J. DUMONT.

WEATHER STRIP.

APPLICATION FILED DEC. 11, 1909.

975,337.

Patented Nov. 8, 1910.

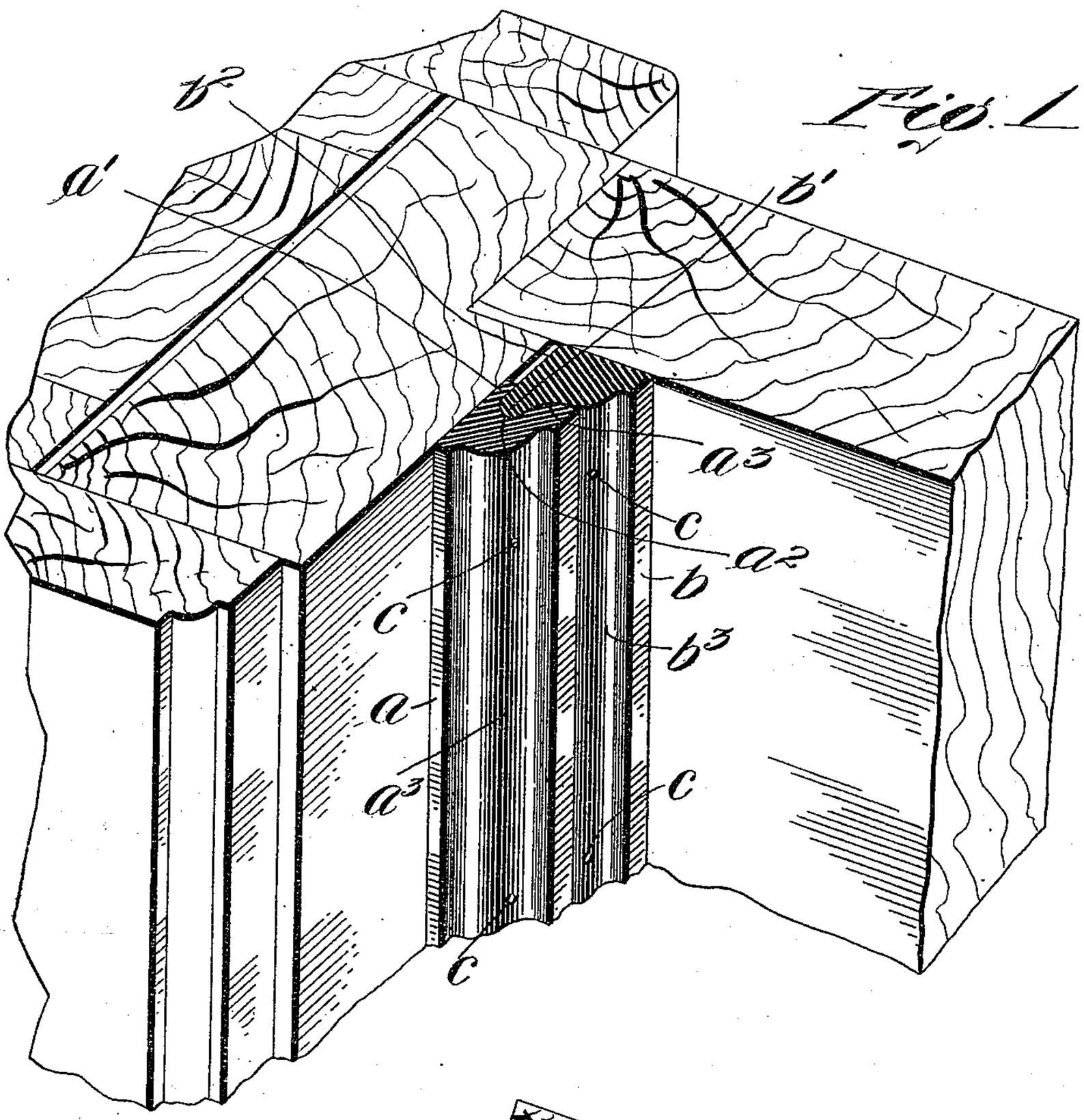

Fig. 1.

