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Description

THE PRESENT INVENTION relates to a drawer, such as is provided in an item of household furniture, and more particularly to a connection for mounting a fascia panel on part of a drawer body.

It is known to form a drawer body as an integrally moulded, single unit and to provide a separate fascia panel, together with means for connecting the panel to the drawer body. It is also known to form a drawer body in kit form comprising a base and upstanding walls which are interconnectable to form the drawer body. Again it is necessary to provide means for connecting a fascia panel to part of the drawer body. References in this document to a drawer body are to be understood to cover either an integrally formed body or a body in kit form.

Various arrangements have been proposed for connecting the fascia panel to the drawer body. Simple arrangements which serve permanently to secure the front panel on the drawer body, such as screwing the panel in position, are cheap to produce but do not permit for adjustment of the panel relative to the drawer body if assembly of the complete unit is not effected with the necessary degree of accuracy. More complex arrangements have been proposed which allow for adjustment of the panel relative to the drawer body e.g. EP-A-0 030 290. However, these arrangements tend to be relatively expensive to produce and are often difficult or awkward to assemble and adjust.

The present invention seeks to provide a drawer having a connection between a drawer body and a fascia panel which is simple and cost-efficient to produce and assemble and which enables adjustment of the fascia panel relative to the drawer body, both vertically and horizontally, in a quick and simple manner.

According to one aspect of this invention there is provided a kit of parts for forming a drawer, the kit of parts comprising a drawer body, a fascia panel adapted to be mounted on the front of the drawer body, and means for releasably retaining the panel adjacent the front of the drawer body, the retaining means comprising a projection associated with the fascia panel, the projection having a part which is movable relative to the remainder of the projection between first and second positions corresponding to release and locking of the fascia panel relative to the drawer body when the fascia panel is mounted on the front of the drawer body, the retaining means associated with the fascia panel defining a space adjacent the movable part, the kit of parts further comprising an element mountable on the drawer body, the element having an insert which passes into the space and urges the movable part of the retaining means associated

with the fascia panel to the second position in which the fascia panel is locked in position relative to the drawer body.

Preferably the releasable retaining means comprise a projection extending rearwardly of the fascia panel and a channel formed at the front of the drawer body, the channel defining an opening through which the projection may be introduced into the channel.

Conveniently the channel extends substantially vertically and is formed at the front of a side wall of the drawer body, the channel having an opening extending into the front of the channel, through which part of the projection protrudes when the projection is inserted into the channel.

Advantageously the projection is in the form of a connector element comprising a front portion and a rear portion, the front portion being received wholly within the channel and the rear portion protruding through said opening and being connected to the rear surface of the fascia panel.

Preferably the front portion of the connector element comprises a central region of reduced thickness, said space being defined between said central region and the rear portion of the connector element, the central region constituting said part of the retaining means movable between said first and second positions.

Conveniently the central region of the front portion of the connector element is connected to the remainder of the front portion by relatively thin, flexible webs of material.

Advantageously the element is mountable on the drawer body such that the insert extends into the space from one side of the drawer body in a direction substantially perpendicular to a side wall of the drawer body, the thickness of the insert being greater than the depth of the space between the central region and the rear portion of the connector element such that, upon insertion of the insert into the space, said thin webs of material flex and the central region of the front portion of the connector element is moved away from the rear portion so as to project beyond the remainder of the front portion of the connector element and moves forcibly into engagement with a wall of the channel formed at the front of the drawer body when the connector element is received within that channel, thereby locking the fascia panel in position relative to the drawer body.

Preferably the element comprises a cover plate receivable within a shallow recess formed in a side wall of the drawer body, the cover plate carrying said insert which is introducible into the space between the central region of the front portion of the connector element and the rear portion of the connector element, the shallow recess in the side wall having an aperture through which the insert

passes when it is to be introduced into the space in the connector element.

Conveniently the shallow recess defines a further aperture and the cover plate carries a projection designed to be received in that further aperture as a snug fit so as to retain the cover plate in position within the shallow recess.

Advantageously the central region of the front portion of the connector element and said wall of the channel define cooperating sets of teeth which are brought into engagement when the central region is forced into engagement with the wall, the sets of teeth serving to prevent movement of the fascia panel relative to the drawer body in one or more directions.

The sets of teeth may serve to prevent vertical and horizontal movement of the fascia panel relative to the drawer body.

According to a second aspect this invention provides a method of forming a drawer from a kit of parts as described above the method comprising the steps of connecting a projection to the rear surface of the fascia panel and inserting said projection into a channel formed at the front of the drawer body such that the panel is retained adjacent the front of the drawer body; mounting an element having an insert upon the drawer body so that the insert engages part of the projection and move said part of the projection from a first position in which the fascia panel may move relative to the drawer body to a second position in which the part of the projection locks the fascia panel in position relative to the drawer body.

This invention further provides a drawer when formed from a kit of parts as described above, and an item of furniture incorporating such a drawer.

In order that the present invention may be more readily understood, and so that further features thereof may be appreciated, the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

FIGURE 1 is a perspective view of a drawer body forming part of the present invention;

FIGURE 2 is a perspective view, from the rear, of one end of a fascia panel adapted to be mounted on the front of the drawer body of Figure 1;

FIGURE 3 is a perspective view of a locking member for use in mounting the fascia panel of Figure 2 on the drawer body of Figure 1;

FIGURE 4 is a perspective view on an enlarged scale showing a front corner of the drawer body of Figure 1;

FIGURE 5 is a rear view of a connector element as shown on the rear of the fascia panel portion shown in Figure 2;

FIGURE 6 is a cross-sectional view taken on the line VI-VI of Figure 5;

FIGURE 7 is a perspective view, on an enlarged scale, showing the front of one side wall of an alternative embodiment of a drawer body forming part of the present invention;

FIGURE 8 is a perspective view of a locking member for use in mounting a fascia panel on the front of the side wall shown in Figure 7;

FIGURE 9 is a view showing a connector element designed to be mounted on the rear of a fascia panel which is in turn to be mounted on a drawer body; and

FIGURE 10 is a cross-sectional view taken on the line X-X of Figure 9.

A drawer in accordance with the present invention comprises a drawer body 1, as shown in Figure 1 of the drawings, and a fascia panel 2 (only part of which is shown in Figure 2) carrying, on its rear surface, a pair of connector elements 3 (only one of which is shown in Figure 2) and a pair of locking members 4, one of which is illustrated in Figure 3. The connector elements 3 and the locking members 4 enable the fascia panel to be releasably mounted on the front of the drawer body 1.

The drawer body comprises an integrally moulded unit which is, in plan view, substantially square and comprises a base 5, side walls 6 and a rear wall 7. Each of the side walls 6 are of similar form and extend outwardly at their upper edge in an arcuate manner and then extend downwardly as a depending skirt 8 which turns inwardly before again extending downwardly to the level of the base 5. Thus the skirt 8 has an upper portion extending over approximately two thirds the depth of the side wall and a lower portion which extends over approximately one third the height of the side wall. The region between each of the side walls 6 and their respective skirts 8 is hollow.

At the front of the drawer each side wall 6 is connected to its associated skirt 8 by way of a vertical front wall 9, each front wall 9 defining a rectangular opening 10 which extends upwardly from the base of the drawer (where it has an open mouth) over approximately three quarters of the height of the side wall. A further vertical wall 11 extends between the side wall 6 and the skirt 8 at a position just behind the front wall 9. The wall 11 carries a set of vertically extending, parallel serrations or teeth 12 which are of a limited depth and are positioned just beneath the level of the upper edge of the opening 10. A horizontal set of teeth may be superimposed on the vertical teeth 12. The teeth 12 are designed to cooperate with a corresponding set of teeth formed on part of each connector element 3.

