Dec. 14, 1937. G. W. GAIL 2,102,578

SEALING STRIP

Filed Jan. 22, 1937

Fig. 1.

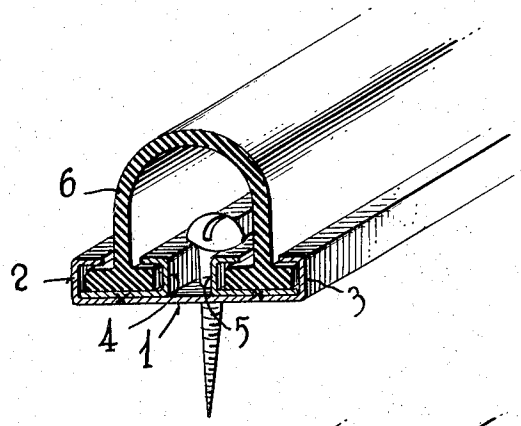


Fig. 2.

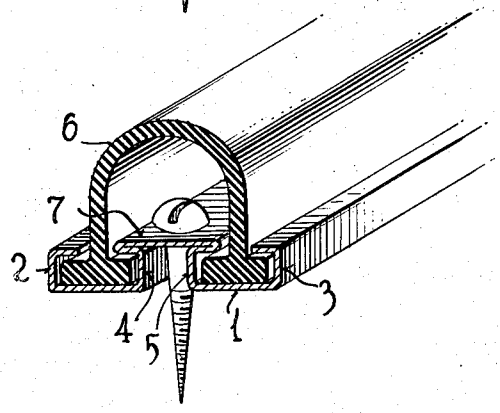
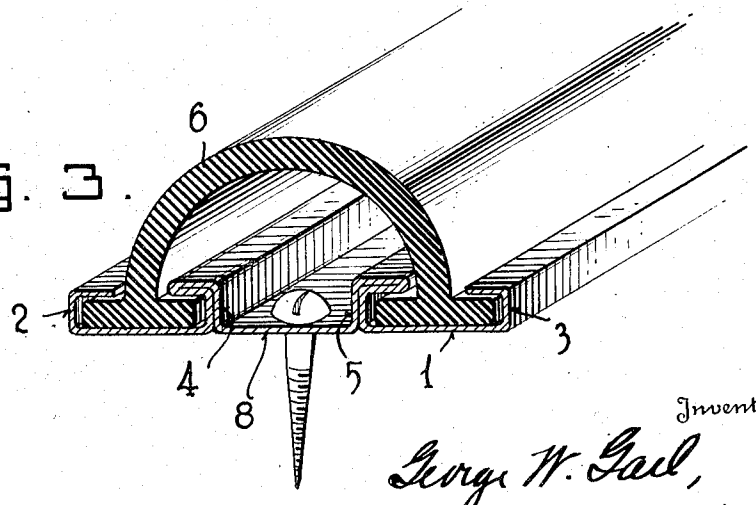


Fig. 3.



Inventor

George W. Gail,

By X. Clyde Gail,

Attorney

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SEALING STRIP

George W. Gail, Ruxton, Md., assignor to G. W. Gail, Inc., Baltimore, Md.

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7 Claims. (Cl. 20—69)

This invention relates to certain improvements in sealing strips of the type as illustrated in applicant's Patent 1,991,776 and allowed application Ser. No. 20,499.

More particularly the features of the present invention reside in the construction of the base member of the sealing strip, and its adaptability to the narrower or smaller type of seals of this class.

In applicant's former construction, like the present one, the broad features comprise a relatively rigid base member provided with parallel T-shaped slots in which there is adapted to be inserted or secured a semi-cylindrical resilient or flexible member preferably formed of rubber, the parallel edges of said flexible member being provided with T-shaped portions corresponding to the T-shaped slots in the base member hereinbefore referred to, whereby the said flexible member is positioned and retained in the base member.

Means are also provided for securing the sealing strip in operative position by screws or the like passing through the base member.

In some instances this base member is first fastened in position and the flexible portion of the sealing strip thereafter inserted longitudinally into the base member, or the sealing strip may be first assembled and then secured in position, but in this arrangement it is necessary to provide the semi-cylindrical flexible portion with a series of holes registering with the screw holes in the base member so that the necessary screws can be inserted as well as a screw driver for fastening the completely assembled sealing strip in position.

Also in these former constructions, the T-shaped slots in the base member were formed by inner and outer flanges and an intermediate web portion, the securing screws passing through this web portion with the heads of the screws seating on the web portion and positioned in the space between the inner flanges.

This sealing strip has been very successfully adapted to the use for which it was intended but in some instances where a relatively small or narrow sealing strip is desired, this could not be obtained owing to the space required for the heads of the screws between the inner flanges (see Fig. 3).

The object of the present invention is the provision of a sealing strip of the type indicated whereby the same will be adaptable to a much narrower form and at the same time retain its same general construction and arrangement and novel features.

