No. 858,544. PATENTED JULY 2, 1907

E. SONNTAG.

COMBINED WEATHER STRIP AND WINDOW SUPPORTER.

APPLICATION FILED APR. 8, 1907.

Fig. 1

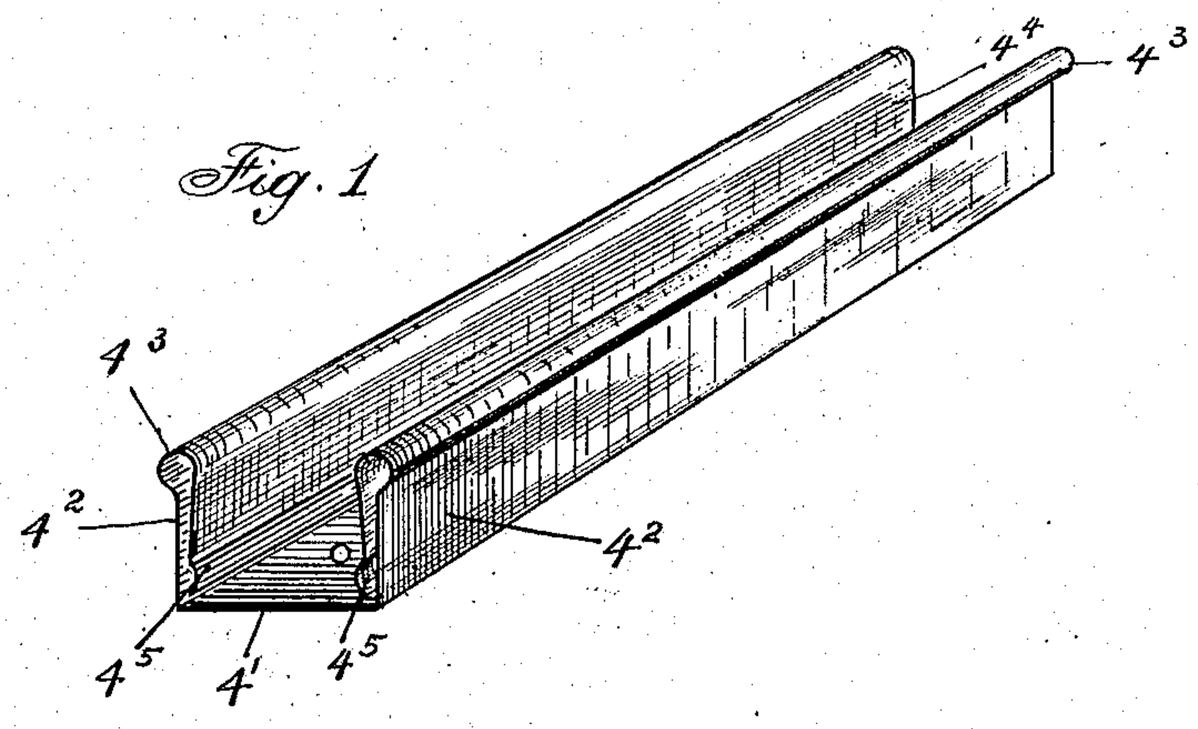
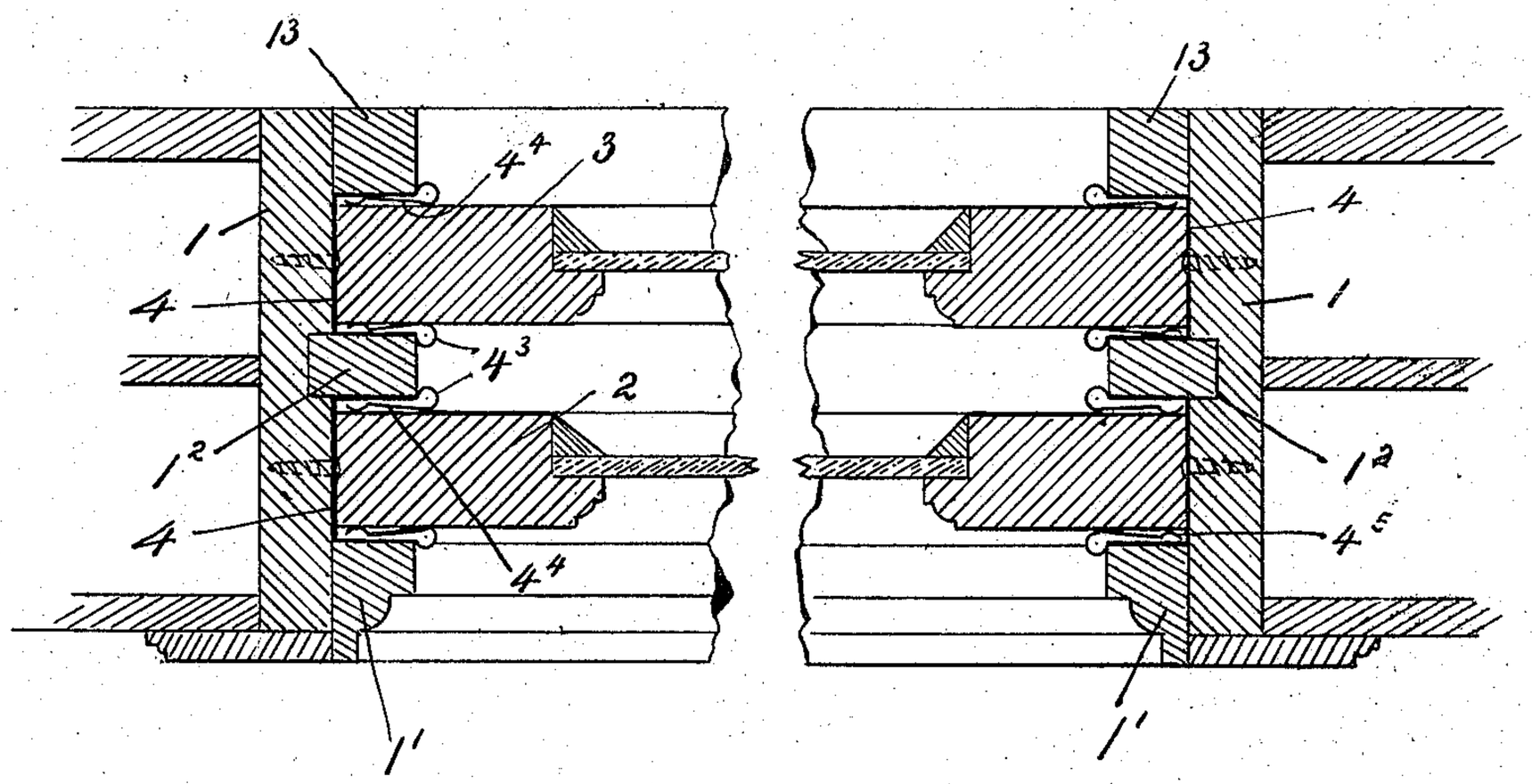