It will be appreciated from the description given above and from Figures 1 and 4 of the drawings that the front end of each side wall of the drawer

body defines a vertically extending, open bottomed channel which is of substantially T-shaped configuration when seen in horizontal cross-section, the head of the T being enclosed by the side wall 6, the wall 11 and the skirt 8, whilst the stem of the T is defined between the edges of the opening 10. This channel is designed to receive a connector element 3 which may be introduced into the channel via the open bottom thereof.

At the front end of each skirt 8 at a position just above the point where it turns inwardly, the upper portion of the skirt defines a shallow, generally rectangular recess 13. The recess defines two apertures, there being a first, rectangular upright aperture 14 positioned adjacent the front edge of the drawer and a second, elongated oval-shaped aperture 15 positioned behind the aperture 14 at a small distance therefrom. The aperture 14 extends through the skirt 8 into the hollow region between the side wall and the skirt at a position in front of the wall 11 i.e. it extends into the T-shaped channel at the front of the side wall. The aperture 15 extends through the skirt into the hollow between the skirt and the side wall at a position behind the wall 11. The shallow recess 13 is aligned vertically with the set of teeth 12 formed on the wall 11. The hollow region between the skirt 8 and the side wall 6 is accessible in the region of the recess 13 by way of an opening in the skirt 8 where the skirt turns inwardly. This opening is not visible in the drawings but allows a person's finger to enter behind the upper portion of the skirt 9 in the region of the recess 13. Each recess 13 is designed to receive a locking member 4.

Each locking member 4 comprises a planar, substantially rectangular cover plate 16 of the same overall dimensions as the recess 13. The cover plate carries, adjacent one edge, a projection 17 which is of rectangular cross-section and which is dimensioned to pass through the aperture 14. The projection 17 defines a bevelled free edge 18. The cover plate 16 also carries an elongate oval-shaped projection 19 dimensioned to fit in the aperture 15. The free edge of the projection 19 is also bevelled at 20.

Each connector element 3 comprises an integrally moulded elongate component having a relatively wide front portion 21 designed to be received wholly within the T-shaped channel formed at the front edge of each side wall of the drawer body and a relatively narrow rear portion 22 designed to pass through the opening 10 in the front wall 9. The rear portion 22 is located substantially centrally upon the rear of the front portion 21 and extends over only part of the width and only part of the height of the front portion, as is most clearly visible in Figures 5 and 6 of the drawings. The rear portion 22 defines a flat rear surface 23 which lies

flat on the rear surface of the fascia panel 2 when the connector element is mounted thereon. Each connector element defines a pair of vertically spaced apart, countersunk screw holes 24 through which screws may be passed in order to screw the connector element onto the rear surface of the fascia panel. The holes 24 are countersunk so that the heads of the screws received within the holes lie substantially flush with or slightly below the front surface of the connector element.

The front portion of each connector element comprises three regions, there being an upper region 25, a central region 26 and a lower region 27.

The upper region 25 and the lower region 27 are of equal thickness and are interconnected at the rear by the rear portion 22, whilst the central portion 26 is of lesser thickness such that an aperture 28 is defined between the rear portion 22 and the central portion 26. The depth of the aperture 28 in a direction extending perpendicularly between the rear portion 22 and the back of the central portion 26 is slightly less than the thickness of the projection 17 on the locking member 4. The height of the aperture 28 is slightly greater than the height of the projection 17.

The upper region 25 and the lower region 27 are each connected to the central region by a relatively thin web of material 29 forming one side of the base of respective V-shaped grooves 30 which extend transversely across the front surface of the front portion 21 at the upper and lower borders of the central portion 26. The front surface of the central portion 26 carries a set of vertical, parallel teeth 31 designed to engage with the teeth 12 formed on the wall 11 in the drawer body. A set of horizontal teeth may be superimposed on the horizontal teeth 31.

It is envisaged that the connector elements 3 will be formed from polypropylene and the webs 29 will be sufficiently thin to enable them to flex slightly so that the central portion 26 may be urged away from the rear portion 21 thereby causing the surface carrying the teeth 31 to project beyond the plane of the front surface of the connector.

The screw holes 24 are located in the upper and lower regions of the front portion at positions immediately adjacent the V-shaped grooves 30. The lower portion 27 has one side face which defines an inturned step 32 in similar manner to that which is defined by the skirt 8 on the drawer body. Thus, the lowermost section of the lower portion 27 is of lesser width than the remainder of the front portion of the connector element.

In use it will be appreciated that the two connector elements 3 are screwed onto the rear of a fascia panel 2 at predetermined positions spaced across the width of the panel, the spacing corresponding to the distance between the T-shaped

channels defined at the front of the side walls of the drawer body. The panel is then mounted on the front of the drawer body by introducing the connector elements 3 into the T-shaped channels at the front of the side walls of the drawer body. The connector elements are introduced into these channels by way of its open bottom, with the front portion 21 of each connector element being received between the walls 9, 11 and with the rear portion 22 of each connector element projecting through the opening 10. When the connector elements are fully inserted into the T-shaped channels the teeth 31 on each connector element are aligned with, but spaced slightly from the teeth 12 formed on the wall 11.

The two locking members 4 are now each inserted into a respective recess 13 on either side of the drawer body such that the projection 17 passes through the aperture 14 and the projection 19 extends into the aperture 15. The projection 17 passes into the aperture 28 and because that projection is of greater thickness than the depth of the aperture, that projection urges the central portion 26 away from the rear portion 22 and causes the teeth 31 to move into engagement with the corresponding teeth 12. The bevelled edge 18 at the free end of the projection 17 facilitates the insertion of the projection into the aperture 28 behind the central portion 26.

When the locking member 4 is fully inserted the cover plate 16 is received within the shallow recess 13 and lies substantially flush with the surface of the skirt 8, whilst the projection 19 is a tight fit within the aperture 15. The bevelled edge 20 on the projection 19 facilitates the introduction of that projection into the aperture 15. When both locking members 4 have been inserted the fascia panel 2 is securely mounted upon the front of the drawer body with the two sets of teeth 31, 12 serving to prevent sideways movement of the fascia panel relative to the drawer body and the frictional engagement between the front surface of the central portion 26 and the wall 11 serving to prevent vertical movement of the panel relative to the drawer body. If horizontal sets of teeth are superimposed on the vertical teeth 12, 13 then the teeth will serve to prevent both horizontal and vertical movement of the fascia panel relative to the drawer body.

If it is necessary to adjust the position of the fascia panel relative to the drawer body or to remove the fascia panel from the front of the drawer body then the locking members 4 can be released by pushing them out of their respective recesses 13. This is effected by passing a finger behind the skirt 8 at a position adjacent the recess 13 and pushing on the free end of the projection 19 so as to force the locking member 4 out of the recess 13. As the locking member 4 moves out of

the recess 13 so the projection 17 is withdrawn from the aperture 28 and the sets of teeth 31, 12 become disengaged, thereby allowing movement of the fascia panel both vertically and horizontally.

It is to be noted that when the connector elements 3 are fully inserted within the T-shaped channels and the sets of teeth are aligned the wider section of the front portion 21 of each connector element is received within the channel at a position above the level of the step in the skirt 8. If the connector elements 3 are lowered from the fully introduced position then the wider section of the front portion 21 of each connector element will just pass through the lower portion of the T-shaped channel but no significant sideways movement of the panel will be possible relative to the drawer body unless the connector elements are fully inserted within the T-shaped channels.

