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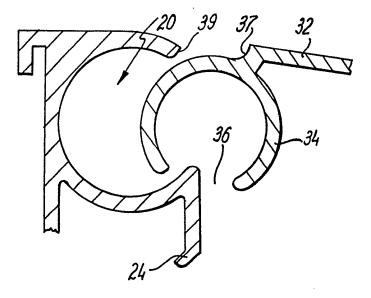
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(58) Field of search G5C

(54) Signs

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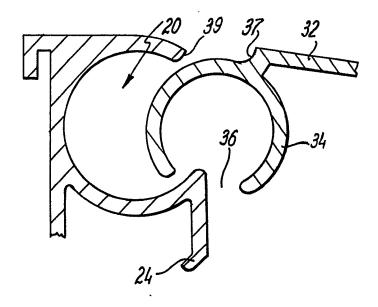
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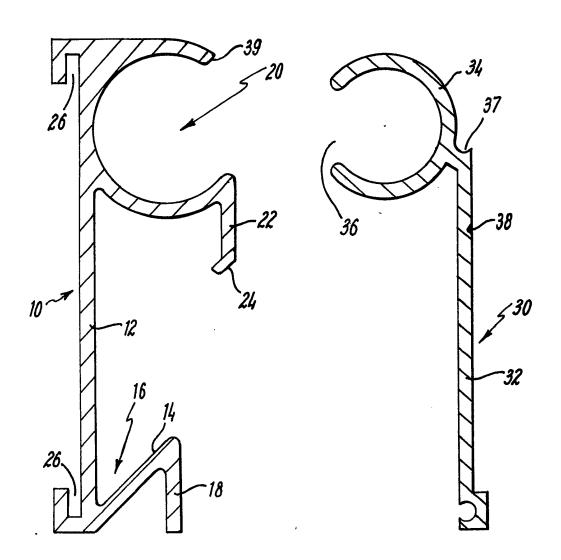
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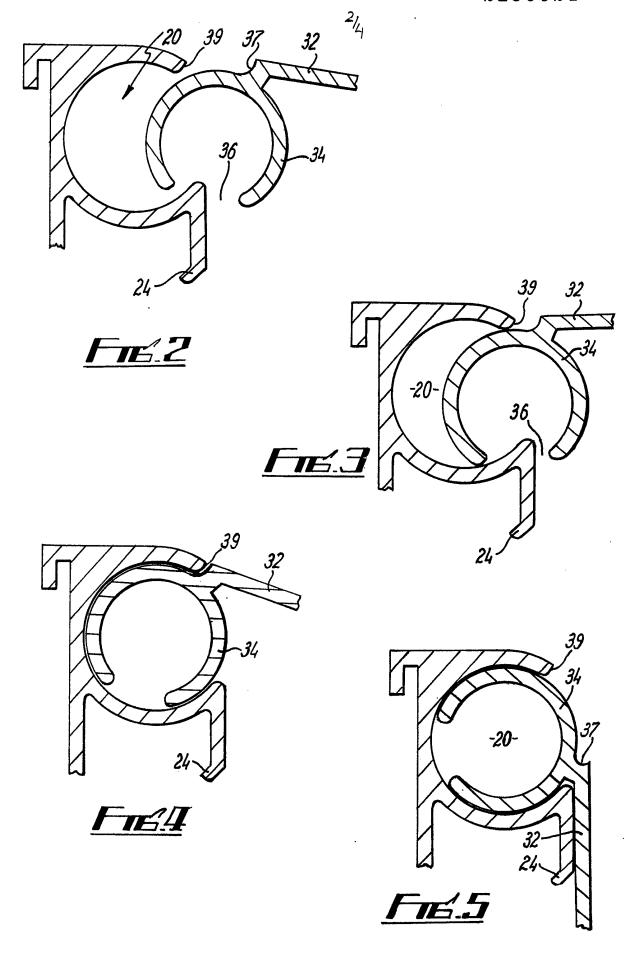




