No. 690,417. Patented Jan. 7, 1902.

G. W. GOLDEN.

WEATHER STRIP.

(Application filed July 22, 1901.)

(No Model.)

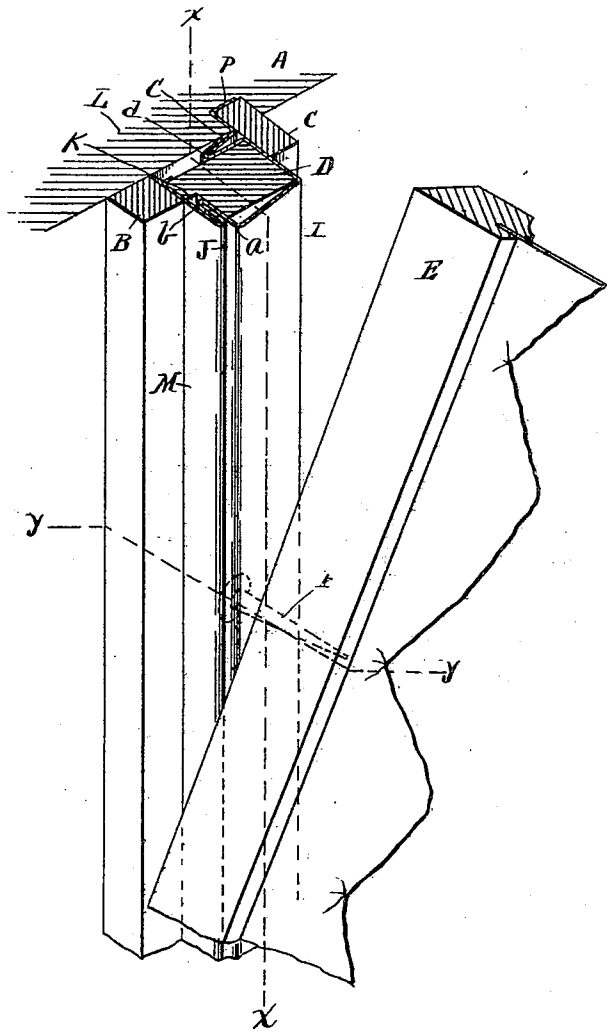


Fig. 1.

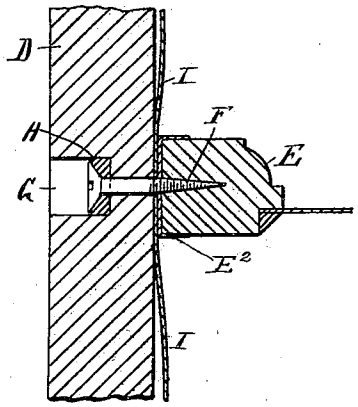


Fig. 2.

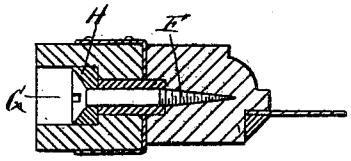


Fig. 3.

WITNESSES.

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WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 690,417, dated January 7, 1902.

Application filed July 22, 1901. Serial No. 69,221. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. GOLDEN, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, 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.

The invention relates to a novel type of weather-strip particularly designed for use in connection with swinging windows; and the invention consists in the novel construction of the strip and in the peculiar arrangement and combination of its various parts, as hereinafter described.

In the drawings, Figure 1 is a sectional perspective view of a combined sliding and swinging window, showing my strip applied thereto. Fig. 2 is a vertical section taken on line *x x*, Fig. 1, in the plane of the pivot, illustrating a slight modification; and Fig. 3 is a horizontal section on line *y y*, Fig. 1, illustrating a modified form of strip.

The reference-letter A designates the window-casing, B the usual blind-stop, and C the parting-strip, fitting within the usual recess in the casing.

D designates one of the hanging stiles of the window, which is adapted to slide between the stops B and C, and E represents one of the stiles of the swinging sash.

As shown, the sash is connected to the hanging stiles by pivots F in the form of screws, which extend through thimble-bearings H in the hanging stiles and are carried by the sash-stiles.

