No. 661,040. Patented Nov. 6, 1900.

A. CRAIG.

WEATHER STRIP.

(Application filed Jan. 22, 1900.)

(No Model.)

Fig. 1.

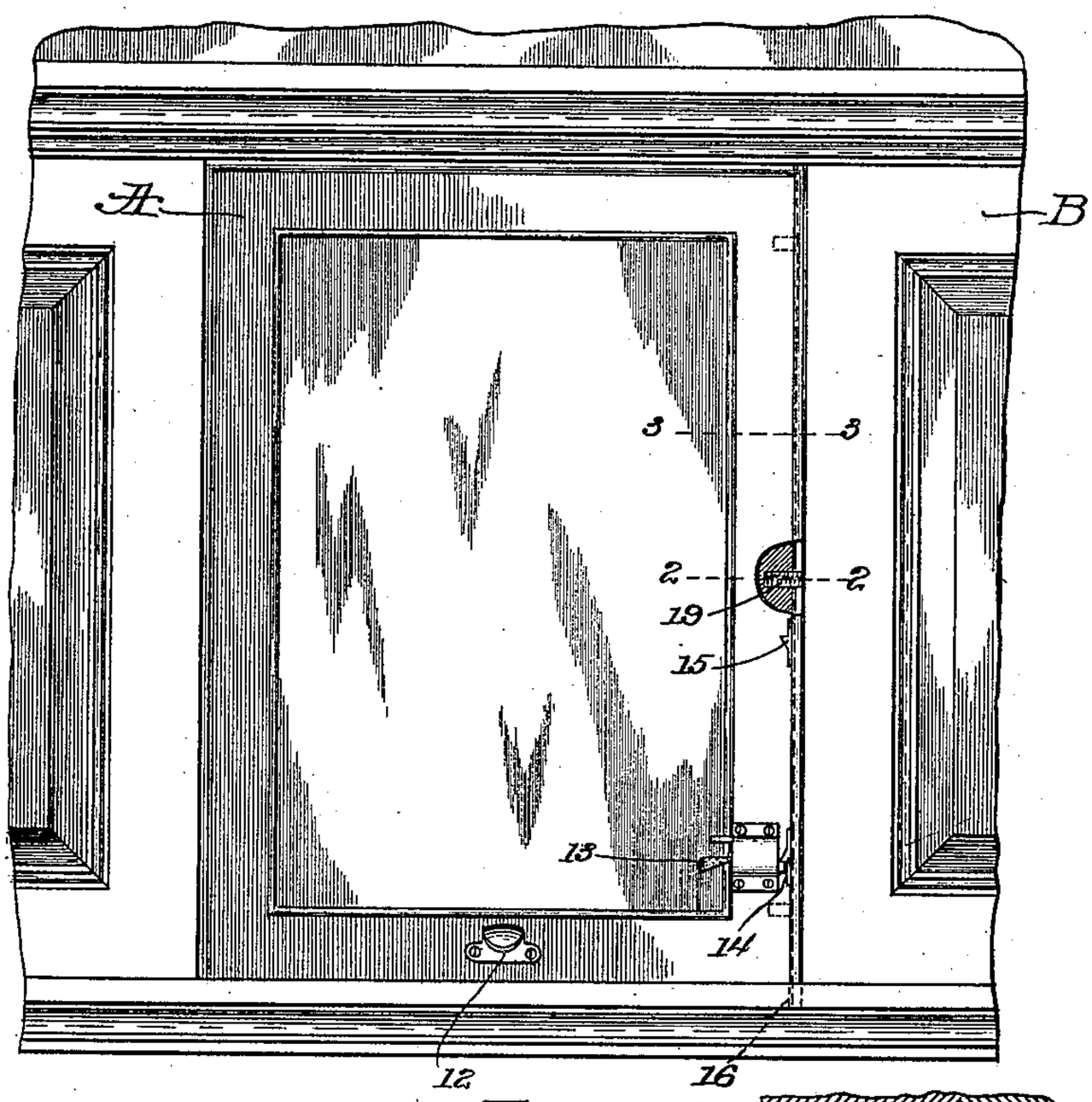


Fig. 2.

