July 3, 1928.

1,675,844

W. J. DENNIS

WEATHER STRIPPING

Filed Oct. 9, 1924

Fig. 2.

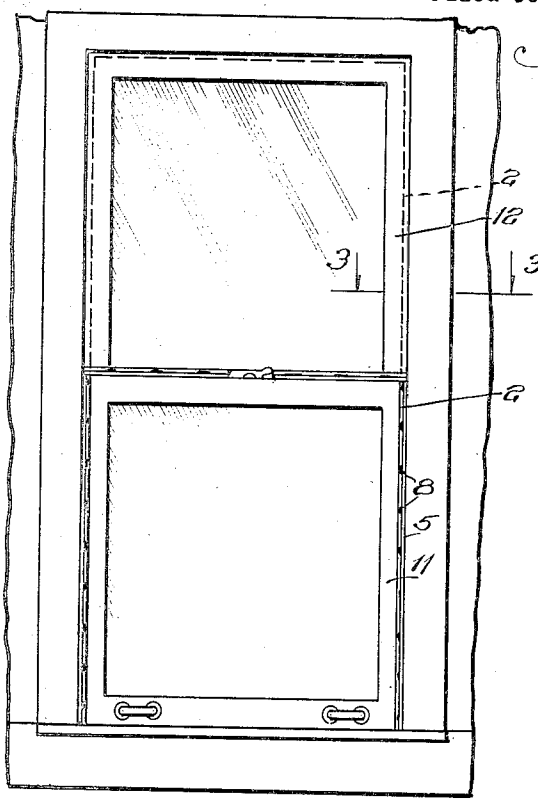


Fig. 3.

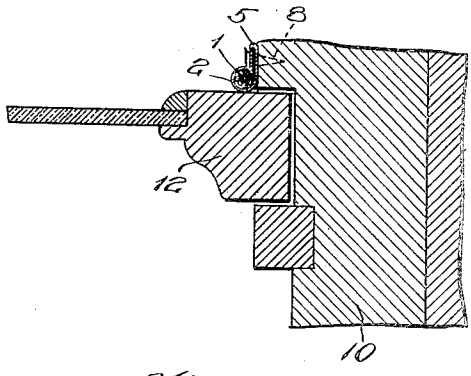


Fig. 4.

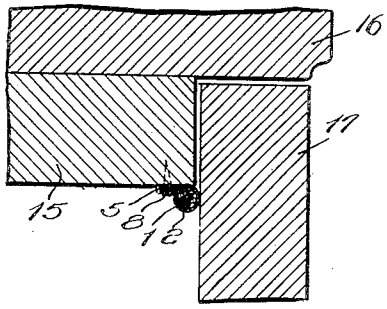


Fig. 1.

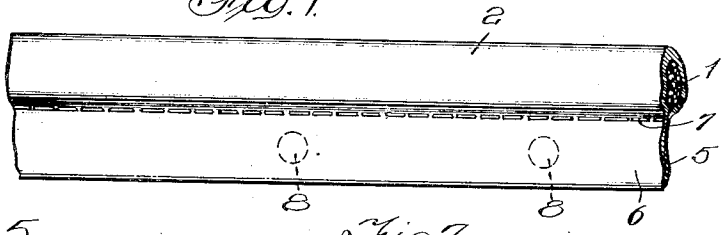


Fig. 5.

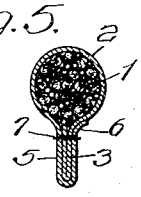


Fig. 7.

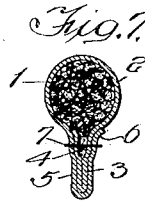


Fig. 9.

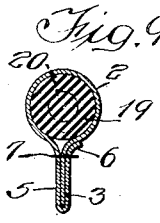


Fig. 6

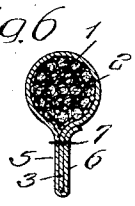


Fig. 8.



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Patented July 3, 1928. 1,675,844

UNITED STATES PATENT OFFICE.

WILLIAM J. DENNIS, OF CHICAGO, ILLINOIS.

WEATHER STRIPPING.

Application filed October 9, 1924. Serial No. 742,588.

My invention belongs to that general class of devices known as weather stripping, and relates more particularly to a stripping to be applied to doors, windows or the like, to provide a tight fit and prevent rattling. The invention has among its objects the production of a weather stripping of the kind described that is simple, convenient, durable, reliable, efficient and satisfactory for use wherever found applicable. More particularly it has as an object the production of a weather stripping that may be economically and easily applied and when so applied will prevent the admission of dust, cold air, rain, or snow around the window or door. Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosures herein given.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts:

Fig. 1 is a view in elevation of a section of weather stripping;

Fig. 2 is a view in elevation of the inside of a window, showing the application of the weather stripping thereto;

Fig. 3 is a section taken substantially on line 3—3 of Fig. 2;

Fig. 4 is a sectional view illustrating the application of the stripping to a door;

Fig. 5 is a sectional view through the weather stripping; and

Figs. 6, 7, 8 and 9 are similar views illustrating slightly different forms.

