

No. 652,400.

Patented June 26, 1900.

S. E. MOORE.
WEATHER STRIP.

(Application filed Apr. 19, 1900.)

(No Model.)

Fig. 1.

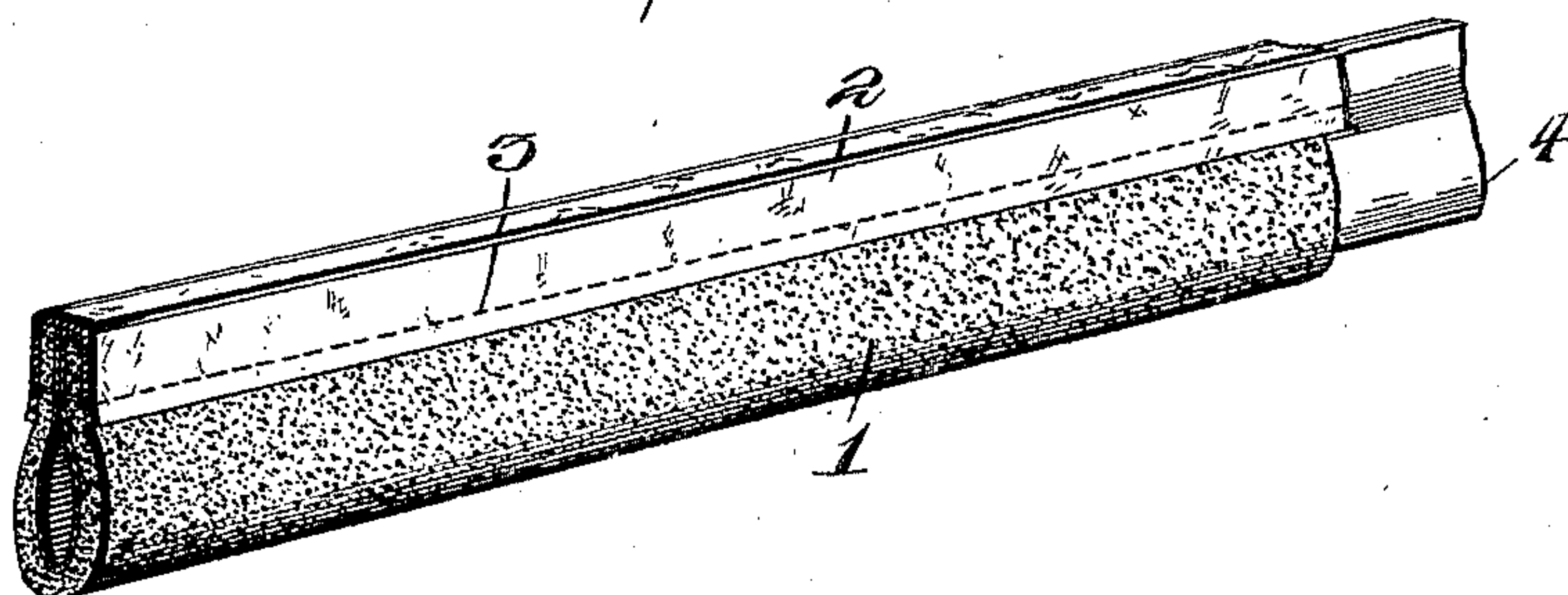


Fig. 2.