In construction the weather-strip comprises, essentially, a swinging section I, secured, preferably, to the hanging stile, and an overlapping section J, which projects over one of the stile sides. The swinging section is formed, preferably, of spring metal bent, as indicated in Fig. 1, to allow it to freely yield to pressure and covers the entire meeting face of said hanging stile passing between the bearings of the stile members, as indicated in Fig. 2. The swinging section may be secured to its stile in any approved manner; but I preferably attach the parts in the manner indicated in Fig. 1. The section in this case is continued over one side of the hanging stile and partially overlaps the inner meeting face L of the latter. By this construction the parting-strip C holds the weather-strip tightly in place.

To limit the outward swinging movement of the section I of the weather-strip, a locking-strip M is employed, which is secured to the hanging stile and covers the remaining side of the latter, as indicated in Fig. 1. This strip terminates at its free edge in a hook *a*, adapted to interlock with a corresponding hook *b*, carried by the section J of the weather-strip. A groove K is preferably formed in the side of the hanging stile adjacent to the adjoining strips described, which receives the hooks, as plainly shown in Fig. 1.

As a further means of preventing dust or air passing between the hanging stile and the sash I employ a Z-shaped strip P, located within the recess, that receives the parting-strip and which is held in place by the latter. One of the wings *c* of the strip last referred to extends intermediate the casing and the sash-stile and is engaged by a hook *d*, formed upon the portion of the weather-strip which partially embraces the inner meeting face of the hanging stile.

The swinging section of the strip is clamped at its center by means of the pivots to the hanging stile; but the portions of the strip upon opposite sides of the pivot when the swinging sash is open are normally out of contact with the stile, as shown in Fig. 2. Thus the swinging section in addition to performing its usual function of closing the crevice forms a yielding packing between the stile members and serves to retain the swinging sash in its different positions of adjustment. Furthermore, by extending the swinging section between the bearing-surfaces metallic bearings are formed by the weather-strip upon which the swinging sash turns.

In Fig. 3 a modified construction of weather-strip is shown. In this case the interlocking-hooks for limiting the outward swinging movement of the strip is dispensed with, and the hinged section is secured to one side of the hanging stile by suitable nails or screws.

Fig. 2 of the drawings shows the stile E of the swinging sash provided with a wear-plate in the form of a metallic sheathing E^2 on its meeting face. A covering of this character

may be employed, if desired, with my weather-strip; but its use is not required.

What I claim as my invention is—

1. The combination of two meeting members one pivoted to the other for swinging movement, and a weather-strip comprising a flat spring-section arranged between the meeting faces of the members for swinging movement, said section being secured to one of the members and having its free edge turned to form a bearing adapted to engage the meeting face of the other member.

2. The combination with two meeting members, one pivoted to the other for swinging movement, of a weather-strip covering the meeting face of one member and secured to the latter for free yielding movement, said weather-strip comprising a spring-section extending from one corner of the meeting face to the opposite corner, and a complementary section covering said opposite corner and overlapping the adjacent side of the member.

3. The combination with two meeting members, one pivoted to the other for swinging movement, of a weather-strip covering the meeting face of one member and secured to the latter for free yielding movement, said weather-strip comprising a spring-section extending from one corner of the meeting face to the opposite corner, and a complementary section covering said opposite corner and overlapping the adjacent side of the member, and means for limiting the outward movement of the spring-section.

4. In a swinging and sliding window, the combination with the casing, of a hanging stile having a sliding engagement therewith and provided with a recess formed in one of its sides, the swinging stile, two adjoining metallic strips covering the opposite sides of the hanging stile and the outer meeting face of the latter, said strips having interlocking hooks at their adjoining edges extending within the recess, a spring-strip intermediate the hanging stile and the casing, and a hook carried by one of the adjoining strips engaging the spring-strip.

5. The combination with two meeting members one pivoted to the other for swinging movement, of a weather-strip, carried by one of the members, having a swinging section extending between the meeting faces of said members, and means for limiting the swinging movement of said section.

6. The combination of two meeting members one pivoted to the other for swinging movement, and a weather-strip comprising a flat swinging section extending entirely across the meeting face of one member and secured to the latter at one of the face-corners and having its free edge turned to form a bearing adapted to engage the meeting face of the complementary member.

7. The combination of two meeting members, one pivoted to the other for swinging movement, and a weather-strip carried by one of the members having a section interposed between the meeting faces of said members for swinging movement, said section contacting at one of its edges with the member to which it is attached, and provided at its opposite edge with a bearing adapted to engage the meeting face of the complementary member.

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

GEORGE W. GOLDEN.

Witnesses:
L. J. WHITTEMORE,
H. C. SMITH.