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"DRAUGHT EXCLUDER"

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This invention relates to draught excluders and like sealing devices and to door frames, window frames, partitions and like structures fitted with such sealing devices.

Heretofore, draught excluders have generally been fitted to the door or other moving member of such structures. The present invention, however, is concerned with the provisions of an improved draught excluder or other sealing device which would be located in the door frame or threshold by the door manufacturer, the sealing device being available in a number of sizes so as to allow the door manufacturer to enable various sizes of doors to be sealed.

According to the invention there is provided a sealing device comprising an elongate channel member having one side of the channel of greater height than the opposite side thereof, the said one side terminating in an inwardly extending flange parallel to the base of the ~~channel~~ ^{channel} member, and said opposite side of the channel member being formed with a longitudinal groove, a sealing strip being located in

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the groove and extending angularly across the channel member towards the intersection of the said one side and the flange which provides a well or space for the end of the sealing strip remote from said groove.

5 The channel member in use is rebated into the fixed frame of the structure so that as the moving member e.g. a door or window moves towards the fixed frame member, the moving member moves in a line substantially parallel with the limb forming the base of the channel member and thus engages the sealing strip which is thereby depressed to provide an effective seal.

10 The sealing strip is preferably a brush strip device and the end of the shorter limb of the channel is preferably formed at its extremity with an inwardly directed flange so that when the sealing device is fitted in a door frame, a stop is provided for the door spaced from the plane of the shorter limb
15 of the device.

The invention will now be described by way of example only with particular reference to the accompanying drawings wherein:

20 Figure 1 is a sectional view of the sealing device of the present invention;

Figure 2 is a sectional view of a door and frame with the sealing device rebated into the frame and the door out of contact therewith and

25 Figure 3 is a sectional view similar to that of Figure 2 with the door closed and in contact with the sealing device.

The sealing device of the invention comprises an elongate channel member 1 made of a suitable plastics material or metal such as aluminium. The member 1 has a limb 2 forming a vertical wall of the channel and the bight 3 forming the base of the channel member. The limb 2 has at its extremity a short inwardly extending flange 4 providing with the door frame 5 (Figures 2,3) a stop for the door 6 and also providing a well or space 7 within the channel shaped section for receiving the end 8 of the sealing strip 9 as this is depressed inwardly by the edge of the door 6 as will be hereinafter described with reference to Figures 2 and 3.

The base or bight 3 of the channel is formed with an enlarged section 10 having formed therein a groove 11 which extends longitudinally of the sealing device and which is located at an angle, for example 30° to the plane of the base 3. The groove 11 is open to the interior of the channel of the sealing device as shown in Figure 1.

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The groove 11 slidably receives the sealing strip 9 which is preferably a brush strip element comprising a plurality of brush fibres 12 made for example of Nylon (Registered Trade Mark), and which are looped around a wire core and then held in place in a metal channel by means of cleating or other locking means.

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Figures 2 and 3 show the sealing device rebated into a door frame 5. Figure 2 shows the door 6 in the open position with the brush sealing strip 12 extending angularly across the interior of the channel of the sealing device. Figure 3 shows the door 6 in its closed position in which the leading edge of the door 6 has engaged and depressed the brush fibres 12 of the sealing strip 9 which thereby provides an effective sealing device between the door 6 and frame 5.



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CLAIMS

1. A sealing device comprising an elongate
channel member having one side of the channel of
greater height than the opposite side thereof, the
said one side terminating in an inwardly extending
flange parallel to the base of the ~~channel~~^{channel} member, and
said opposite side of the channel member being formed
with a longitudinal groove, a sealing strip being
located in the groove and extending angularly across
the channel member towards the intersection of the
said one side and the flange which provides a well or
space for the end of the sealing strip remote from
said groove.

2. A sealing device as claimed in Claim 1
wherein said sealing strip is a brush strip device
having a plurality of brush fibres extending across
the channel towards the side and the flange.

3. A sealing device as claimed in Claim 1 and
rebated within the fixed member of a structure
employing said fixed member and a movable member
movable towards and away from said fixed member such
as to depress the sealing strip into the well or space



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when the movable member is moved closely adjacent the
fixed member.

4. A sealing device substantially as
hereinbefore described and as shown in the
accompanying drawings.