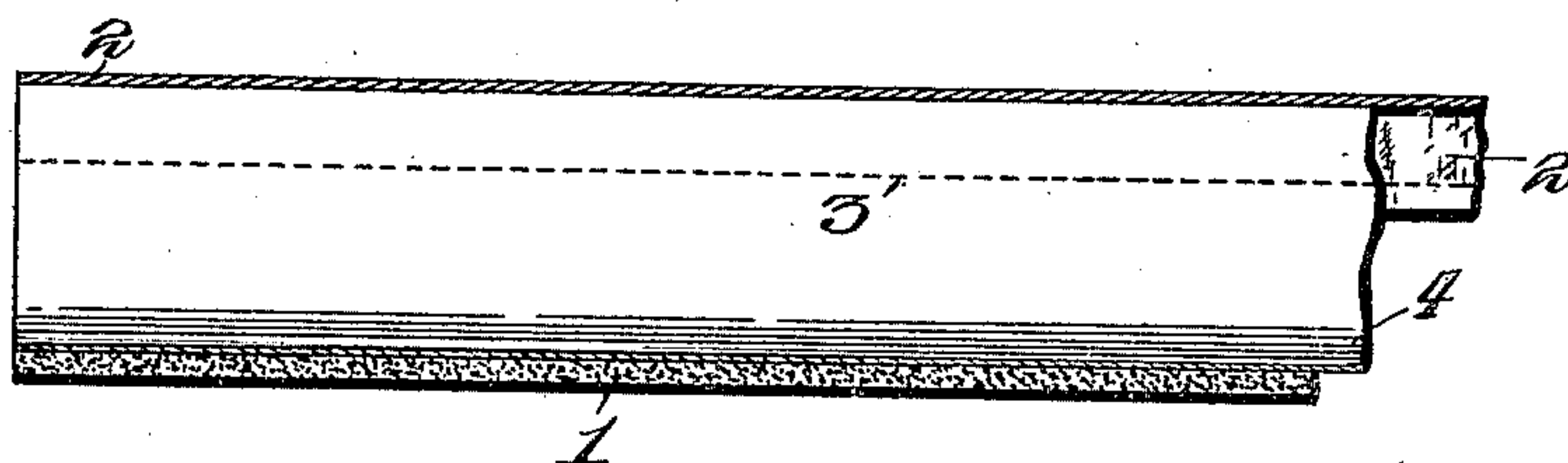
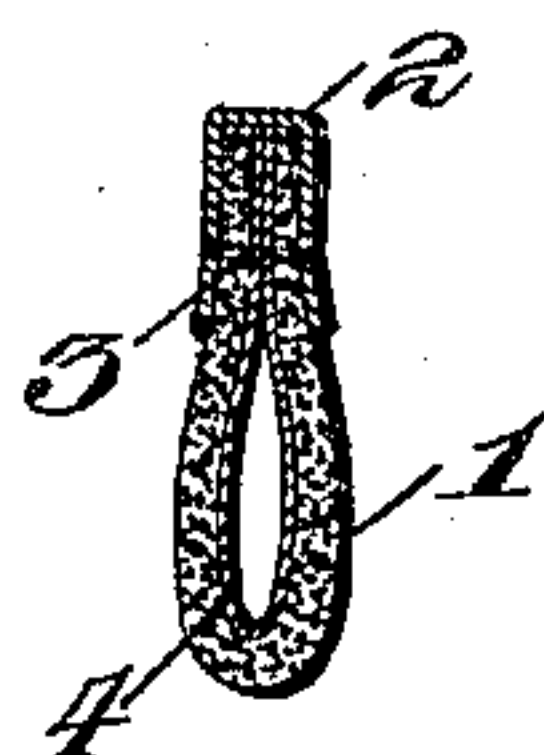


Fig. 3.



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SOLON E. MOORE, OF PUTNAM, CONNECTICUT.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 652,400, dated June 26, 1900.

Application filed April 19, 1900. Serial No. 13,542. (No model.)

To all whom it may concern:

Be it known that I, SOLON E. MOORE, a citizen of the United States, residing at Putnam, in the county of Windham and State of Connecticut, have invented a new and useful Weather-Strip, of which the following is a specification.