It is envisaged that the connector elements and the channels within which they are received will be provided with cooperating means to enable the fascia panel to be supported upon the front of the drawer body before the locking members 4 have been placed in position. Thus, the connector elements and the channels may be provided with cooperating projections and recesses which form a flexible snap-fitting connection which supports the connector elements within the channels and thereby supports the fascia panel upon the front of the drawer body. The step 32 on the front portion of each connector element already serves this purpose to a certain degree, in that the step enables the connector to rest upon the corresponding step formed in the skirt 8. However there is no positive retention of the fascia panel in position relative to the drawer body with this arrangement. Similarly the locking members 4 may well be provided with means for retaining the locking members in position relative to the recess before the locking members have been fully inserted. It will still be possible to adjust the position of the fascia panel both vertically and horizontally relative to the drawer body when the panel is supported upon the front of the drawer body in this way and when the locking members 4 are supported in position relative to the recesses 13.

Figures 7 to 10 illustrate modified components for enabling a fascia panel to be mounted upon the front of a drawer body. Figure 7 illustrates the front end only of one side wall 33 of a drawer body supplied in kit form. The complete drawer body would comprise a base, a pair of side walls, a front wall and a rear wall. In some cases the front wall may be omitted and a fascia panel can be mounted directly on the front ends of the side walls 33. Alternatively the rear of a fascia panel may carry the front wall of the drawer body which is in turn mounted on the front end of the side walls 33. The

modified arrangement of Figures 7 to 10 comprises the same basic components as previously described and thus the front end of each side wall 33 is designed to receive a connector element 34 mounted on the rear of a fascia panel, with each connector element 34 being positively retained in position relative to the front end of the its associated side wall 33 by means of a locking member 35.

The main difference between the modified arrangement of Figures 7 to 10 and that of Figures 1 to 6 is that the front end of each side wall 33 has been modified to take account of the fact that the drawer body is to be provided in kit form and, as can be seen from Figure 7, the front end of each side wall defines a vertically extending channel 36 between inner and outer walls 37, 38 of the side wall. The channel has a base which is constituted by a vertical wall 39 extending between the inner and outer walls 37, 38, the vertical wall 39 being spaced rearwardly of a further vertical wall 40 which is positioned adjacent the front end of the side wall and which defines an opening 41 extending into the channel 36 from the front end of the side wall. The opening 41 has a first portion 42 which extends across approximately half of the width of the side wall and which is of greater height than a second portion 43 of the opening which extends across the other half of the width of the front wall. The second portion of the opening 41 is formed with a projecting rim 44 around three of its sides. It will be appreciated that the lowermost portion of the vertical wall 40 forms a web extending between the inner and outer walls 37, 38 adjacent the lowermost edge of the side wall 33 and this web prevents the insertion of a connector element 34 into the channel 36 via the open end of the channel 36 adjacent the base of the side wall when the connector element is mounted on the rear of the fascia panel.

In similar manner to the previously described embodiment, the front end of the side wall 33 defines a shallow recess 45 which is designed to receive the locking member 35. In the modified embodiment the recess 45 is generally L-shaped, having a portion which extends vertically at the front end of the side wall and a portion which extends horizontally from the front end towards the rear of the side wall adjacent the upper edge thereof. Within the recessed area 45 the outer wall 38 defines a rectangular upright aperture 46 which extends into the channel 36 in similar manner to the aperture 14 of the previous embodiment. The aperture 46 is aligned with a set of teeth 47 formed on the vertical wall 39 constituting the base of the channel 36.

Each locking member 35 comprises a generally L-shaped portion designed to be received

within the recessed area 45 formed on the outwardly directed face of the side wall 33 and a portion 48 which extends perpendicularly thereto, the portion 48 being designed to extend across the front end of the side wall 33 when the locking member is in place. The portion 48 defines a cut away region 49 which is designed to be aligned with the opening 41 when the locking member is in place. As with the previously described locking member, the locking member 35 effectively forms a cover plate and carries a projection 50 which is of rectangular cross-section and which is dimensioned to pass through the aperture 46. The projection 50 has a bevelled edge 51 which facilitates the mounting of a fascia panel on the front end of the drawer body.

The connector elements 34 are of very similar design to the connector elements 3 which have been described above and thus comprise a front portion 52 which is dimensioned to pass through the first portion 42 of the opening 41 with a small clearance and a rear portion 53 which is of lesser height than the front portion and which is dimensioned so that it will just pass through the second portion 43 of the opening 41 with a small clearance. As can clearly be seen from Figures 9 and 10 of the drawings the front portion and the rear portion of each connector 34 are of the same width and each portion is of generally rectangular shape. Each connector element defines a pair of screw holes 54 by way of which the element is designed to be mounted upon the rear of a fascia panel or upon the rear of the front wall of a drawer body which is itself mounted on the rear of a fascia panel.

The front portion 52 of each connector element is of the same design as the front portion of the connector element 3 described above and will therefore not be described in detail again other than to say that it comprises a central region 55 which is spaced from the rear of the connector by an aperture 56, the central region being connected to the remainder of the connector element by thin webs of material 57 which can flex slightly so as to permit the central portion 55 to be urged away from the rear portion 53 of the connector element. The front surface of the central region 55 again carries a set of teeth 58 designed to cooperate with the teeth 47 formed on the base of the channel 36. Thus, as the webs 57 flex and the central portion 55 is urged away from the rear portion 53 of the connector element the teeth 58 project beyond the plane of the front surface of the connector.

In use two connector elements 34 are mounted on the rear of a fascia panel or on the rear of a front wall of a drawer body which is itself mounted on the rear of a fascia panel so that the spacing between the connector elements corresponds to

the spacing between the side walls 33 of the drawer body to which the fascia panel is to be connected. The panel (and the front wall of the drawer body if this is mounted on the rear of the panel) is then mounted on the front of each side wall 33 by introducing the connector elements 34 into the channel 36 through the opening 41.

It will be appreciated that in contrast to the previously described embodiment the connector elements are introduced into the channel not via the opening adjacent the base of the side wall but via the opening formed at the front of the side wall i.e. by pushing the connector elements into the channel in a direction towards the rear of the drawer body. The connector elements are inserted into the channel by passing the elements through the first portion 42 of the opening whereupon the fascia panel and the connector elements can be moved laterally such that the front portion 52 of each connector element is received behind the vertical wall 40 with the rear portion 53 of each connector element projecting out through the second portion 43 of the opening 41. The rear portion 53 of each connector element now rests upon the projection 44 formed around the periphery of the second portion 43 of the opening 41 and when the fascia panel is correctly positioned relative to the drawer body the locking members 35 can be located in position on each side wall 33.

Each locking member is offered up to the side wall by introducing the projection 50 into the aperture 46. As the projection 50 passes through the aperture 46 it is automatically directed into the aperture 56 between the front and rear portions of the connector element 34. The projection 50 has a thickness which is slightly greater than the distance between the front and rear portions of the connector element 34 and thus the projection 50 urges the central portion 55 away from the rear portion 53 and causes the teeth 58 to move into engagement with the corresponding teeth 47. The bevelled edge 51 on the projection 50 facilitates the insertion of the projection into the aperture 56 defined by the connector element. The fascia panel is now effectively locked in place on the front of the drawer body and the locking member 35 is received within the recessed area 45 with its front portion 48 extending across the front of the side wall 33.

