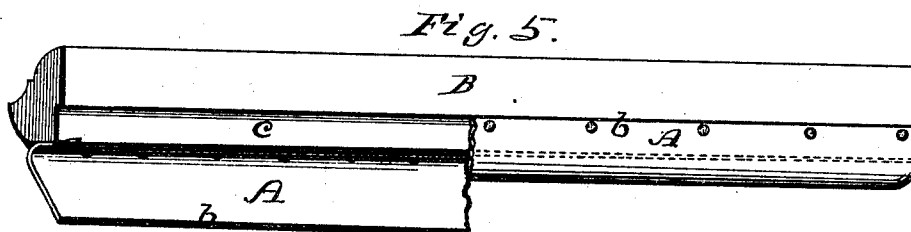
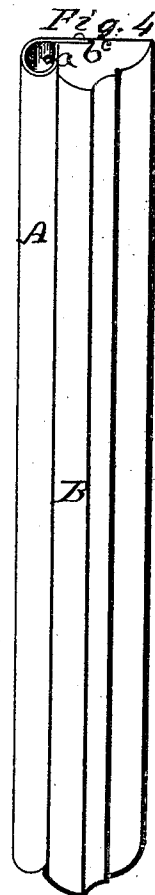
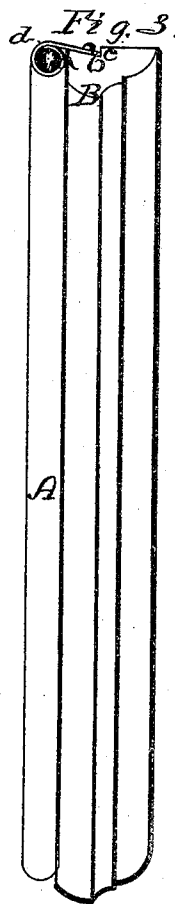
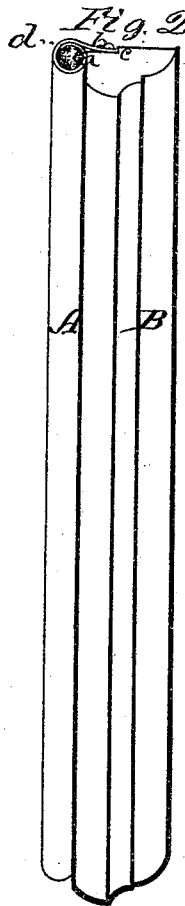
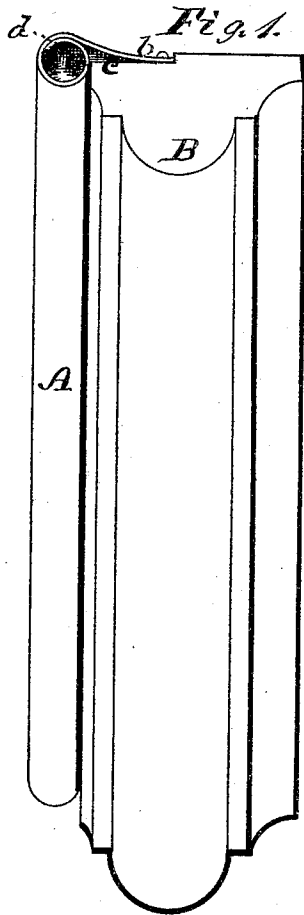


C. A. WILHELMI.
WEATHER-STRIPS.

No. 171,334.

Patented Dec. 21, 1875.



WITNESSES

E. M. Gallaher,
L. B. Townsend

By

INVENTOR,

Charles A. Wilhelmi,
J. S. Brown,
his Attorney

UNITED STATES PATENT OFFICE.

CHARLES A. WILHELMI, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WEATHER-STRIPS.

Specification forming part of Letters Patent No. **171,334**, dated December 21, 1875; application filed December 2, 1875.