Fig. 2



WITNESSES

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COMBINED WEATHER-STRIP AND WINDOW-SUPPORTER.

No. 858,544. Specification of Letters Patent. Patented July 2, 1907.

Application filed April 8, 1907. Serial No. 366,945.

To all whom it may concern:

Be it known that I, EDUARD SONNTAG, a citizen of the United States, and residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in a Combined Weather-Strip and Window-Supporter, of which the following is a complete specification.

This invention relates to improvements in combined weather strips and window supporters and has for its object the production of a device adapted to provide weather tight joints for the sash and which will permit the sash to be raised and lowered with a minimum amount of friction.

It is a further object of the invention to provide a device affording an anti-rattling strip, by means of which the sash is resiliently held out of contact with its stops, thus obviating in great measure the noise usually produced by the sash.

The invention consists of the matters hereinafter described in the specification and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a perspective view of a device embodying my invention. Fig. 2 is a fragmentary section of a window provided with devices embodying my invention.

As shown in said drawings: Referring first to Fig. 2, 1—1 indicate the window frame and $1'$—1^2 and 1^3 indicate the stops between which the sash 2 and 3 slide as is usual in such devices. Rigidly engaged in any preferred manner to the frame and between said stops are the weather strips indicated as a whole by 4, and which may be of a length to reach the whole or a part only of the height of the window frame. Each of said weather strips, as shown more clearly in Fig. 1, comprises a channel of sheet metal or other preferred material, and the back $4'$ thereof is adapted to be laid flat against the frame and secured thereto. The side flanges 4^2 fit closely against the adjacent stops and are of a width to extend outwardly from the frame beyond the same and each terminates in a bead 4^3 which bears on its inner face against the sash. Extending inwardly from said bead, and integral therewith, is a leaf spring 4^4 extending the full length of the flange and which lies between the sash and said flanges, and diverges from the sash to a point near said back plate where it terminates in a bead 4^5 which bears against the edge of the sash, as shown more clearly in Fig. 2, and thereby affording a spring on each side of the sash having two points of contact therewith.

The operation is as follows: Inasmuch as the strip is stationary the sash must slide therein and owing to the fact that the leaf springs 4^4 press firmly against the sash on both sides thereof they form a supporter for the sash in any of its positions. Furthermore the friction usually caused by the movement of the sash is greatly reduced since the beads 4^3 and 4^5 form comparatively slight contact surfaces. Obviously with a device embodying my invention the sash is prevented from rattling and the joints about the same are securely closed to drafts and obviously many details of construction may be varied without departing from the principles of my invention.

I claim as my invention:

1. In a device of the class described the combination with a channel of a leaf spring on the inner side of each of its flanges and a bead on each spring adapted to afford a bearing surface.

2. In a device of the class described the combination with a channel of a bead on the margin of each of its flanges and a leaf spring extending inwardly from each bead and having a bead on its inner margin.

3. In a weather strip, a channel having a bead on the margin of each flange and a leaf spring extending from each bead into the channel, said springs diverging at their inner edges towards the adjacent flange and each having a bead on its inner margin.

4. A weather strip comprising a channel having a leaf turned inwardly from each flange and inclined from the edge of the flange towards the base thereof, and longitudinal beads on said leaves affording bearing surfaces adapted to engage the sash.

In testimony whereof I have hereunto subscribed my name in the presence of two witnesses.

EDUARD SONNTAG.

Witnesses:
A. PRATZKY,
J. C. TOOSMANN.