My present invention relates to a novel weather-strip, and particularly to that class of strips which are made of felt or other flexible material and are designed to be cut into proper lengths and tacked along the edges of door and window casings to prevent the ingress of air around the closures. I have found by experience and experiment that these felt weather-strips are preferable, because they are easily fitted to the joints and cushion the movements of the doors or windows while performing their office as protective strips. I have also found that there are certain valid objections to their use. One of such objections is that the felt being more or less elastic the strip will stretch when drawn taut during the operation of tacking the strip to its support, and as this yielding of the material is not equalized throughout its length a more or less pronounced puckering of the strip will result—that is to say, the strip will not lie smoothly upon the supporting-surfaces of the door or window casing throughout its length. Another objection is that these felt strips being ordinarily formed from a piece of felt fabric doubled upon itself dust will gradually find its way through the porous material and, accumulating between the layers, will harden the strip at intervals. This hardening serves in time to effect the breaking of the strip, which loses its flexibility and becomes stiff and brittle, thus precluding the possibility of its removal after continued use for reuse in connection with another closure.

My invention is therefore directed to the production of a felt weather-strip which will not be open to the objections noted, but which, on the contrary, will be freely flexible, inelastic, or non-stretchable and impervious to the air and dust.

A further object of my invention is to reinforce the layers of the strip without interfering with their flexibility and to effect the

retention of the entire structure by a single line of stitching, which obviously results in the production of the strip at a minimum cost.

To the accomplishment of the several objects stated, my invention consists in providing a felt weather-strip of the character described with a paper or other equivalent lining corresponding to the interior of the strip and retained by the line of stitching which serves to unite the edges of the felt and to secure the binder folded over said edges.

Referring to the drawings, Figure 1 is a perspective view of a short section of my weather-strip. Fig. 2 is a central longitudinal section therethrough, and Fig. 3 is a transverse sectional view of the strip.

Referring to the numerals of reference designating corresponding parts and structural peculiarities in the several views, 1 indicates a strip of felt or similar material doubled upon itself longitudinally and having its edges bound and stiffened by a strip of braid 2, secured by a line of stitching 3, piercing the binding and felt adjacent to and parallel with the bound edges of the latter. The line of stitching 3 also passes through and secures the edges of a double strip of paper or other inelastic non-stretchable material 4, which is doubled upon itself and located within the strip—that is to say, between the layers of the doubled felt—to constitute a lining therefor, completely covering the interior surface of the felt and serving the triple function of a reinforcing-strip, an impervious non-stretchable lining, and a stiffening for the bound edge through which the securing-tacks are passed in placing the strip upon a casing, as in use.

I desire it to be distinctly understood that I do not limit myself to the use of a paper lining, inasmuch as various materials may be employed in this connection; but in order to define the equivalency of such other materials as I may desire to adopt it may be stated that in order to fill the several offices of my lining the material must, first, be incapable of stretching, as it is designed to prevent the objectionable stretching of the felt and binding, as heretofore noted, and, second, it must be impervious to air and dust to prevent the

passage of the former through the strip and to prevent the accumulation of the latter between the felt layers.

From the foregoing it will be observed that
5 I have produced a novel weather-strip which will not stretch when drawn taut against its supporting-surface, which will not become hardened and inflexible by the accumulation of dust, and which is reinforced and rendered more durable without sacrificing that
10 degree of flexibility which is desirable; but while the embodiment of my invention illustrated and described is believed at this time to be preferable I desire to reserve the right
15 to effect such variations of form and material as may be embraced within the scope of the protection prayed.

Having thus described the invention, what I claim is—

20 1. A weather-strip comprising a strip of felt doubled upon itself longitudinally, an

impervious lining-strip of corresponding dimensions and likewise doubled upon itself between the doubled strip of felt, and a binding folded over the opposed edges of the felt
25 and lining strips.

2. A weather-strip comprising a strip of felt doubled upon itself longitudinally, a lining-strip of corresponding dimensions and likewise doubled upon itself between the
30 doubled strip of felt, a binding folded over the opposed edges of the felt and lining strips, and a single line of stitching uniting the felt and lining strips and binding.

In testimony that I claim the foregoing as
35 my own I have hereto affixed my signature in the presence of two witnesses.

SOLON E. MOORE.

Witnesses:

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