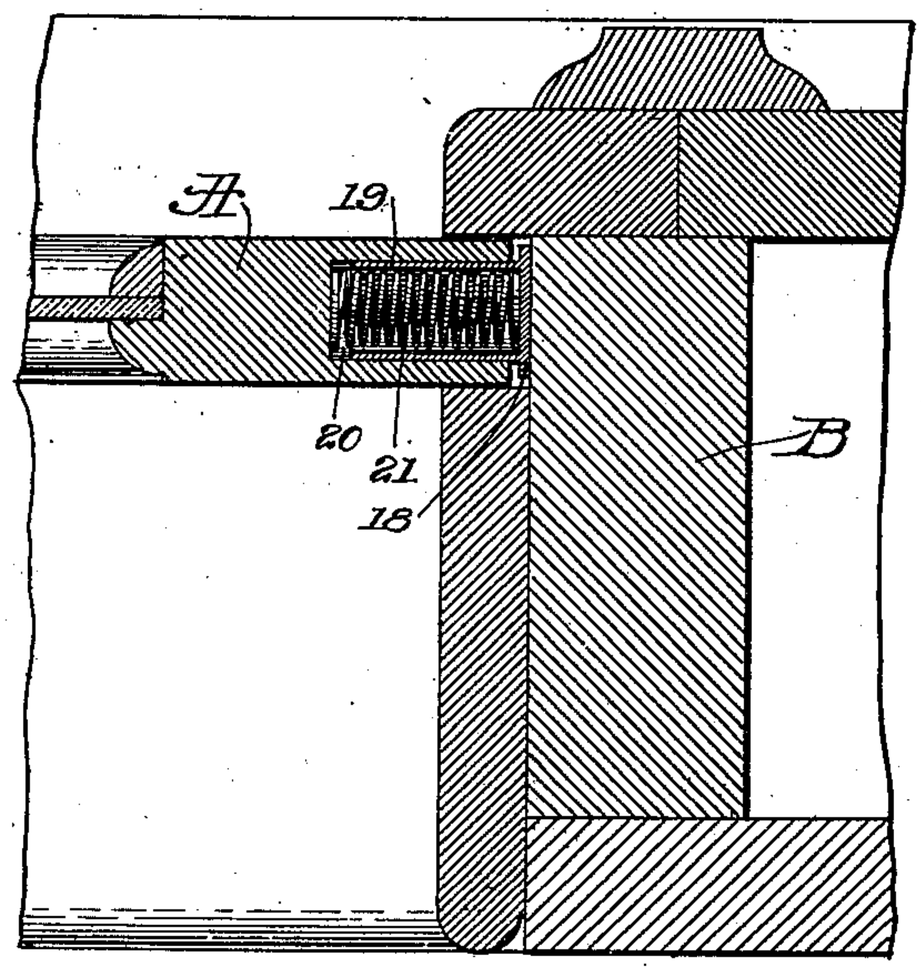


Fig. 3.

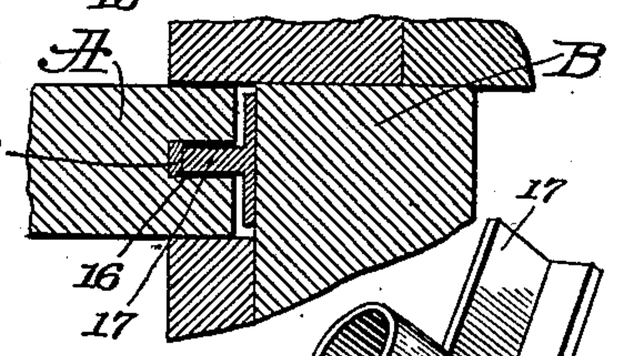
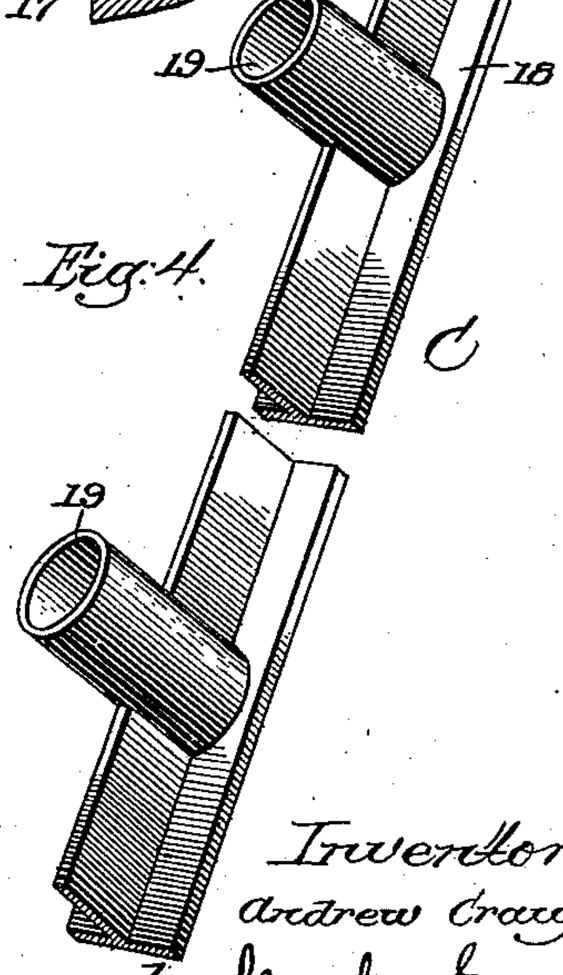


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

ANDREW CRAIG, OF LAWRENCE, MASSACHUSETTS.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 661,040, dated November 6, 1900.

