Feb. 16, 1937. G. W. GAIL 2,070,725

SEALING STRIP

Filed May 8, 1935

Fig. 1.

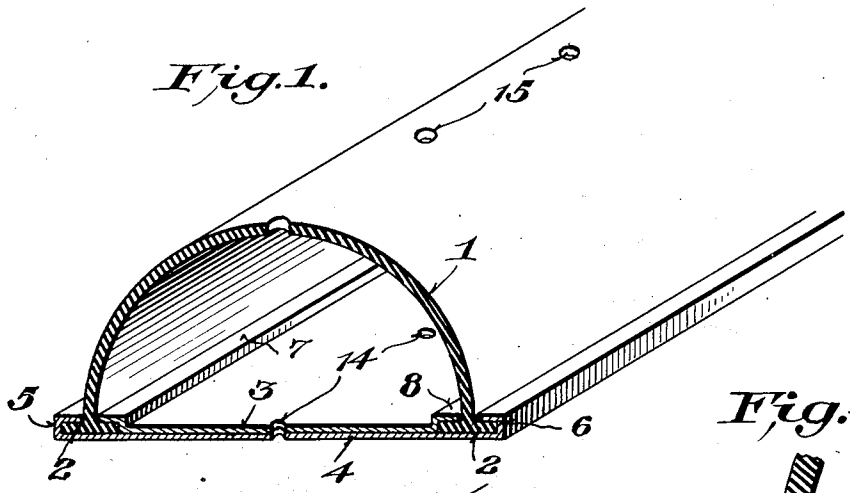


Fig. 2.

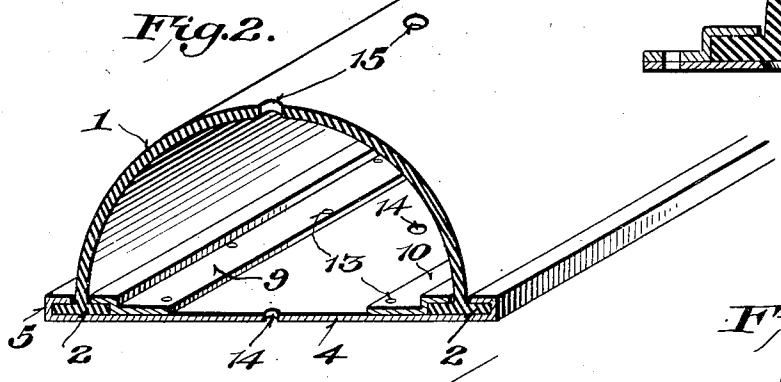


Fig. 3.

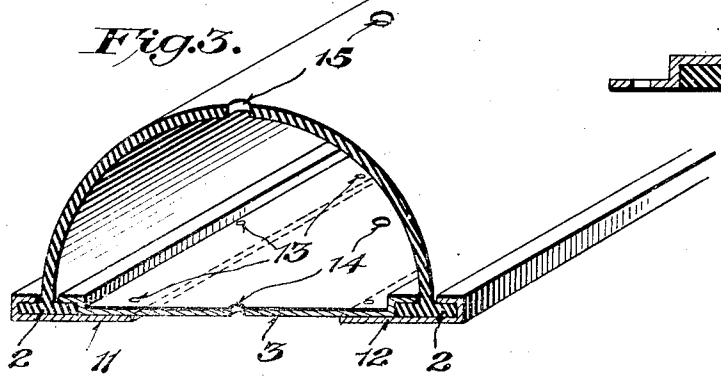


Fig. 4.

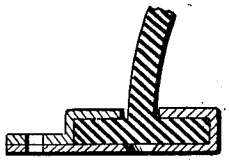
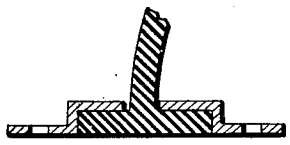


Fig. 5.



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2,070,725

SEALING STRIP

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Application May 8, 1935, Serial No. 20,499

10 Claims. (Cl. 20—69)

This invention relates to sealing and weather strips and particularly to certain improvements in the sealing strip construction as disclosed in the patent to G. W. Gail 1,991,776.

In this construction a substantially rigid base is provided in which is anchored, by its side edges, a semi-cylindrical resilient member or strip, the said side edges being locked in the base in a manner similar to the present construction.

The present invention is directed more specifically to a new type of base member as distinguished from that shown in the aforesaid patent, the new combination as a whole involving in addition certain other improved details incident to the manufacture and use of this latest form of sealing strip.

The present type of sealing strip is applicable to every use to which the former construction was adapted and furthermore can be more economically manufactured and more easily applied than said former device.

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

Figure 1 illustrates one form of the sealing strip in which the base member comprises two base units superimposed and cooperating to provide parallel anchoring grooves for the flexible strip;

Figure 2 is a modification in which the inner base unit is divided into two parts;

Figure 3 is a further modification in which the outer or bottom base unit is formed of two parts; and

Figures 4 and 5 are additional modifications showing the invention as applied to a single flange of the flexible member, to permit the use of a substantially semi-cylindrical flexible member of different widths or where it is desirable to use simply a straight or flat flexible member.