To all whom it may concern:

Be it known that I, CHARLES A. WILHELMI, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in the Construction of Weather-Strips; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings making part of this specification—

Figure 1 being a view in perspective of a section of my improved weather-strip as applied to the lap-molding of double doors; Fig. 2, a similar view of the improved weather-strip as applied at the edges of doors and French windows; Fig. 3, a similar view of the improved weather-strip as applied to sliding sash windows, particularly to the meeting-rails of the sashes; Fig. 4, a similar view of the improved weather-strip, showing a modification of the construction represented in Fig. 3; Fig. 5, a view, in perspective, showing the mode of attaching the india-rubber or other elastic or yielding strip to the molding-strip.

Like letters designate corresponding parts in all of the figures.

My invention belongs to the class of weather-strips in which a strip of india-rubber or equivalent soft elastic material is secured to a rigid molding-strip, to be attached to the door, sash, or casing; and the nature of my invention consists in the peculiar mode of attaching the said elastic strip to the molding-strip, substantially as hereinafter specified.

I attach the elastic strip A to the molding-strip B at both edges *a b* of the said elastic strip, so as to make the same tubular; and in order to give as nearly a round or cylindrical form as possible thereto, (the best form to give the tube permanency and certainty of elasticity,) I first nail or otherwise secure one edge, *a*, to the edge of the molding-strip B, as shown at one end in Fig. 5. The strip is then bent round, and the other edge, *b*, thereof is nailed or otherwise secured to the inner side of the molding-strip, as shown at the other end in the same figure. This edge fits into a rabbet-groove, *c*, in the side of the molding, so that its surface will be beneath or flush with the inner side of the molding-strip. This mode of attaching the elastic

strip to the molding-strip constitutes the first feature of my improvement.

The second feature of my improvement consists in so attaching one edge, *a*, of the elastic strip A to the edge of the molding-strip B that it projects somewhat beyond the corner of the said molding-strip at one side, as shown at *d* in Figs. 1, 2, and 3. This projecting edge turns into, and conforms to, the inner surface of the tube, and not only greatly increases the strength of the elasticity possessed by the tube on that side, but gives a lateral projection to the whole tube more decidedly in that direction, causing it to hug closely to the casing, door, or sash against which it bears. I am thereby enabled to use an elastic strip much thinner and cheaper than without this projection, or add to the efficiency of the strip with the same thickness of material. The first feature of my improvement, however, may be used without the second, as shown in Fig. 4, which is similar to Fig. 3, except that in it the edge *a* does not project, as in the former figure.

Fig. 1 shows how the elastic strip A is applied in my improved manner to the molding-strip for double doors. The molding-strip B is to take the place of the ordinary lap-molding of such doors. Its peculiarity lies in making the rabbet-groove *c* wider than for other uses, and lapping the edge *b* of the elastic strip so much farther on the molding-strip. The edge *a*, also, preferably projects somewhat farther than for other uses, whereby the lateral elasticity of the strip is increased, so as to close with certainty any space between the doors.

Fig. 2 shows the same mode of application as in Fig. 1, only with a smaller and thinner elastic strip and smaller molding-strip, applicable to door-jambs for shutting the door against, and also to the sides of window-frames for the sashes to slide in contact with.

Fig. 3 shows a construction differing from that in Fig. 2 in having the rabbet-groove *c* inclined inward, instead of parallel with the face of the molding, as in the former figures, so as to give greater lateral projection to the elastic strip, applicable especially to the bottom of the upper sash of windows, to press against the lower sash. It is also applicable

to the sides of window-frames, and to door-jambs, the same as the construction shown in Fig. 2.

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

1. A weather-strip, having its elastic strip A attached by one edge, *a*, to the edge of the molding-strip B, and by the other edge, *b*, to the inner side of the said molding-strip, substantially as and for the purpose herein specified.

2. A weather-strip, having its elastic strip A attached to the molding-strip B, as described, and one edge, *a*, thereof projecting beyond the edge of the molding-strip, substantially as and for the purpose specified.

Specification signed by me this 26th day of November, 1875.

CHARLES A. WILHELMI.

Witnesses:

J. S. BROWN,
A. H. KNAPP.