No. 849,366. PATENTED APR. 9, 1907.

S. P. BRICKER.

WEATHER STRIP.

APPLICATION FILED MAR. 6, 1905.

Fig. 1.

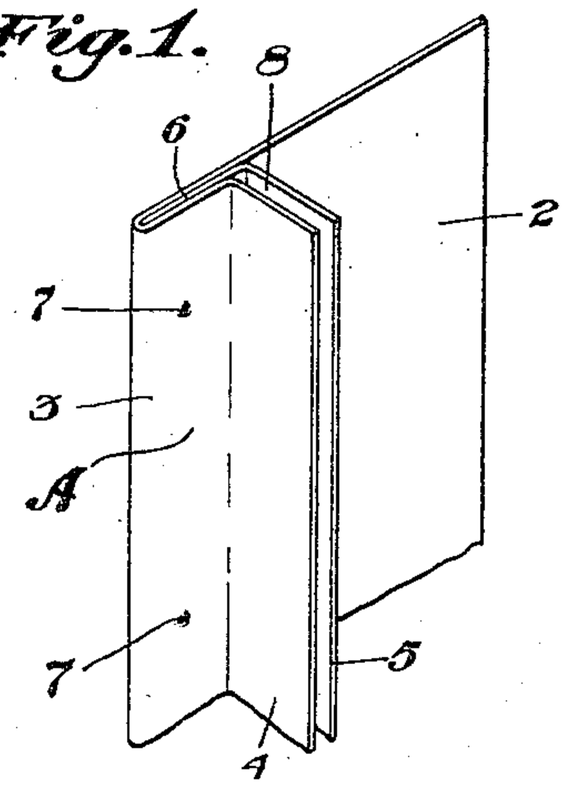


Fig. 2.

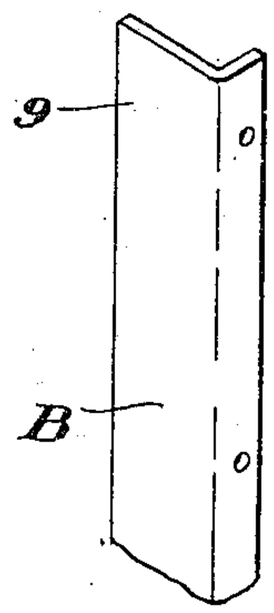


Fig. 3.

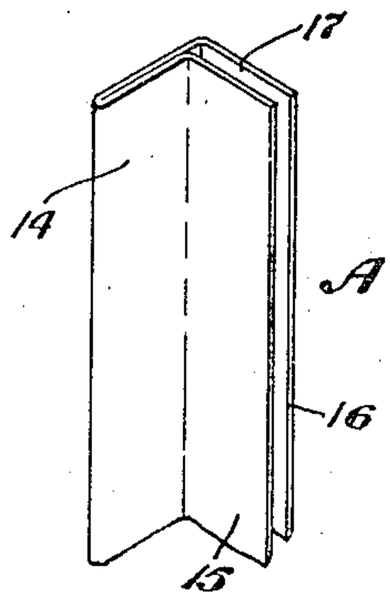


Fig. 4.

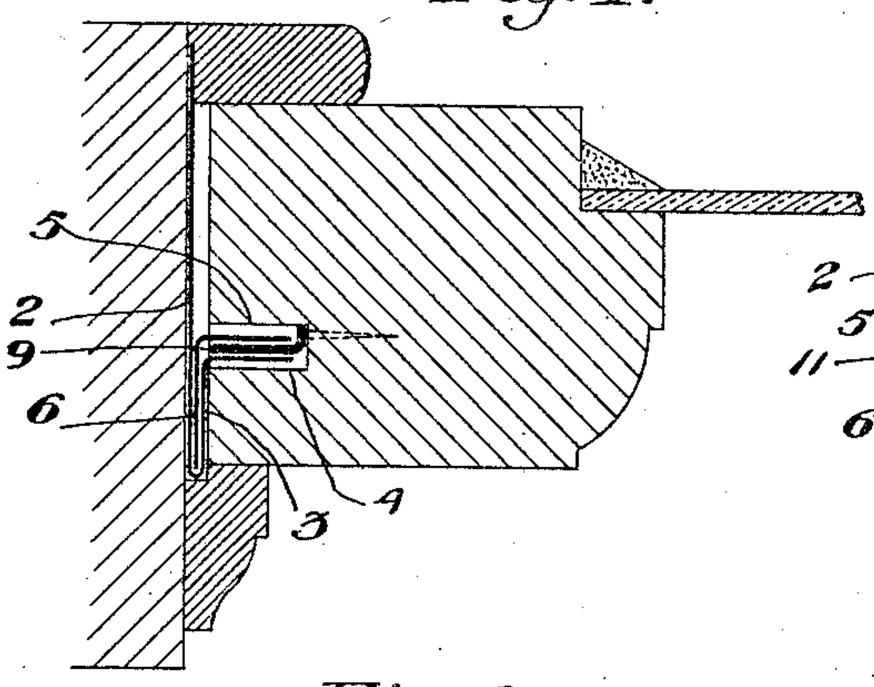


Fig. 5.