Application filed January 22, 1900. Serial No. 2,242. (No model.)

To all whom it may concern:

Be it known that I, ANDREW CRAIG, a citizen of the United States, residing at Lawrence, county of Essex, State of Massachusetts, have invented an Improvement in Weather-Strips, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to weather-strips; and the object of the invention is to provide a simple and inexpensive device of this character especially adapted to sashes that are to be raised, and it serves to thoroughly exclude cold air, while at the same time it permits the free operation of the sash or like appliance.

Figure 1 is a front elevation of a window provided with a weather-strip constructed in accordance with one embodiment of my invention on a reduced scale. Figs. 2 and 3 are sectional plan views, the sections being taken in the lines 2 2 and 3 3, respectively, Fig. 1; and Fig. 4 is a perspective view of a portion of the strip detached with a part removed.

I provide in combination with a sash and its frame a strip fitting flatwise against one of said parts, provided with a longitudinal rib or fin, the other part being grooved or channeled to receive said rib or fin. I prefer to employ with this combination yieldable means bearing against said strip to hold it firmly in contact with the part against which it fits. By this construction I secure a positive barrier against the admission of cold air from the exterior to the interior of a room or compartment and at the same time secure a snug joint between the parts without in any wise affecting the ready action of the sash when it is desired to raise or lower the same.

The weather-strip may be employed in connection with any type of sash, and at this point I wish to state that the latter term is used generically to include within its scope all structures of an analogous character. I have shown the improved device in connection with a car-window.

A denotes the sash, and B the frame, the sash being shown as mounted between the stiles of the frame for vertical movement and having the usual finger-piece 12, by which it may be raised or lowered, and a latch 13 of ordinary kind coöperating with the superposed catches 14 and 15 upon the frame B. The sash along one edge thereof, shown as the right-hand edge, is channeled or grooved, as at 16, for its entire length, the channel being adapted to snugly receive the rib or fin 17, extending transversely from the body 18 of the strip, (denoted in a general way by C, Fig. 4.) The body of the strip is flat and in the present case fits flatwise against the right-hand side of the frame and slides upon the latter as the window-sash is operated. The rib or fin 17 extends the entire length of the body of the strip and is of the same length as the groove or channel 16, and it is intersected by one or more cases or tubes, as 19, three of them being shown and arranged in vertical order at desired intervals. These cases or tubes abut against the body of the strip and are adapted to receive springs by which the strip can be held in frictional engagement with the window-frame, thereby to increase the efficiency of the article as a means for excluding cold air. The cases or tubes 19 are adapted to enter cylindrical mortises or recesses, as 20, formed in the sash A at proper points in its height and intersecting or opening into the elongated channel 16.

The strip C may be of any suitable character. It is cheaply made by being cast in one piece.

The cases or tubes 19 are adapted to receive coiled springs, as 21, the ends of the springs being adapted to engage the body of the strip and the bottoms of the mortises 20, so as to hold said strip with a yielding pressure against the frame, thereby securing a tight closure.

The device is simple and can be made at a low cost and moves with the sash, but does not affect the free operation of the same, though it serves effectively for the purpose for which it is intended.

In some cases I may interpose packing between the strip and the sash. I have shown such packing in Fig. 3, the same being denoted by 22, and it may be of any suitable material, being arranged in strips back of the rib or fin 17 in the groove 16 and being in contact with the adjacent forces of these

parts. The packing simply fills the channel, not entering the mortises 20.

Having described my invention, what I claim is—

1. A sash and its frame, the sash having a longitudinal groove and a strip embodying a flat body provided with a longitudinal rib or fin fitted in said groove, one or more cases carried by said strip and intersecting said rib or fin, and springs within said case or cases bearing against the strip and the sash.

2. A weather-strip having a transverse rib extending the entire length of the same, and one or more cases or tubes carried by said strip and intersecting said rib.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANDREW CRAIG.

Witnesses:
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