A further object is to also simplify the manner of constructing the base portion of this strip, tending towards a more economical and commercially practicable device.

The preferred embodiment of the present invention is illustrated in the accompanying drawing, in which

Figure 1 is a view partly in section and partly in perspective showing the base member of applicant's sealing strip with the present improvement applied thereto, wherein the head of the fastening is elevated above the inner flanges;

Figure 2 is a like view showing a modified construction of base member wherein the same is formed of one continuous piece of sheet metal; and

Figure 3 is a view similar to Figure 2 of the one piece construction as applied to the wider types of sealing strip, with the head of the fastening seated on the intermediate web portion of the base between the inner flanges.

Referring to the drawing in detail and particularly Figure 1, the improved sealing strip comprises a base or bottom portion 1, outer flanges 2 and 3 and inner flanges 4 and 5, said flanges defining parallel T-shaped slots for securing the edges of the semi-cylindrical flexible member 6 to complete the construction. These inner flanges 4 and 5 are closely spaced leaving only enough room therebetween for the insertion of the screw and shank portion of the screw fastening, the head of the screw seating on the upper faces of the inner flanges 4 and 5. With this arrangement the outside dimensions of the sealing strip as a whole can be materially reduced in order to adapt the same to small constructions, making it possible to use this improved type of sealing strip in a number of instances where it would be impossible to mount the wider type of strip.

In the construction as shown in Figure 1, the inner flanges 4 and 5 are formed of two separate members spot welded or otherwise secured in relative position, producing substantially an integral base member. As illustrated in Figure 2, this integral construction may be formed of one piece of sheet metal with the connecting web 7 between the inner flanges 4 and 5 elevated to receive the under face of the head of the screw fastening, the space between the inner flanges 4 and 5, like the construction shown in Figure 1, being just sufficient to permit the passage therebetween of the shank of said fastening.

In Figure 3, this one piece sheet metal construction is illustrated as applied to the wider

type of sealing strip in which arrangement the connecting web portion 8 is depressed between the inner flanges 4 and 5, permitting the head of the screw fastening to be seated between said inner flanges as shown.

Throughout the specification applicant has referred to screws as the fastening means for the sealing strip, but it is to be understood that other types of fastenings may be used to accomplish the same purpose and produce the same result.

What I claim is:

1. In a sealing strip, the combination with a flexible strip of semi-cylindrical form provided with an anchoring flange along each side edge, of a base member comprising inner and outer longitudinal parallel flanges defining slots adapted to receive the flanges on said flexible member and fastenings for securing said assembled strip in operative position, the heads of said fastenings engaging the upper faces of said inner flanges.

2. In a sealing strip, the combination with a flexible strip of semi-cylindrical form provided with an anchoring flange along each side edge, of a base member comprising inner and outer longitudinal parallel flanges defining slots adapted to receive the flanges on said flexible member and headed fastenings for securing said assembled strip in operative position, said inner flanges being closely spaced permitting only the insertion therebetween of the shank portions of said fastenings.

3. In a sealing strip, the combination with a flexible strip of semi-cylindrical form provided with an anchoring flange along each side edge, of an integrally formed one piece base member comprising inner and outer longitudinal parallel flanges and a connecting web portion, defining slots adapted to receive the flanges on said flexible member and headed fastenings for securing said assembled strip in operative position, said fastenings passing through the web portion with the heads thereof engaging the upper faces of said inner flanges.

4. In a sealing strip, the combination with a flexible strip of semi-cylindrical form provided with an anchoring flange along each side edge, of an integrally formed one piece base member comprising inner and outer longitudinal parallel flanges and a connecting web portion, defining slots adapted to receive the flanges on said flexible member and screw fastenings for securing said assembled strip in operative position, said inner flanges being closely spaced permitting only the insertion therebetween of the screw and shank portions of said screw fastenings with the heads of said fastenings engaging the upper face of said connecting web portion.

5. A base member for receiving a semi-cylindrical flexible member of a sealing strip, comprising inner and outer parallel longitudinal flanges, and fastening means for said strip each consisting of a head portion and a shank portion, said inner flanges being closely spaced permitting only the insertion therebetween of the shank portions of said fastenings.

6. A base member for receiving a semi-cylindrical flexible member of a sealing strip, comprising inner and outer parallel longitudinal flanges, and fastening means for said strip each consisting of a head portion and a shank portion, said inner flanges being closely spaced permitting only the insertion therebetween of the shank portions of said fastenings with the heads of said fastenings engaging the upper faces of said inner flanges.

7. A base member provided with T-shaped slots for receiving a semi-cylindrical flexible member of a sealing strip, comprising inner and outer parallel longitudinal flanges and an elevated connecting web portion defining said T-shaped slots, and fastening means for said strip each consisting of a head portion and a shank portion, said inner flanges being closely spaced permitting only the insertion therebetween of the shank portions of said fastenings with the heads of said fastenings engaging the elevated web portion of said base member.

GEORGE W. GAIL.