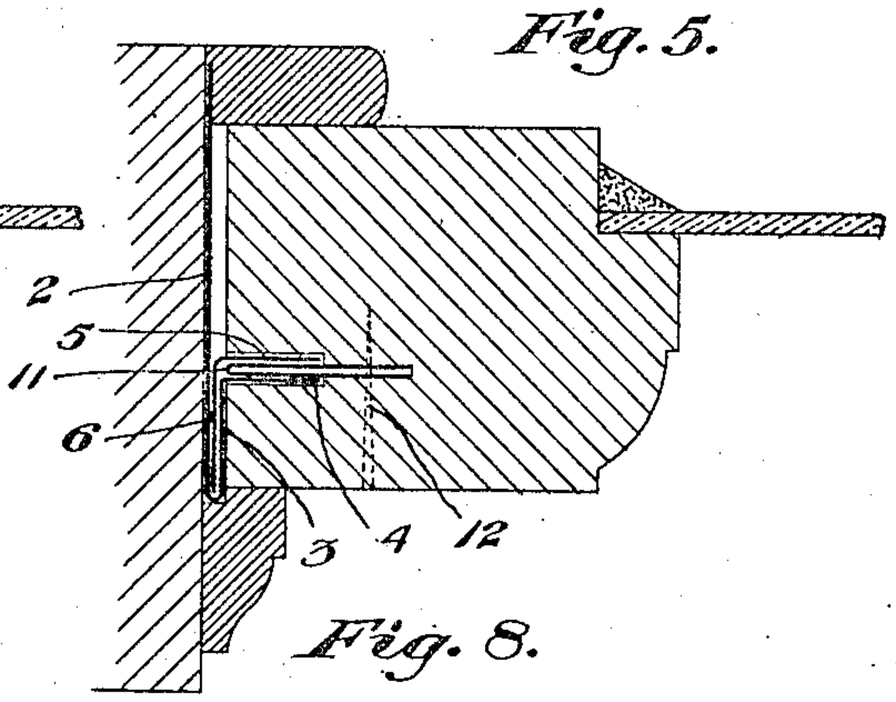


Fig. 8.

Fig. 6.

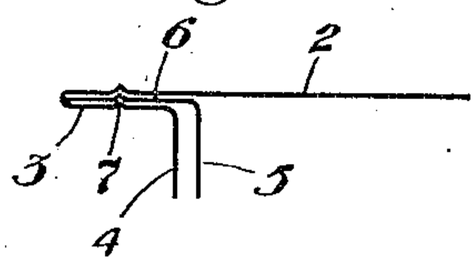


Fig. 7.

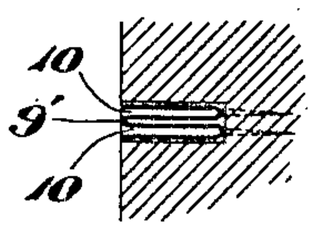
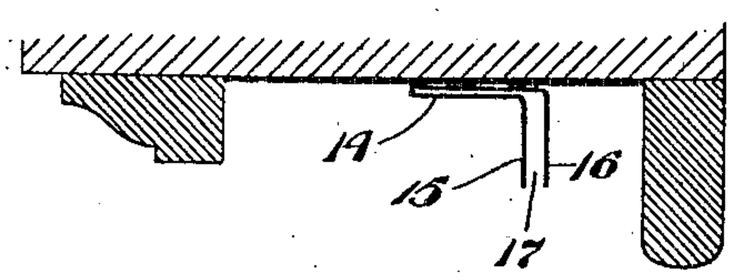


Fig. 9.



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UNITED STATES PATENT OFFICE.

SAMUEL P. BRICKER, OF ALLEGHENY, PENNSYLVANIA.

WEATHER-STRIP.

No. 849,366. Specification of Letters Patent. Patented April 9, 1907.

Application filed March 6, 1905. Serial No. 248,382.

To all whom it may concern:

Be it known that I, SAMUEL P. BRICKER, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification, reference being had therein to the accompanying drawings, forming part of the specification, in which—

Figure 1 is a perspective detail view of a portion of the "plow" member of my improved weather-strip. Fig. 2 is a similar view of a portion of the "tongue" member. Fig. 3 is a view similar to Fig. 1, showing a modified construction. Fig. 4 is a cross-sectional view of a portion of a window frame and sash provided with the interfitting plow and tongue members. Fig. 5 is a similar view showing a modified form of the tongue member. Figs. 6 and 7 are cross-sectional views of Figs. 1 and 2, respectively. Fig. 8 is a sectional view of a portion of the sash-frame, showing a further modification of the tongue. Fig. 9 is a sectional view of the plow member set against a facing or lining strip.

