groove in which said ribs snugly fit, a roller member in said housing, a carrier for said roller, a guide for controlling the sliding action of said roller, said guide being in said housing, and a spring in said housing adapted to force said roller against the opposing parting strip and said sash against said rib.

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

WILLIAM F. CONNOLLY.

Witnesses:

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LEONA KATHLEEN STEIN.

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