J. W. Browne.

Weather Strip

No. 34,458. Patented Feb. 18, 1862.

Fig. 1.

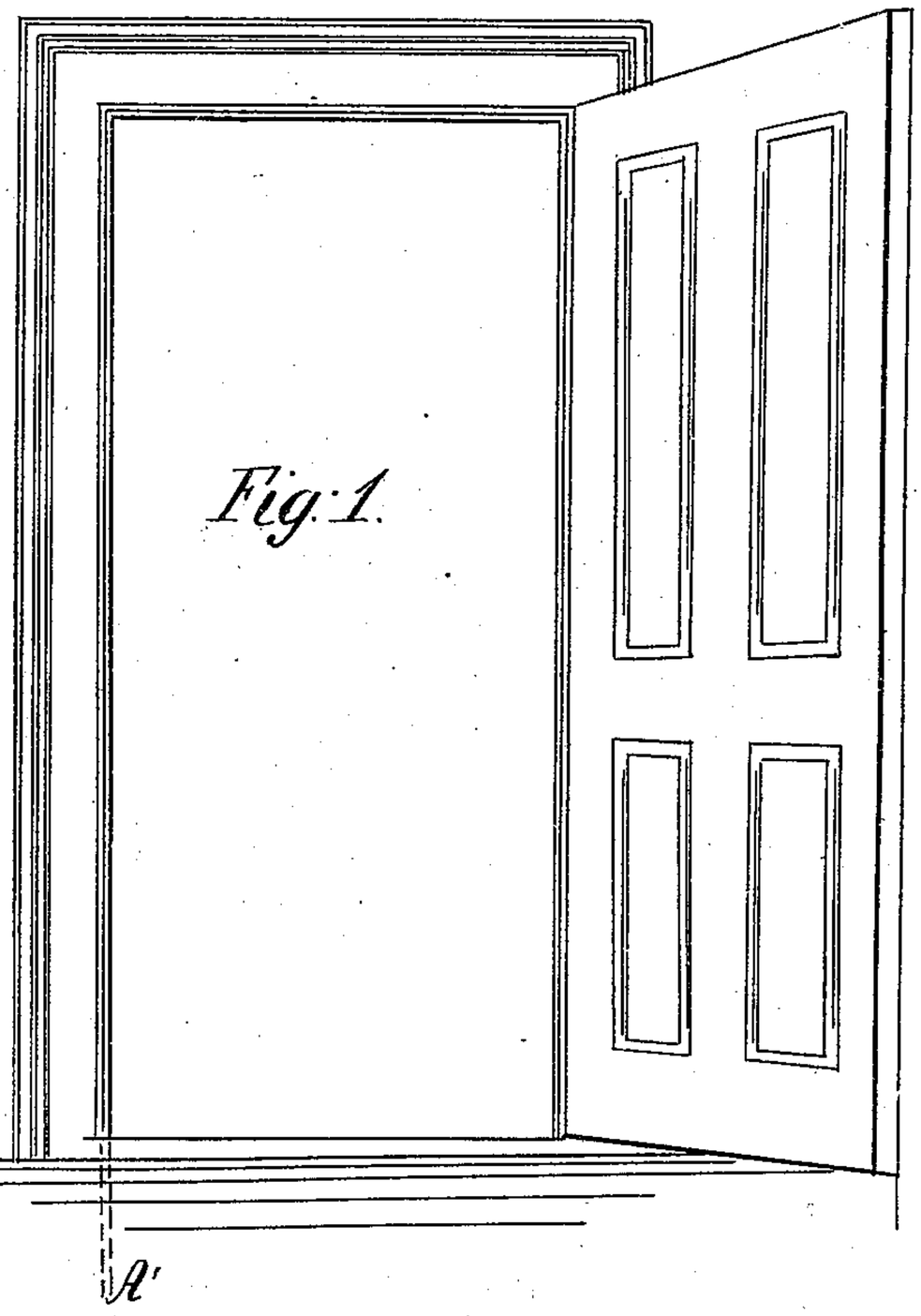


Fig. 2

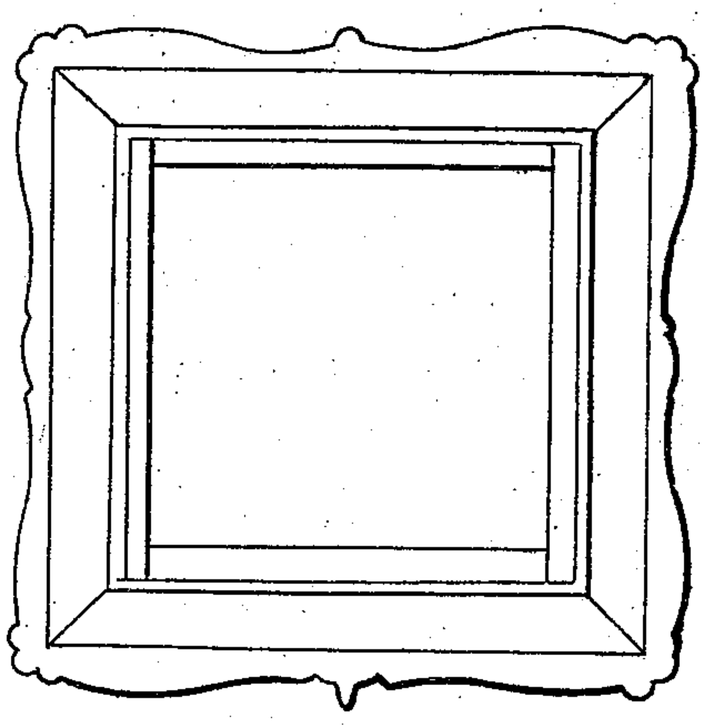


Fig. 3.

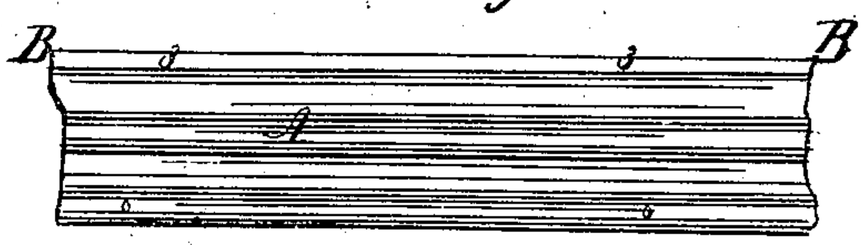


Fig. 5.

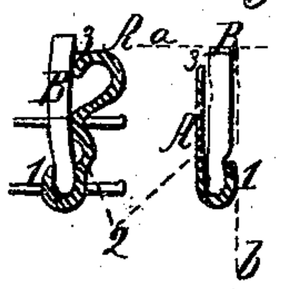


Fig. 6

Fig. 7

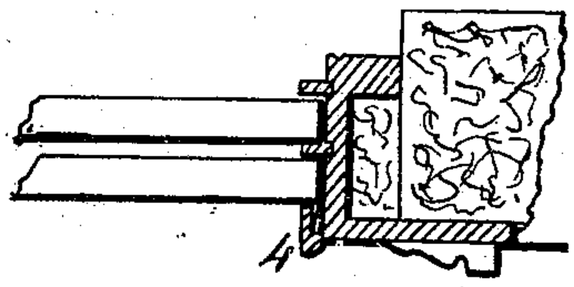
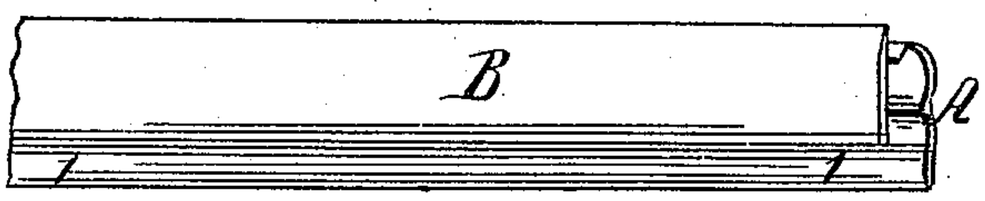


Fig. 4



Witnesses;
C. Harry Smith
S. T. McDougall

Inventor;
J. W. Browne

UNITED STATES PATENT OFFICE.

J. W. BROWNE, OF NEW YORK, N. Y., ASSIGNOR TO JACOB MOTT VAN WAGNER.

IMPROVEMENT IN WEATHER-STRIP MOLDING.

Specification forming part of Letters Patent No. **34,458**, dated February 18, 1862.