My invention relates to weather-strips, and refers more particularly to metallic devices of this class adapted to be secured to the window frame and sash, respectively, and to coöperate with each other to make a tight weatherproof interfitting engagement.

The present invention is designed to provide a stationary plow member having a plurality of projecting single thickness ribs and an intermitting movable tongue member arranged to project between said ribs, although it will be understood that the different members of the device may be transposed with relation to the frame and sash, if desired, while the invention may also be adapted to any other meeting or interfitting construction where it is desirable to obtain a practically tight stationary or sliding joint.

The parts forming the strips are composed of thin metallic plates, preferably zinc or other non-corrosive material, so bent as to provide the projecting embracing rib portions, while being capable of a limited deflection to compensate for any irregularities in alinement, thickness of the metal, &c.

Referring to the drawings, A represents the plow member, which is secured upon the inner sides of the frame by nails or screws, consisting of a base portion 2, bent or redoubled upon itself, as shown at 3, and then bent outwardly at right angles to said base 2, providing a rib 4. A similar rib 5, having an L-shaped base portion 6, is inserted by means of such base between the main base members 2 and 3 and is preferably rigidly secured thereto by any suitable means, as by riveting, soldering, or by a series of punctures 7, thus incorporating the parts together in one practically integral strip. As thus constructed an intervening space 8 is provided between the ribs 4 and 5, and for the purpose of making interfitting engagement therewith I provide the tongue member B, (shown in Fig. 2,) composed of an L-shaped strip of metal 9, provided with a base-flange by which it may be nailed to the sash within a receiving-groove.

In Fig. 5 I have shown the tongue member as made by simply doubling the metal upon itself, providing a doubled wall or tongue 11, set into the sash and secured by any suitable means, as small nails 12, the doubled tongue interfitting between the flanges 4 5 in the same manner as already described.

In Fig. 8 I have shown a modified form of tongue member consisting of a strip of metal doubled to provide a central doubled tongue 9′ with redoubled sides, providing intervening spaces 10 10, adapted to receive the ribs 4 5, similar to the construction shown in my prior patent, No. 712,761.

In Fig. 3 is shown a modified construction of the plow member wherein but a single strip of metal is employed, doubled upon itself, as shown at 14, to provide a base, which may be of any desired width, the edges of the strip being then bent at right angles to said base portions, as shown at 15 and 16, providing projecting ribs with an intervening space 17, arranged to receive the tongue member, as in the construction above described. In Fig. 9 the same construction is shown set upon a lining or facing strip of metal placed against the runway of the sash-frame. If desired, the strip may be secured to the lining strip in any convenient manner. Such a lining is desirable, as it provides a bearing-surface for the edges of the sash and facilitates the operation of the window.

It will be understood that as thus constructed the interfitting plow and tongue members will engage each other and form a tight weatherproof joint well adapted to the exclusion of the elements. A particular advantage in the interfitting construction is

that it overcomes the objections of warpage, shrinkage, or expansion of the wood, providing a durable and reliable weather-strip which may be installed and left in place during all seasons without interfering with the operation of the sash, while being capable of ready removal of the sash or renewal of sash-cords, &c. A further advantage of great importance is that all rattling or lateral movement of the sashes is entirely prevented by reason of the engagement of the stationary and movable members with each other, and these advantages will be appreciated by all those accustomed to the use of metallic weather-strips.

It will be understood that I do not desire to be confined to the exact construction shown and described, but that variations therefrom may be made by the skilled mechanic without departing from the scope of the following claims.

What I claim is—

1. In a weather-strip, the combination of a primary base of suitable metal bent upon itself to form a secondary base with its terminal edge portion bent outwardly at right angles to form a projecting rib, and a similar rib having its base incorporated with said primary base and secondary base and arranged parallel to said first-named rib, substantially as set forth.

2. A weather-strip consisting of sheet metal reflexed upon one side only to provide an attaching-base and having its terminal edge portions bent out at right angles thereto and arranged in parallel relation to each other with an intervening space, substantially as set forth.

3. In combination, a window-jamb, spaced strips applied to said jamb and forming a runway, a sash mounted in said runway and having a slot in a side thereof, and a weather-strip comprising a base disposed in the runway and having its opposite edge portions engaged by the spaced strips aforesaid, one edge portion of the base being folded thereon and then projected outwardly to form a body portion, the outwardly-projected body portion being received in the slot of the sash aforesaid.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL P. BRICKER.

Witnesses:
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W. A. AVEY.