If necessary the rearwardly extending portion of the L-shaped locking member may carry a further projection designed to be received within a further aperture formed in the outer wall 38 in similar manner to the projection 19 which is received in the aperture 15 in the embodiment described previously. This would serve to ensure that the locking member is retained securely in position within the recessed area 45.

As previously described the teeth 47, 58 prevent sideways movement of the fascia panel relative to the drawer body and the frictional engagement between the front surface of the central portion 55 of the connector element and the wall 39 defining the base of the channel prevent vertical movement of the panel relative to the drawer body. As previously mentioned horizontal sets of teeth could be superimposed upon the vertical teeth 47, 58 so that the two sets of teeth would prevent both horizontal and vertical movement of the fascia panel relative to the drawer body.

Adjusting the position of the fascia panel relative to the drawer body can be effected in the same manner as described above by simply removing the locking members 35 adjusting the position of the panel as necessary and then replacing the locking members.

Whilst this invention has been described with reference to specific embodiments, it will be appreciated that various modifications may be made to those embodiments without departing from the scope of the present invention, as defined by the appended claims.

Claims

1. A kit of parts for forming a drawer, the kit of parts comprising a drawer body (1), a fascia panel (2) adapted to be mounted on the front of the drawer body (1), and means for releasably retaining the panel (2) adjacent the front of the drawer body (1), the retaining means comprising a projection (3, 34) associated with the fascia panel, the projection having a part (26, 55) which is movable relative to the remainder of the projection between first and second positions corresponding to release and locking of the fascia panel (2) relative to the drawer body (1) when the fascia panel is mounted on the front of the drawer body, the retaining means associated with the fascia panel (2) defining a space (28, 56) adjacent the movable part (26, 55), the kit of parts further comprising an element (4, 35) mountable on the drawer body, the element (4, 35) having an insert (17, 50) which passes into the space (28, 56) and urges the movable part (26, 55) of the retaining means associated with the fascia panel to the second position in which the fascia panel (2) is locked in position relative to the drawer body (1).
2. A kit of parts according to Claim 1, wherein the releasable retaining means comprise a projection (3, 34) extending rearwardly of the fascia panel (2) and a channel formed at the front of the drawer body (1), the channel (36) defining

an opening (41) through which the projection (34) may be introduced into the channel.

3. A kit of parts according to Claim 2, wherein the channel (36) extends substantially vertically and is formed at the front of a side wall (6, 33) of the drawer body (1), the channel (36) having an opening (41) extending into the front of the channel, through which part of the projection (3, 34) protrudes when the projection (3, 34) is inserted into the channel. 5
4. A kit of parts according to Claim 3, wherein the projection (3, 34) is in the form of a connector element comprising a front portion (21, 52) and a rear portion (22, 53), the front portion (21, 52) being received wholly within the channel (36) and the rear portion (22, 53) protruding through said opening (41) and being connected to the rear surface of the fascia panel. 10 15
5. A kit of parts according to Claim 4, wherein the front portion (21, 52) of the connector element (3, 34) comprises a central region (26, 55) of reduced thickness, said space (28, 56) being defined between said central region (26, 55) and the rear portion (22, 53) of the connector element, the central region (26, 55) constituting said part of the retaining means movable between said first and second positions. 20 25 30
6. A kit of parts according to Claim 5, wherein the central region (26, 55) of the front portion (21, 52) of the connector element is connected to the remainder of the front portion by relatively thin, flexible webs of material (29, 57). 35
7. A kit of parts according to Claim 6, wherein the element (4, 35) is mountable on the drawer body such that the insert (17, 50) extends into the space (28, 56) from one side of the drawer body (1) in a direction substantially perpendicular to a side wall (6) of the drawer body (1), the thickness of the insert (17, 50) being greater than the depth of the space (28, 56) between the central region (26, 55) and the rear portion (22, 53) of the connector element such that, upon insertion of the insert (17, 50) into the space (28, 56), said thin webs of material (29, 57) flex and the central region (26, 55) of the front portion (21, 52) of the connector element (3, 34) is moved away from the rear portion (22, 53) so as to project beyond the remainder of the front portion (21, 52) of the connector element (3, 34) and moves forcibly into engagement with a wall (11, 39) of the channel formed at the front of the drawer body (1) when the connector ele- 40 45 50 55

ment (3, 34) is received within that channel, thereby locking the fascia panel (2) in position relative to the drawer body (1).

8. A kit of parts according to Claim 7, wherein the element (4, 35) comprises a cover plate (16) receivable within a shallow recess (13, 45) formed in a side wall of the drawer body (1), the cover plate (16) carrying said insert (17, 50) which is introducible into the space (28, 56) between the central region (26, 55) of the front portion (21, 52) of the connector element and the rear portion of the connector element, the shallow recess (13, 45) in the side wall having an aperture (14, 46) through which the insert (17, 50) passes when it is to be introduced into the space (28, 56) in the connector element (3, 34). 10 15 20
9. A kit of parts according to Claim 7 or Claim 8 wherein the central region (26, 55) of the front portion (21, 52) of the connector element (3, 34) and said wall (11, 39) of the channel define cooperating sets of teeth (12, 31; 47, 58) which are brought into engagement when the central region (26, 55) is forced into engagement with the wall (11, 37), the sets of teeth (12, 13; 47, 58) serving to prevent movement of a fascia panel (2) relative to the drawer body (1) in one or more directions. 25 30
10. A method of forming a drawer from a kit of parts according to any one of Claims 1 to 9, the method comprising the steps of connecting a projection (3, 34) to the rear surface of the fascia panel and inserting said projection (3, 34) into a channel formed at the front of the drawer body (1) such that the panel (2) is retained adjacent the front of the drawer body (1); mounting an element (4, 35) having an insert (17, 50) upon the drawer body (1) so that the insert (17, 50) engages part (26, 55) of the projection (3, 34) and move said part (26, 55) of the projection from a first position in which the fascia panel (2) may move relative to the drawer body (1) to a second position in which the part (26, 55) of the projection (3, 34) locks the fascia panel (2) in position relative to the drawer body (1). 35 40 45 50 55

Patentansprüche

1. Teilesatz zum Herstellen einer Schublade, mit einem Schubladenkörper (1), einer Frontplatte (2) zur Befestigung an der Vorderseite des Schubladenkörpers (1), und einem Mittel zur lösbaren Halterung der Platte (2) unmittelbar benachbart zur Vorderseite des Schubladen-