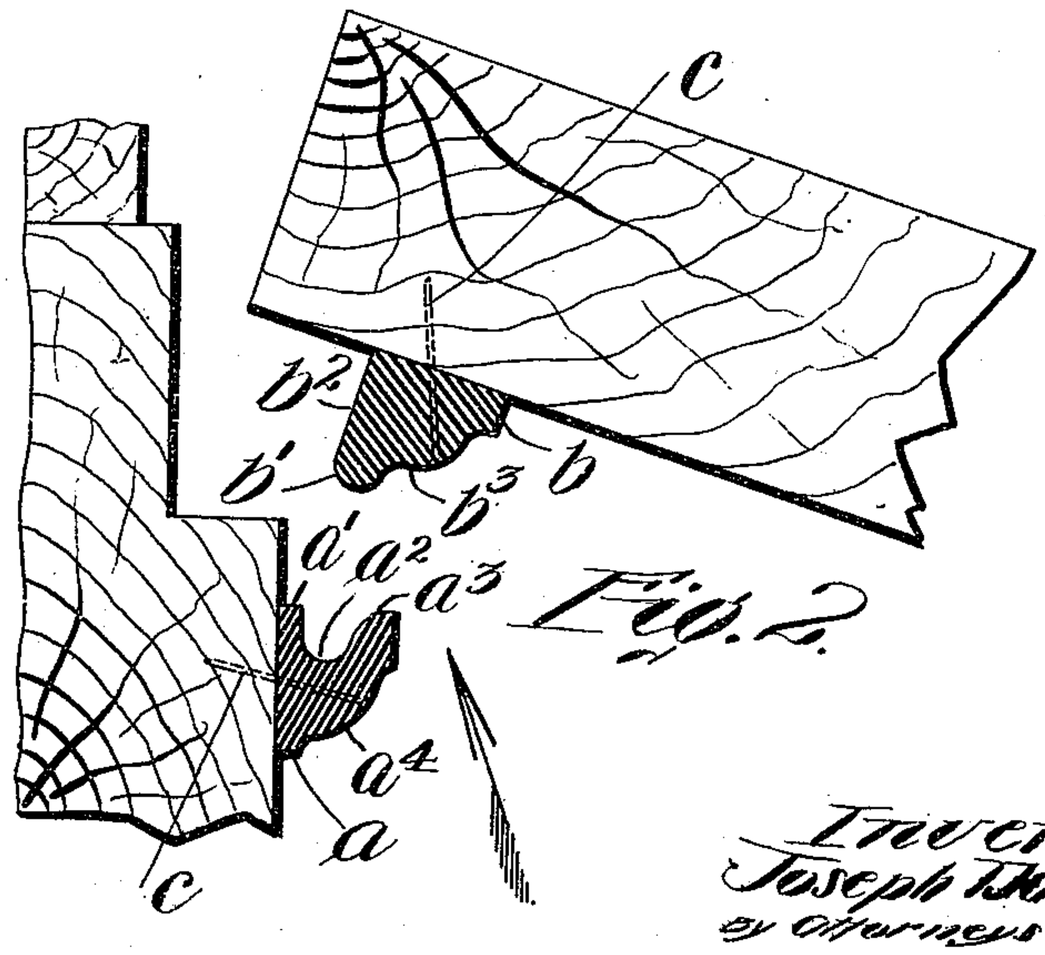

Fig. 2.

Witnesses:

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WEATHER-STRIP.

975,337. Specification of Letters Patent. **Patented Nov. 8, 1910.**

Application filed December 11, 1909. Serial No. 532,570.

To all whom it may concern:

Be it known that I, JOSEPH DUMONT, a citizen of the United States, residing at Gardner, in the county of Worcester and State of Massachusetts, have invented a new and useful Weather-Strip, of which the following is a specification.

This invention relates to a weather strip suitable for general use but particularly adapted for doors.