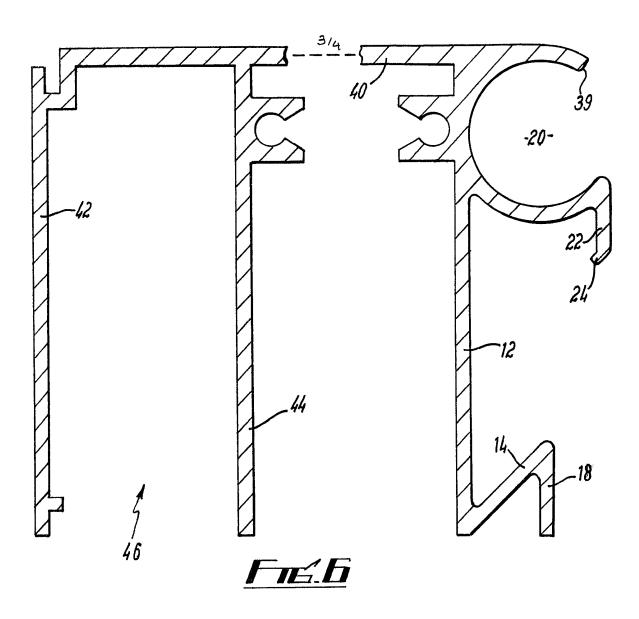


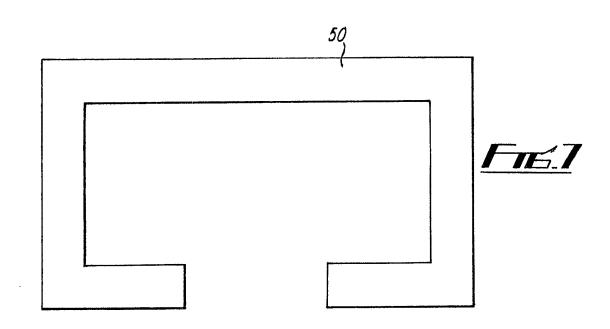


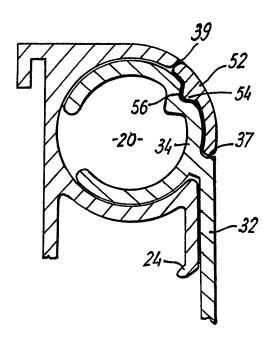
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SPECIFICATION

Improvements in or relating to signs

5 This invention relates to signs and more particularly, but not exclusively, signs, for example for shops that can be illuminated.

A form of shop sign construction is known which comprises a frame assembled from extruded aluminium channel. The channel is profiled so as to receive a batten, which may also be of extruded aluminium. The batten, is, in use, fixed to a wall surface and supports the frame usually with the aid of a bracket. The profiling of the frame channel is

15 also adapted to receive and support the actual sign board. The edges of the sign board are covered by a strip, also usually of extruded aluminium which fits on the frame and is held in place by screws. If the sign is to be illuminated the appropriate fittings are

20 disposed inside the frame prior to the sign board being fitted. The entire system includes a considerable number of different pieces.

If for any reason the sign requires servicing, for example to replace a lamp, access to the interior of 25 the frame can only be effected by removing the sign board and that can only be removed by first removing the edge cover strip. Because the signs are usually exposed to all weather the screws holding the cover strip in place corrode and after some time

30 it becomes difficult, if not impossible, to undo them. In such circumstances access to the frame interior can only be obtained by breaking the frame.

The present invention has been made from a consideration of these problems.

35 According to the invention there is provided an assembly for forming a frame for a sign comprising a frame member including support means for a sign board and also including one part of a separable hinge and a cover strip member including the other 40 part of said separable hinge, said cover strip being

removably and pivotably mountable on said frame member by means of said hinge.