- körpers (1), wobei das Halterungsmittel einen mit der Frontplatte verbundenen Vorsprung (3, 34) umfaßt, der ein Teil (26, 55) hat, welches relativ zu dem übrigen Teil des Vorsprungs zwischen einer ersten und einer zweiten Stellung verschieblich ist, die dem Lösen und Verriegeln der Frontplatte (2) bezüglich des Schubladenkörpers (1) entsprechen, wenn die Frontplatte an der Vorderseite des Schubladenkörpers gehalten ist, wobei das mit der Frontplatte (2) verbundene Halterungsmittel einen Zwischenraum (28, 56) benachbart zu dem beweglichen Teil (26, 55) festlegt, und wobei der Teilesatz weiterhin ein auf dem Schubladenkörper befestigbares Element (4, 35) umfaßt, welches einen Einsatz (17, 50) aufweist, welches in den Zwischenraum (28, 56) hineingeht und das bewegliche Teil (26, 55) des mit der Frontplatte verbundenen Halterungsmittels in die zweite Stellung drückt, in der die Frontplatte (2) in ihrer richtigen Stellung bezüglich des Schubladenkörpers (1) verriegelt ist.
2. Teilesatz nach Anspruch 1, dadurch gekennzeichnet, daß das lösbare Halterungsmittel einen sich rückseitig von der Frontplatte (2) erstreckenden Vorsprung (3, 34) und eine an der Vorderseite des Schubladenkörpers (1) ausgebildete Aussparung aufweist, wobei die Aussparung (36) eine Öffnung (41) festlegt, durch die der Vorsprung (34) in die Aussparung eingeführt werden kann.
3. Teilesatz nach Anspruch 2, dadurch gekennzeichnet, daß sich die Aussparung (36) im wesentlichen senkrecht erstreckt und an der Stirnseite einer Seitenwand (6, 33) des Schubladenkörpers (1) ausgebildet ist, wobei die Aussparung (36) eine in die Stirnseite der Aussparung hinein verlaufende Öffnung (41) aufweist, durch die ein Teil des Vorsprungs (3, 34) vorsteht, wenn der Vorsprung (3, 34) in die Aussparung eingesetzt ist.
4. Teilesatz nach Anspruch 3, dadurch gekennzeichnet, daß der Vorsprung (3, 34) die Form eines Verbindungselements mit einem vorderen Abschnitt (21, 52) und einem hinteren Abschnitt (22, 53) hat, wobei der vordere Abschnitt (21, 52) vollständig innerhalb der Aussparung (36) aufgenommen ist und der hintere Abschnitt (22, 53) durch die Öffnung (41) vorsteht und mit der Rückseite der Frontplatte verbunden ist.
5. Teilesatz nach Anspruch 4, dadurch gekennzeichnet, daß vordere Abschnitt (21, 52) des Verbindungselements (3, 34) ein Mittelteil (26, 55) verminderter Dicke aufweist und der Zwischenraum (28, 56) zwischen diesem Mittelteil (26, 55) und dem hinteren Abschnitt (22, 53) des Verbindungselements festgelegt ist, wobei das Mittelteil (26, 55) den besagten Teil des Halterungsmittels bildet, der zwischen der ersten und zweiten Stellung beweglich ist.
6. Teilesatz nach Anspruch 5, dadurch gekennzeichnet, daß das Mittelteil (26, 55) des vorderen Abschnitts (21, 52) des Verbindungselements mit dem übrigen Teil des vorderen Abschnitts durch relativ dünne, flexible Materialstege (29, 57) verbunden ist.
7. Teilesatz nach Anspruch 6, dadurch gekennzeichnet, daß das Element (4, 35) auf dem Schubladenkörper befestigbar ist, so daß sich der Einsatz (17, 50) von einer Seite des Schubladenkörpers (1) in einer im wesentlichen zu einer Seitenwand (6) des Schubladenkörpers (1) senkrechten Richtung in den Zwischenraum (28, 56) hinein erstreckt, wobei die Dicke des Einsatzes (17, 50) größer als die Tiefe des Zwischenraums (28, 56) zwischen dem Mittelteil (26, 55) und dem hinteren Abschnitt (22, 53) des Verbindungselements ist, so daß sich die dünnen Materialstege (29, 57) beim Einsetzen des Einsatzes (17, 50) in den Zwischenraum (28, 56) durchbiegen und das Mittelteil (26, 55) des vorderen Abschnitts (21, 52) des Verbindungselements (3, 34) vom hinteren Abschnitt (22, 53) wegbewegt wird, so daß es über den übrigen Teil des vorderen Abschnitts (21, 53) des Verbindungselements (3, 34) hinaus vorsteht und sich zwangsweise bis zum Zusammenwirken mit einer Wand (11, 39) der an der Stirnseite des Schubladenkörpers (1) ausgebildeten Aussparung bewegt, wenn das Verbindungselement (3, 34) innerhalb dieser Aussparung aufgenommen ist, wodurch die Frontplatte (2) in ihrer richtigen Stellung bezüglich des Schubladenkörpers (1) verriegelt ist.
8. Teilesatz nach Anspruch 7, dadurch gekennzeichnet, daß das Element (4, 35) eine Deckplatte (16) umfaßt, die innerhalb einer in einer Seitenwand des Schubladenkörpers (1) ausgebildeten, flachen Aussparung (13, 45) aufnehmbar ist, wobei die Deckplatte (16) den Einsatz (17, 50) trägt, der in den Zwischenraum (28, 56) zwischen dem Mittelteil (26, 55) des vorderen Abschnitts (21, 52) des Verbindungselements und dem hinteren Abschnitt des Verbindungselements einzuführen ist, und wobei die flache Aussparung (13, 45) in der Seitenwand eine Öffnung (14, 46) aufweist, durch die der

Einsatz (17, 50) hindurchgeht, wenn er in den Zwischenraum (28, 56) im Verbindungselement (3, 34) einzuführen ist.

9. Teilesatz nach Anspruch 7 oder 8, dadurch gekennzeichnet, daß der Mittelteil (26, 55) des vorderen Abschnitts (21, 52) des Verbindungselements (3, 34) und die besagte Wand (11, 39) der Aussparung miteinander zusammenwirkende Gruppen von Zähnen (12, 31; 47, 58) festlegen, die miteinander in Eingriff gebracht werden, wenn der Mittelteil (26, 55) zwangsweise in Zusammenwirken mit der Wand (11, 37) gebracht wird, wobei die Gruppen von Zähnen (12, 13; 47, 58) dazu dienen, eine Bewegung der Frontplatte (2) relativ zum Schubladenkörper (1) in einer oder mehreren Richtungen zu verhindern. 5 10
10. Verfahren zum Herstellen einer Schublade aus einem Teilesatz nach einem der Ansprüche 1 bis 9, welches die Schritte umfaßt, einen Vorsprung (3, 34) mit der Rückseite der Frontplatte zu verbinden und den Vorsprung (3, 34) in eine an der Vorderseite des Schubladenkörpers (1) ausgebildete Aussparung einzusetzen, so daß die Frontplatte (2) unmittelbar benachbart zur Vorderseite des Schubladenkörpers (1) gehalten ist; Befestigen eines Elements (4, 35), welches einen Einsatz (17, 50) hat, am Schubladenkörper (1), so daß der Einsatz (17, 50) einen Teil (26, 55) des Vorsprungs (3, 34) erfaßt, und Bewegen dieses Teils (26, 55) des Vorsprungs aus einer ersten Position, in der sich die Frontplatte (2) relativ zum Schubladenkörper (1) bewegen kann, in eine zweite Stellung, in der der Teil (26, 55) des Vorsprungs (3, 34) die Frontplatte (2) in ihrer richtigen Stellung bezüglich des Schubladenkörpers (1) verriegelt. 20 25 30 35 40