To all whom it may concern:

Be it known that I, J. W. BROWNE, of the State, city, and county of New York, have invented an Improved Weather-Strip Molding; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 represents a door and frame having the improvement applied. Fig. 2 shows it applied to a picture-frame back. Fig. 3 shows the back of the molding. Fig. 4 shows the face or elastic side. Figs. 5 and 6 are cross-sections. Fig. 7 is a sectional diagram showing the device applied to a window.

The object of my invention is to provide an efficient and permanent contrivance for excluding dust, air, moisture, light, head, cold, &c., from crevices or apertures around doors and windows or wherever in general crevices or apertures exist which it may be desired to close up.

To this end I employ felt, rubber, or other substance having the quality of yielding and adapting itself to unequal surfaces, and back the same with a suitably rigid material—such as wood or metal—to support and maintain the felt in place, and these two are conjoined in substantially the manner hereinafter specified.

My improved molding is applicable chiefly in situations where the surfaces adjacent to the aperture to be closed are at right angles to each other.

In all devices heretofore used the rubber is inserted and secured in a shallow groove in the edge of the molding, and the rubber is not only liable to become unfastened when the molding is accidentally split in the nailing of it on and otherwise, and thus rendered inefficient and useless, but is also objectionable in furnishing but one edge or surface capable of yielding and adjusting itself to the inequalities of the surfaces to which the device is applied, so that the cold or dust, &c., as the case may be, though quite effectually excluded from the aperture from one side, is allowed to enter more or less at the other, and hence the device only partially remedies the evil it is designed to cure. In order to obviate or overcome these difficulties and objections and produce a perfect thing, the felt, rubber, or other elastic substance in my improved contrivance is so secured to the backing or rigid part as to expose both the edge and side of the felt, and thus provides against all contingencies by presenting to the contact of both the contiguous surfaces a substance possessing the capacity of self-adaptation thereto. The same peculiarity of structure admits the nails used to fasten it on through both the felt and the wood or metal, so that if the latter become injuried or mutilated the felt will still retain its place, all which will hereinafter more fully appear.

To enable others to make and use my invention, I will proceed to describe the same and the mode of its application and use.

I usually make my improved weather-strip molding of a strip of sheet metal A, (see annexed drawings,) doubled or folded over on a strip of felt, rubber, or other elastic substance B. The metallic part may have beads or corrugations longitudinally for stiffening purposes. That part 1 of the metal folded over on the felt is quite narrow, and has its edge turned down or pressed into the felt to prevent the latter from escaping from the fold, and in addition the metal may be creased or indented on the opposite side 2. The narrow fold 1 leaves a width of felt of nearly the same dimensions as the metallic side of the molding, and said felt extending beyond the upper edge of the metal shows a felt margin 3 on the metal side nearly as wide as the metal margin on the felt side. Fig. 3 shows the former and Fig. 4 the latter.

In applying the molding the elastic or felt side is placed against a fixed part, as the jamb of a door or window-frame, and the felt edge against the moving or removable part, as a window-sash, door, &c., so that the molding presents under all conditions a yielding and self-adapting capacity to both the surfaces contiguous, and thus doubly insures the closure of the aperture against the entrance of air, dust, &c., from any side. In Fig. 6 the dotted line *a* represents a door or moving part, and the line *b* the frame or fixed part.

Fig. 1 shows a door and frame with the molding applied. The line *c* is the usual rab-

bet receiving the edge of the door, and the ine *a'* represents the edge of the felt or rubber. The molding is also used for rendering show-cases, picture-frame backs, &c., dust-tight.

Fig. 2 shows a picture-frame back. The molding is fastened on the frame with the felt edge pressing against the picture back. It is also applicable to apertures in flat surfaces, and for such places the molding is sometimes made with the metal folded over both edges of the felt.

Fig. 7 is a sectional diagram of a window with the molding applied, showing a section 4 of the molding as made of wood. It is here exhibited as taking the place of the usual "stop-bead."

Many other forms could be illustrated, varying with the situations, &c.; but the improvement is not confined to any special form, except, generally, that herein shown and described.

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

The new manufacture of improved weather-strip molding, substantially as described.

J. W. BROWNE.

Witnesses:
E. HENRY SMITH,
S. T. MCDOUGALL.