Referring to the drawings, in which the preferred embodiment of the invention is shown, 1 represents a packing forming a body, the same being of suitable size, shape and material and of the desired length. This body may be made up of one or more elements, and may be in the form of a rope of cotton, hemp, jute, or other material suitable for the purpose. In some instances it may be of rubber or like material, as will be hereinafter referred to.

Arranged about and enclosing the body is a covering sheet 2 of suitable material, preferably a fabric that is flexible or pliable, is durable and weather or water-proof. This cover sheet is made of sufficient width so as to provide a flange at one side, by means of which the stripping is attached. As shown, one edge is extended as at 3 and then folded back upon itself as shown at 4 (see Fig. 5), the portion 4 extending substantially proximate to the body 1. The other edge is of sufficient length to be folded about the first-mentioned edge, as indicated at 5 and 6, with the extreme edge extending up to the body portion. There is thus provided a flange made up of a plurality of plies, and I secure the parts together by a single row of stitching 7 adjacent the body, so that the packing 1 retains its shape. Obviously, the several plies may be cemented or otherwise secured together in addition to the stitching, if preferred. The device is secured in place by means of tacks or screws or the equivalent passed through the flange as illustrated in Fig. 1 at 8, in which tack heads are shown in dotted lines. It will be noted that the stitching being close to the body, there is no danger of the tacks passing through and severing the stitching, thereby causing the packing to become disassembled.

I have illustrated in Figs. 2 and 3 the application of the stripping to a window, in which 10 represents the window frame and 11 and 12 the lower and upper sash respectively. The weather stripping is arranged at the inside of the lower sash 11, preferably by securing the same to the stops thereat, while on the upper sash it is generally placed at the exterior. The same may be and is generally arranged between the two sashes, and if desired, at the bottom of the lower sash.

I have illustrated in Fig. 3 how the same is applied to the outer sash. Of course, on other types of windows, the installation will be obvious from the disclosures given.

In Fig. 4 I have illustrated how the packing may be applied to the stop 15 on the door frame 16, 17 being the door. The same map be applied all around the door or as preferred.

The construction shown in Fig. 6 is similar to Fig. 5, except in this case the turned back portion 4 shown in Fig. 5 on the edge portion 3 is omitted, so that there is only three plies in the flange. In Fig. 7, the construction is similar to that shown in Fig. 5, except in this case a portion of the body 1 is disposed between the edge portions and the stitching 7 passed therethrough, as well as through the plies. Fig. 8 is similar, except

that the portion 4 previously mentioned is omitted. In Fig. 9, there is shown a modification of the body, 19 in this figure representing a body such as rubber or the like, and it may be mentioned that I generally prefer sponge rubber, unless the same is provided with a tubular bore as indicated in the dotted line at 20, in which case a rubber tube may be employed for the purpose.

The weather stripping described is particularly convenient as it may be readily installed by any one, regardless of whether a mechanic or not. It is inexpensive, is weather-proof and dust-proof. It prevents the windows from rattling or the doors from slamming with a loud noise, and being flexible and yieldable, it may be fitted tightly. When worn out, it may be replaced at small expense.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. A weather stripping of the character described comprising a body portion of yieldable material and a flexible covering enclosing the body, the longitudinal edges of the covering being brought together in contact extended to form an attaching flange, one edge being folded to enclose the other and to provide a plurality of plies, and a single row of stitching securing the plies together adjacent the body, the faces of the plies contacting throughout their area to make the flange relatively rigid.

2. A weather stripping for sealing the space between cooperating closed members comprising a strip of fabric folded to provide a main fold, yieldable packing enclosed within said main fold, the free edges of said strip being folded so that one edge of said strip is wholly enclosed within and by an overfold formed on the other edge of said strip to provide a tacking flange consisting of a plurality of plies, and a row of stitching passing through certain of said plies adjacent the main fold whereby to hold said yieldable packing and said fabric and plies in position.

3. A weather stripping for sealing the space between cooperating closed members comprising a strip of fabric folded to provide a main fold, yieldable packing enclosed within said fold, the free edges of said strip being folded so that one edge of said strip is enclosed within and by an overfold formed on the outer edge of said strip to provide a tacking flange consisting of a plurality of plies, a means for holding the main fold and plies permanently in assembled position and means for holding said yieldable packing and said fabric and plies in position.

4. A weather stripping for sealing the space between cooperating closed members, comprising a strip of fabric folded to provide a main fold, yieldable packing enclosed within said fold, the free edges of said strip being extended and folded so that one edge of said strip is folded back upon itself, and is enclosed within and by an over-fold formed on the other edge of the other strip to provide a tacking flange consisting of a plurality of plies, and stitching passing through said folds to hold the yieldable packing in position and maintain the packing as a unitary body.

In testimony whereof, I have hereunto signed my name.

WILLIAM J. DENNIS.