Revendications

1. Jeu de pièces pour former un tiroir, le jeu de pièces comprenant un casier de tiroir (1), un panneau de façade (2) apte à être monté à l'avant du casier du tiroir (1) et des moyens pour retenir de manière amovible le panneau (2) adjacent à l'avant du casier de tiroir (1), les moyens de fixation comprenant un élément en saillie (3, 34) associé au panneau de façade, l'élément en saillie ayant une partie (26, 55) qui est mobile par rapport au reste de la partie en saillie entre une première et une seconde positions correspondant au dégagement et au blocage du panneau de façade (2) par rapport au casier de tiroir (1) quand le panneau de façade est monté à l'avant du casier de tiroir, les moyens de fixation associés au panneau de façade (2) définissant un espace (28, 56) adjacent à la partie mobile (26, 55), le jeu de pièce comprenant en outre un élément (4, 35) apte à être fixé sur le casier de tiroir, l'élément (4, 35) ayant une pièce à insérer (17, 50) qui pénètre à l'intérieur de l'espace (28, 56) et sollicite la partie mobile (26, 55) des moyens de fixation associés au panneau de façade vers la seconde position dans laquelle le panneau de façade (2) est verrouillé en position par rapport au casier de tiroir (1). 5 10
2. Jeu de pièces selon la revendication 1, dans lequel les moyens de fixation amovibles comprennent une partie en saillie (3, 34) s'étendant vers l'arrière du panneau de façade (2) et une rainure formée à l'avant du casier de tiroir (1), la rainure (36) définissant une ouverture (41) à travers laquelle la partie en saillie (34) peut être introduite dans la rainure. 15 20
3. Jeu de pièces selon la revendication 2, dans lequel la rainure (36) est orientée sensiblement à la verticale et formée à l'avant d'une paroi latérale (6, 33) du casier de tiroir (1), la rainure (36) ayant une ouverture (41) s'étendant dans l'avant de la rainure, à travers laquelle une partie de l'élément en saillie (3, 34) dépasse en saillie quand l'élément en saillie (3, 34) est introduit dans la rainure. 25 30 35 40
4. Jeu de pièces selon la revendication 3, dans lequel l'élément en saillie (3, 34) prend la forme d'un élément connecteur comportant une partie avant (21, 52) et une partie arrière (22, 53), la partie avant (21, 52) se logeant complètement à l'intérieur de la rainure (36) et la partie arrière (22, 53) faisant saillie à travers ladite ouverture (41) et étant reliée à la surface arrière du panneau de façade. 35 40
5. Jeu de pièces selon la revendication 4, dans lequel la partie avant (21, 52) de l'élément de connecteur (3, 34) comprend une région centrale (26, 55) d'épaisseur réduite, ledit espace (28, 56) étant défini entre ladite région centrale (26, 55) et la partie arrière (22, 53) de l'élément de connecteur, la région centrale (26, 55) constituant ladite partie des moyens de fixation, mobile entre lesdites première et seconde positions. 45 50 55
6. Jeu de pièces selon la revendication 5, dans lequel la région centrale (26, 55) de la partie avant (21, 52) de l'élément de connecteur est reliée au reste de la partie avant par des bandes souples relativement minces de maté-

riau (29, 57).

7. Jeu de pièces selon la revendication 6, dans lequel l'élément (4, 35) peut être monté sur le casier de tiroir de manière que la pièce à insérer (17, 50) pénètre dans l'espace (28, 56) à partir d'un côté du casier de tiroir (1) dans une direction sensiblement perpendiculaire à une paroi latérale (6) du casier de tiroir (1), l'épaisseur de la pièce à insérer (17, 50) étant supérieure à la profondeur de l'espace (28, 56) entre la région centrale (26, 55) et la partie arrière (22, 53) de l'élément de connecteur de façon, au moment de l'introduction de la pièce à insérer (17, 50) dans l'espace (28, 56), que lesdites bandes minces de matériau (29, 57) fléchissent, et que la région centrale (26, 55) de la partie avant (21, 52) de l'élément de connecteur (3, 34) soit éloignée de la partie arrière (22, 53) afin de faire saillie au-delà du reste de la partie avant (21, 52) de l'élément de connecteur (3, 34), et soit déplacée par sollicitation jusqu'à venir en prise avec une paroi (11, 39) de la rainure formée à l'avant du casier de tiroir (1) quand l'élément de connecteur (3, 34) est logé à l'intérieur de cette rainure, en verrouillant ainsi le panneau de façade (2) en position par rapport au casier de tiroir (1).

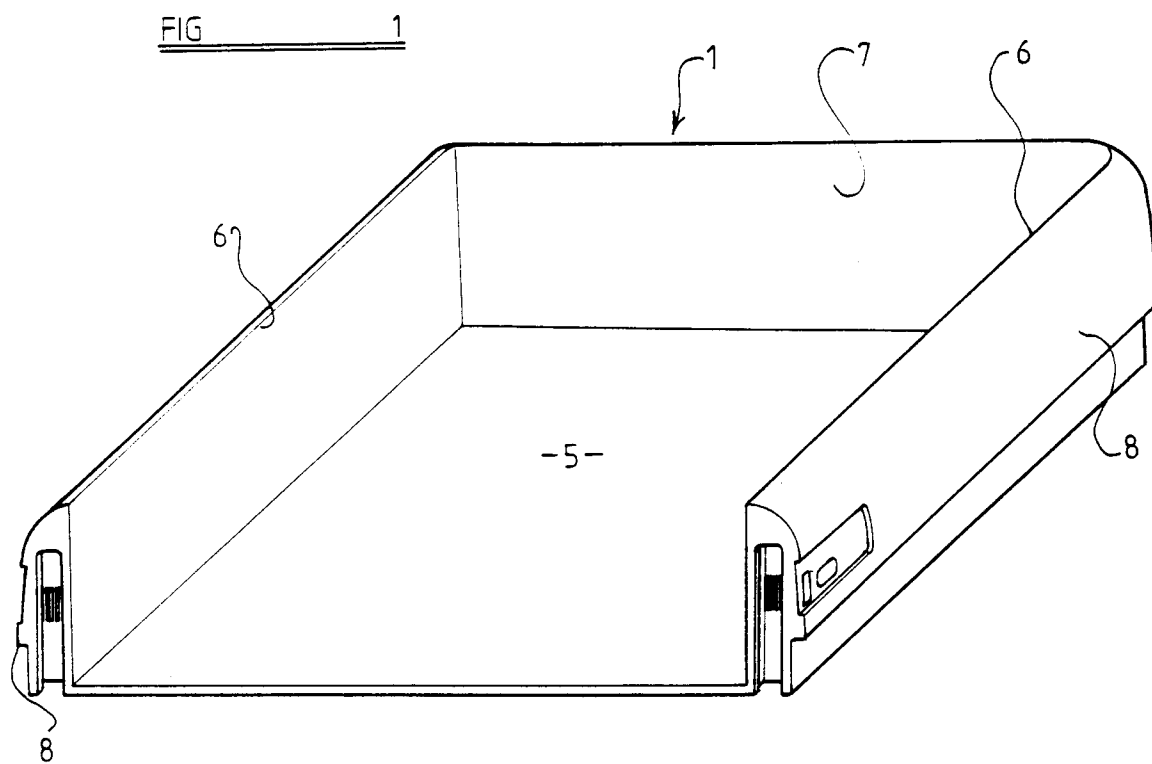
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8. Jeu de pièces selon la revendication 7, dans lequel l'élément (4, 35) comprend une plaque de recouvrement (16) agencable à l'intérieur d'un évidement peu profond (13, 45) formé dans une paroi latérale du casier de tiroir (1), la plaque de recouvrement (16) portant la pièce à insérer (17, 50) qui peut être introduite dans l'espace (28, 56) entre la région centrale (26, 55) de la partie avant (21, 52) de l'élément de connecteur et la partie arrière de l'élément de connecteur, l'évidement peu profond (13, 45) formé dans la paroi latérale présentant une ouverture (14, 46) à travers laquelle passe la pièce à insérer (17, 50) quand elle doit être introduite dans l'espace (28, 56) de l'élément de connecteur (3, 34).