Referring to the drawing in detail the improved sealing strip comprises a flexible or resilient member 1 provided along its parallel side edge with a flange 2 which flange is preferably T-shaped in cross section. This resilient member 1 is preferably made of rubber and is either molded to the semicylindrical shape shown or formed as a flat sheet and afterwards bent and inserted in position in a manner to be hereinafter described.

Cooperating with the resilient member 1 is a substantially rigid base member comprising upper and lower, or inner and outer cooperating parts 3 and 4 respectively. The outer part 4 is provided with inturned flanges 5 and 6 and the inner part 3 is formed along its opposite side edges with flanges 7 and 8. When these inner and outer parts 3 and 4 are superimposed or properly assembled, these flanges 5 and 7, and 6 and 8, respectively, will cooperate to produce a T-shaped slot to receive the flanges 2 of the flexible member 1.

These parts may be assembled in various ways. The parts 3 and 4 of the base may be first assembled and the flanges 2 of the flexible member 1 inserted lengthwise into the T-shaped slots formed by the flanges 5 and 7, and 6 and 8, or the edges of the flexible member 1 may be inserted under the flanges 5 and 6 of the outside part 4 of the base, and the inside part then inserted into place.

Figure 2 illustrates a modification in which the inside part is made in two parts 9 and 10 and in Figure 3 the outside part is made in two parts 11 and 12. In these two latter forms the base parts are preferably spot welded as at 13 and in these modifications it is necessary to preform the complete base member before inserting the rubber or resilient member 1.

In all forms however similar means are provided for securing the completed sealing strip in operative position such as screw holes or the like 14, the flexible member 1 being provided with holes 15 sufficiently large to permit the insertion of a small screw driver, these holes 15 of course being located directly above the screw holes 14 in the base member.

Although the form of sealing strip as shown in Figure 1 is possibly the preferred form, where it is desired to use cement to assist in attaching or securing the sealing strip in position, the modification as illustrated in Figure 3 will be well adapted as the space between the parts 11 and 12 will receive the cement and provide a means of anchoring or locking the strip in its adjusted position, and prevent any leakage between the base and the part to which it is attached.

Referring to the modifications illustrated in Figure 4 there is shown a base unit applicable to a substantially straight or flat sealing strip provided with one T-shaped anchoring flange or the same may be used in duplicate in connection with the semi-cylindrical sealing strip permitting a contracting or spreading of said strip providing a base of various widths.

Figure 5 is a modification similar in its application and use as that shown in Figure 4 illustrating a somewhat different means of securing the base members in operative position.

What I claim is:

1. In a sealing strip, the combination with a flexible portion provided with an anchoring

flange, of a base member comprising inner and outer members adapted to embrace opposite sides of said flange respectively, means for securing said members together in interlocking relation with said flexible member and means provided in said base member for securing the sealing strip in operative position.

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 parts, said outer part adapted to embrace the outer edges of said flanges, and the inner part adapted to embrace the inner edges of said flanges.

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 a base member comprising inner and outer parts, said outer part adapted to embrace the outer edges of both flanges, and the inner part adapted to embrace both inner edges of said 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 a base member comprising inner and outer parts, said inner parts consisting of two parallel sections adapted to embrace both inner edges of said flange and the outer part adapted to embrace the outer edges of said flanges.

5. 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 parts, said inner parts consisting of two spaced parallel sections adapted to embrace both inner edges of said flange and the outer part adapted to embrace the outer edges of said flanges.

6. 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 parts, said outer part consisting of two parallel sections adapted to embrace the outer edges of both flanges, and the inner part adapted to embrace both inner edges of said flanges.

7. 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 parts, said outer part consisting of two parallel spaced sections adapted to embrace the outer edges of both flanges, and the inner part adapted to embrace both inner edges of said flanges.

8. In a sealing strip, the combination with a semi-cylindrical flexible member, of a T-shaped flange formed along each side edge thereof, a base member comprising upper and lower parts, flanges formed on the lower part, flanges formed on the upper part, said base flanges adapted to have interlocking engagement with the T-shaped flanges of said flexible member and means for securing said assembly in operative position.

9. In a sealing strip, the combination with a semi-cylindrical flexible member, of a T-shaped flange formed along each side edge thereof, a base member comprising upper and lower parts, flanges formed on the lower part, flanges formed on the upper part, said base flanges adapted to cooperate and to have interlocking engagement with the T-shaped flanges of said flexible member when said base parts are superimposed, means for securing said parts together, and means for securing the assembly in operative position.

10. In a sealing strip, the combination with a flexible portion provided with an anchoring flange, of a two part base member, one part embracing one side of said flange and the other part embracing the opposite side of the flange, and means for securing said base members in interlocking relation with said flexible portion.

GEORGE W. GAIL.