Specific embodiments of the invention will now be described by way of example with reference to the 45 accompanying drawings in which:-

Figure 1 is a transverse section through a frame member and a cover strip separated from each other;

Figures 2-5 illustrate successive stages in the 50 interconnection of the parts shown in Figure 1;

Figure 6 is a transverse section through another embodiment of frame member;

Figure 7 is an end view of a support member, and Figure 8 is a view similar to Figure 5 showing a 55 modified embodiment of the invention.

Referring to Figure 1 of the drawing the assembly comprises a frame member 10 in the form of a strip which may conveniently be extruded from aluminium or suitable light alloy. The member 10 includes a web 12 having an inclined flange 14 at one edge which defines a wedge shaped groove 16. The free edge of flange 14 is bent back at 18 substantially parallel to the web 12. A sign board (not shown) can be fixed to the part 18 or groove 16.

A C-shaped channel 20 is provided along the other

edge of the web 12. A flange 22 extends substantially parallel to the web 12 from the wall of the channel 20 that is adjacent the flange 14. The free edge 24 of the flange 22 is inturned towards the web 12.

70 U-shaped channels 26 extend along opposite edges of the web 12 on the face thereof opposite to the face having flange 14 and channel 20.

A cover strip 30 comprises a web 32 having a hollow substantially circular tubular body 34

75 attached to one edge thereof such that the web is approximately tangential to the tubular body 34. A continuous slot or opening 36 extends along the tubular body approximately opposite to the point of attachment of the tubular body with the web.

The C-shaped channel 20 and the tubular body 34 together form the two parts of a separable hinge which is connected together as will now be described with reference to Figures 2 to 5. The cover strip is rotated anti-clockwise about the axis of tubular body 34 and advanced to the C-shaped channel so that the arm of the C-shaped channel to which the flange 22 is attached is received in the slot 36 (Figure 2). This permits the left hand side (as viewed in the drawings) of the tubular body 34 to be introduced into the C-shaped channel (Figure 3).

The cover strip 30 is then further rotated anticlockwise about the axis of the tubular body and at the same time the tubular body is manoeuvred to the left fully into the C-shaped channel (Figure 4). The hinge is now assembled and the cover strip can now be rotated clockwise so that the web 32 abuts the flange 22. The parts are held together by a screw or other fastener inserted through web 32 and into flange 22. A mark 38 in the form of a line on the face of web 32 indicates where the fastening should be inserted. It will be understood that other forms of fastening of the parts can be employed. For example web 32 can be provided with a clip which engages the end 24 of flange 22.

105 In order to remove the cover strip the screw or fastening is removed and the sequence of operations as described with reference to Figures 2 to 4 carried out in reverse order.

In use pieces of the frame member are mitred
110 together and fixed to a support such as a wall. A sign
board (not shown) is suspended or supported on the
flange 14 and the cover strip is then connected to the
frame member as has just been described. It will be
evident from the foregoing that when the cover is
115 clipped into the position of Figure 5 the web of the
cover extends over the edge of the sign board to
prevent removal thereof. If for any reason the sign
board is to be removed it is only necessary to pivot

the cover strip into the position shown in Figure 4. It 120 is not essential to remove the cover altogether.

As can be seen in the drawings a shallow concave depression 37 is formed at the junction of web 32 and the tubular body 34. When the parts are clipped together as shown in Figure 5 a length of "trim" can be fitted into the channel defined between the depression 37 and the upper edge 39 of the C-shaped channel 20. The trim which may be, for example, a strip of plastic coloured as desired, preferably fills the channel and, as will be appreciated, prevents the cover from being inadvertently

pivotted anticlockwise.

It will be appreciated that the dimensions of the hinge parts must be chosen so as to permit the hinge to be assembled and disassembled as described and 5 particularly so that during assembly the lower end of the web 30 leaves sufficient clearance from the part 18 of the frame member 10 to permit the cover to be manipulated into position. In order to obtain a separable hinge having the necessary requirements 10 it has been found that the mouth of the C-shaped channel should preferably subtend at the centre of channel over an arc substantially the same as the arc subtended at the centre of tubular body 34 by the slot 36, preferably from 60° to 80° more particularly 15 from 68° to 70°.