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9. Jeu de pièces selon la revendication 7 ou 8, dans lequel la région centrale (26, 55) de la partie avant (21, 52) de l'élément de connecteur (3, 34) et ladite paroi (11, 39) de rainure définissent des jeux de dents (12, 31 ; 47, 58) qui coopèrent, lesquelles sont mises en prise quand la région centrale (26, 55) est forcée à venir en prise avec la paroi (11, 37), les jeux de dents (12, 13 ; 47, 58) servant à empêcher un mouvement du panneau de façade (2) par rapport au casier de tiroir (1) suivant une ou

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plusieurs directions.

10. Procédé de formation d'un tiroir à partir d'un jeu de pièces selon l'une quelconque des revendications 1 à 9, ce procédé comprenant les étapes comprenant la connexion d'une partie en saillie (3, 34) sur la surface arrière du panneau de façade et l'insertion de ladite partie en saillie (3, 34) dans une rainure formée à l'avant du casier de tiroir (1) de manière que le panneau (2) soit maintenu adjacent à l'avant du casier de tiroir (1) ; le montage d'un élément (4, 35) avec une pièce à insérer (17, 50) sur le casier de tiroir (1) de manière que la pièce à insérer (17, 50) vienne en prise avec une partie (26, 55) de l'élément en saillie (3, 34) et déplace cette partie (26, 55) de l'élément en saillie, entre une première position dans laquelle le panneau de façade (2) peut être déplacé par rapport au casier de tiroir (1), et une seconde position dans laquelle la partie (26, 55) de l'élément en saillie (3, 34) verrouille le panneau de façade (2) en position par rapport au casier de tiroir (1).



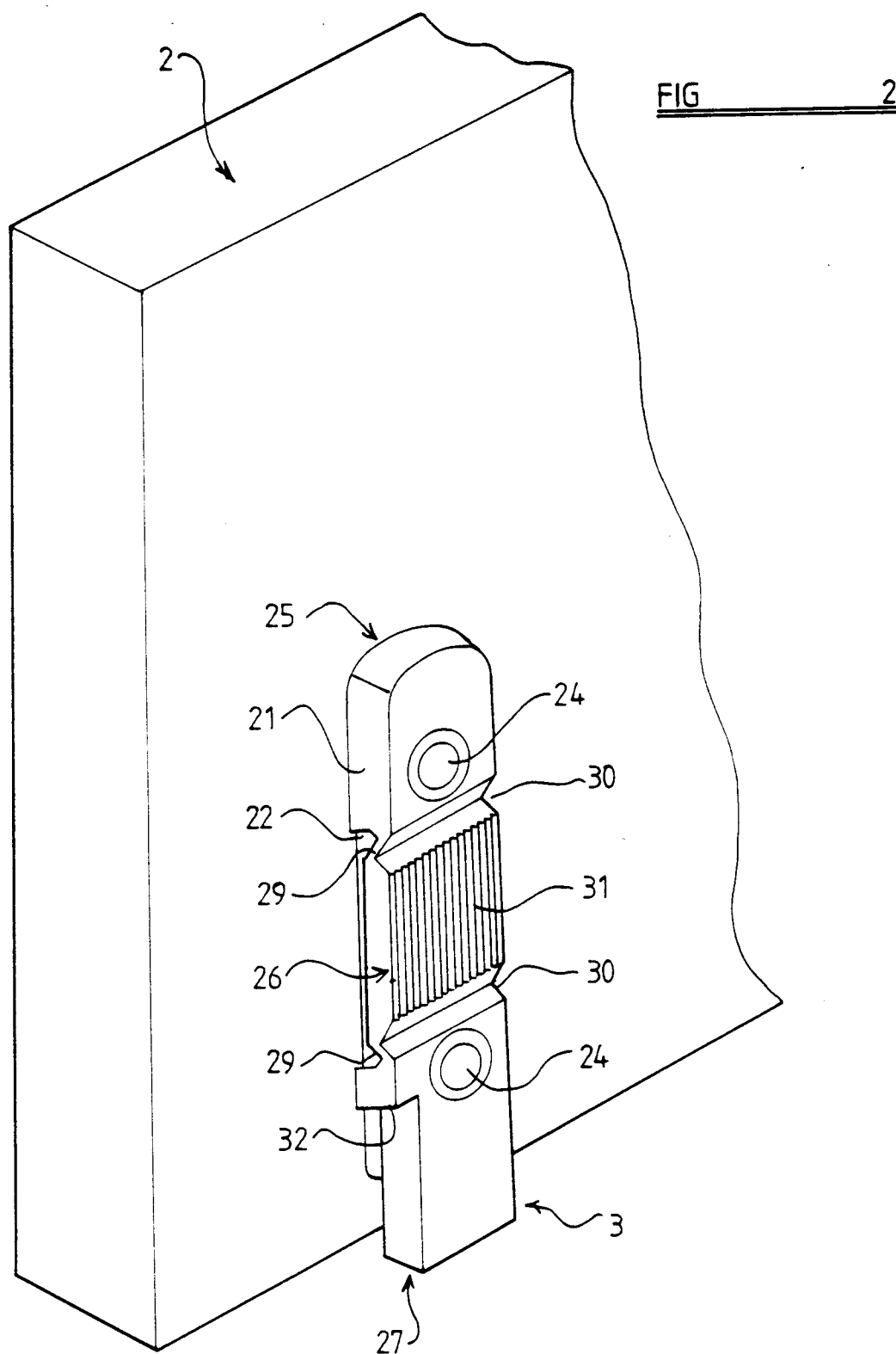


FIG 4

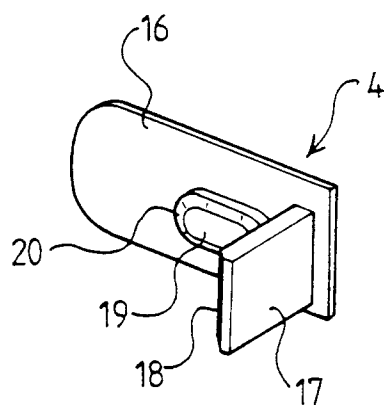
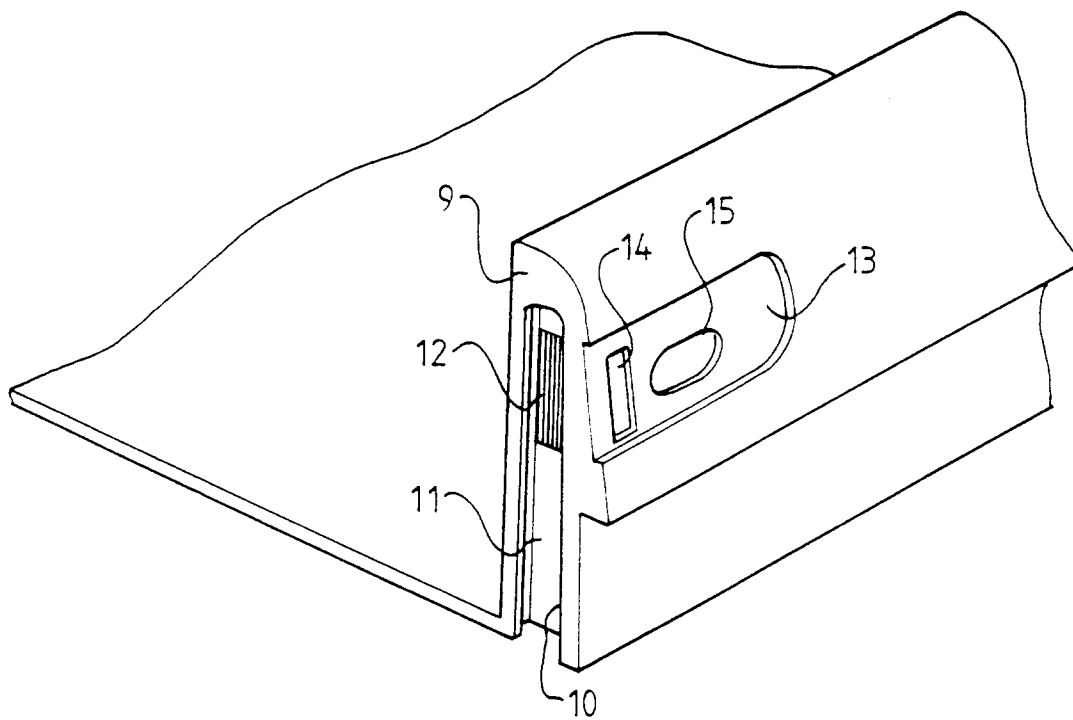