As weather strips have generally been made they consist of two parts, one having a tongue and the other a groove. The grooved member is placed on the door in such position that the prevailing winds and storms are directed against it so that the groove itself receives snow and rain and when it is brought against the tongue it is sometimes found that the parts cannot be closed together on account of the snow being packed in the groove. Both the snow and the water also collecting in the groove tend to warp and crack it and spoil the efficiency thereof.

The principal object of the present invention is to provide a construction in which all surfaces that are exposed to the weather whether the door is open or closed, will shed snow and rain in such a way that it cannot collect in the groove or in any other part of the device. In this way the parts are always kept free of snow and any water that reaches them readily dries off on account of being located on exposed and generally convex surfaces.

Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing in which—

Figure 1 is a perspective view of a preferred embodiment of the invention showing parts in section, and Fig. 2 is a sectional view of the same showing the door partly open.

In order to secure the results above specified, the weather strip is formed of two parts, a and b, the part a being fixed to the casing and the part b to the door. The part b on the door is provided with a projecting tongue b' at the side of which is a substantially flat surface b^2 spaced from the casing and perpendicular to the door. On the other side of the tongue b' is a sinuous surface b^3 having a generally inclined direction from the tongue to the door. This surface is not provided with any groove or with any indentation that would hold snow if the latter should blow against it.

The part a which is fixed on the casing is provided with a projection a' which, when the door is closed, projects in behind the tongue b' and engages the surface b^2. This shows the purpose of the spacing of the surface b^2 from the casing. At the inner end of the projection a' is a groove a^2 shaped and located to receive the tongue b', this tongue and groove, of course being longitudinally located. From this groove extends a projection a^3 on the other side having a surface shaped to fit the surface b^3 as far as it goes. The outer surface a^4 of this part is of a sinuous form and extends in a generally inclined direction substantially parallel with the general direction of the surface b^3. Both of these surfaces are free from grooves, deep indentations, and flat surfaces parallel with the door, so that when the parts are closed, as indicated in Fig. 1, there will be no place where snow can securely lodge. When the parts are open, the projection a^3 protects the groove a^2 against the storms coming from without so that there is no possibility of a collection of snow within the groove. In addition to these features it will be observed that when the door is closed, moisture would have to take a very irregular path in order to work up between the door and casing, particularly on account of the location of the projections a' and a^3.

In view of the construction shown and described, it will be seen that the above mentioned advantages are secured without any addition to the cost of manufacture and in fact by the use of a pair of strips which require less material than is the case with many of those which have a groove so located as to defeat the objects of the device. The parts are so constructed also that the exposed surfaces are of graceful form and pleasing appearance. The figures show the position of nails c for holding the parts in position on the door and casing.

It is to be understood, of course, that while a weather strip is shown and described as applied to a door, it can be used for windows and in other places.

While I have illustrated and described a preferred embodiment of the invention, I am aware that many modifications can be made therein by any person skilled in the

art without departing from the scope of the invention as expressed in the claims.

Having thus fully described my invention what I claim is:—

1. The combination with a door and casing, of a strip on the door having a tongue projecting at right angles thereto and provided with an inclined surface on the weather side free from reëntrant grooves, and a strip on the casing having a groove therein on the side toward the door for receiving said tongue, and a projection on the weather side of said groove for protecting the groove from the lodgment of snow and water when the door is open and for covering and protecting part of the weather side of the first named strip.

2. The combination with a door and casing, of a strip located on the door and spaced from the casing, provided with a projecting tongue and having a surface extending from the tongue on the side toward the casing in a direction substantially perpendicular to the door, and a weather surface on the other side free from grooves and indentations and located at an angle to the first named surface and to the door, and a strip fixed to the casing and provided with a projection engaging the first named surface of the strip of the door and filling one side of the space between said strip and casing, having a groove on the side opposite the weather side for receiving the tongue located adjacent to said projection, and having on the weather side of said groove, a projection fitting the inclined surface of the first named strip and protecting the same from the lodgment of snow and water while the door is closed and protecting the groove from snow and water when the door is open.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

JOSEPH DUMONT.

Witnesses:
GEO. R. WARFIELD,
HELEN HINES.