The embodiment just described is particularly adapted for signs not intended to be illuminated. For an illuminated sign the embodiment of Figure 6 may be used which comprises a frame member, the right 20 hand part of which is substantially the same as the frame member of Figure 1. However, in this embodiment web 12 forms one arm of a U-shaped channel having a web 40 and second arm 42. By this construction a sign board supported on flange 14 is spaced sufficiently far from any support surface, such as a wall, to which arm 42 is secured to allow the installation of electrical illuminating means.

The edges of arm 42 are dimensioned so as to be receivable in the channels 26 of a frame member as 30 shown in Figure 1. Thus it is possible to fit such a frame member to the embodiment of Figure 6 and produce a two sided sign.

An internal partition 44 extends from web 40 parallel to arm 42 and web 12 which defines a 35 subsidiary channel 46. The channel 46 may, if desired, receive the end of a support member 50 as illustrated in Figure 7 itself fixed to a wall or other support surface. The support member may be used to provide a point of attachment for a bracket for 40 supporting the underside of web 40 towards the right hand end thereof.

As mentioned above a trim can be provided in the channel defined between edge 39 and depression 37. Figure 8 shows a preferred kind of trim 52 in the 45 form of a strip, a slightly arcuate shape which fits between edge 39 and depression 37 and substantially flush with the adjacent surfaces of the frame member and cover strip. A barb or other projection 54 projects from the strip 52 and is received in a 50 corresponding depression 56 in the body 34. The positive engagement of the trim with the body 34 ensures that the body is held in place and cannot be moved anticlockwise until the trim is removed. With this embodiment it may not be necessary to provide 55 any other fastening such as screws between the frame member and the cover strip. If desired the trim may be coloured differently to the other frame parts.

The invention is not restricted to the embodiments just described; many variations and modifications 60 can be made.

CLAIMS

 An assembly for forming a frame for a sign 65 comprising a frame member including support

- means for a sign board and also including one part of a separable hinge, a cover strip member including the other part of said separable hinge, said cover strip being removably and pivotably mountable on said frame member by means of said hinge.
 - 2. A frame assembly as claimed in Claim 1, wherein the separable hinge comprises two tubular bodies of substantially circular cross-section and each body having a slot extending therealong.
- 75 3. A frame assembly as claimed in Claim 2, wherein the slot in the tubular body subtends over an arc of from 60° to 80°.
- 4. A frame assembly as claimed in any preceding claim wherein means are provided for releasably80 fastening the frame member and cover member together.
- A frame assembly as claimed in any preceding claim, wherein a channel is defined by the hinge when the frame member and cover member are
 fitted together, a further member being removably receivable in said channel.
- A frame assembly as claimed in Claim 5, wherein said further member is adapted to engage said cover member to prevent hingeing movement
 of the cover member relative to the frame member.
 - A frame assembly as claimed in any preceding claim, wherein the frame member is provided with means for securing said member to a supporting surface.
- 95 8. A frame assembly as claimed in Claim 7, wherein the hinge part of frame member is spaced from the means for securing the member to a supporting surface.
- 9. A frame member as claimed in Claim 8 100 wherein a channel is provided between the hinge part of the frame member and the means for securing the member to a supporting surface, a support being receivable in said channel and said support being fixable to the supporting surface.
- 105 10. A frame assembly as claimed in Claim 9, wherein the support provides means for attaching a support bracket, said bracket extending from the support to the frame member adjacent the hinge part thereof.
- 110 11. A frame assembly as claimed in any preceding claim wherein the frame member is adapted for connection to another frame member to form a double sided sign.
- 12. An assembly for forming a frame for a sign
 115 substantially as described herein with reference to
 Figures 1 to 5 or Figures 1 to 5 as modified by Figure
 6 or Figures 6 and 7.

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