FIG 3

FIG 5

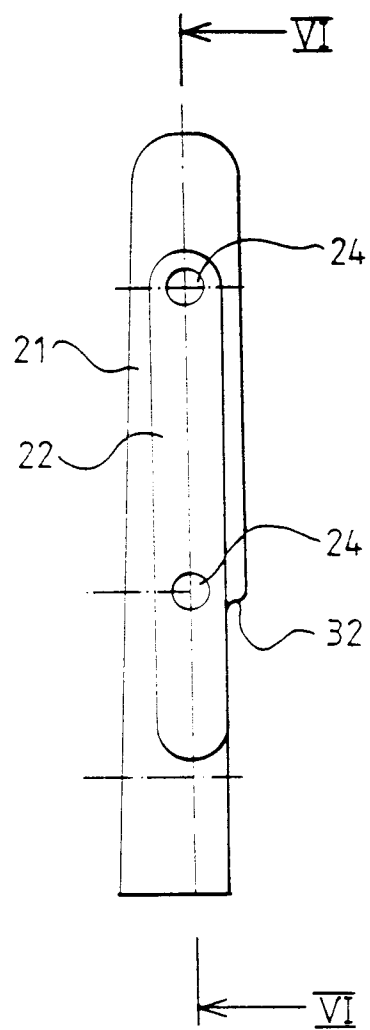
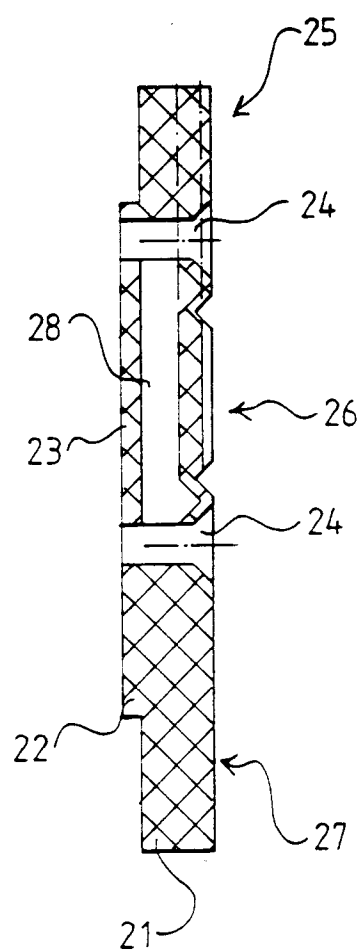
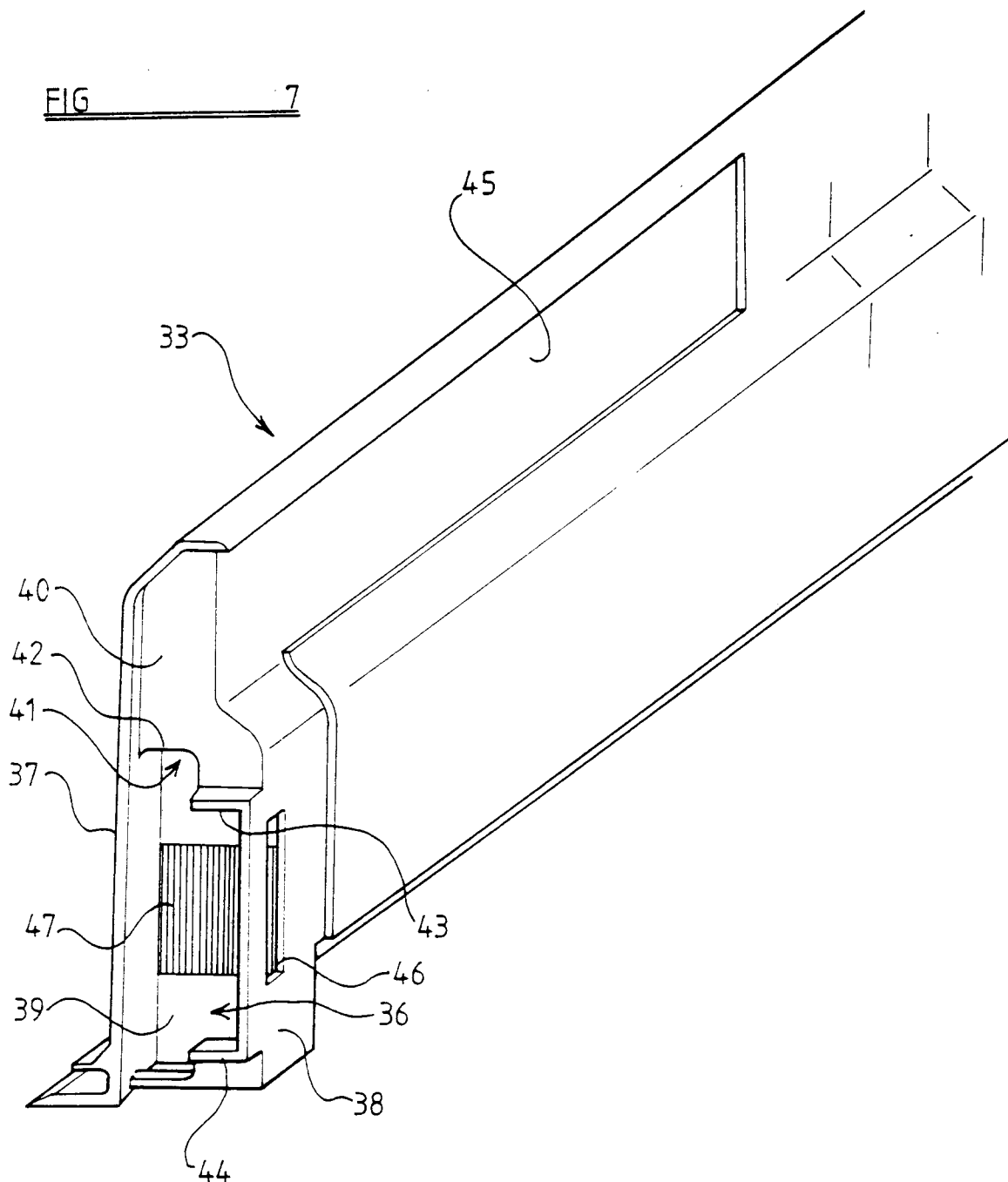
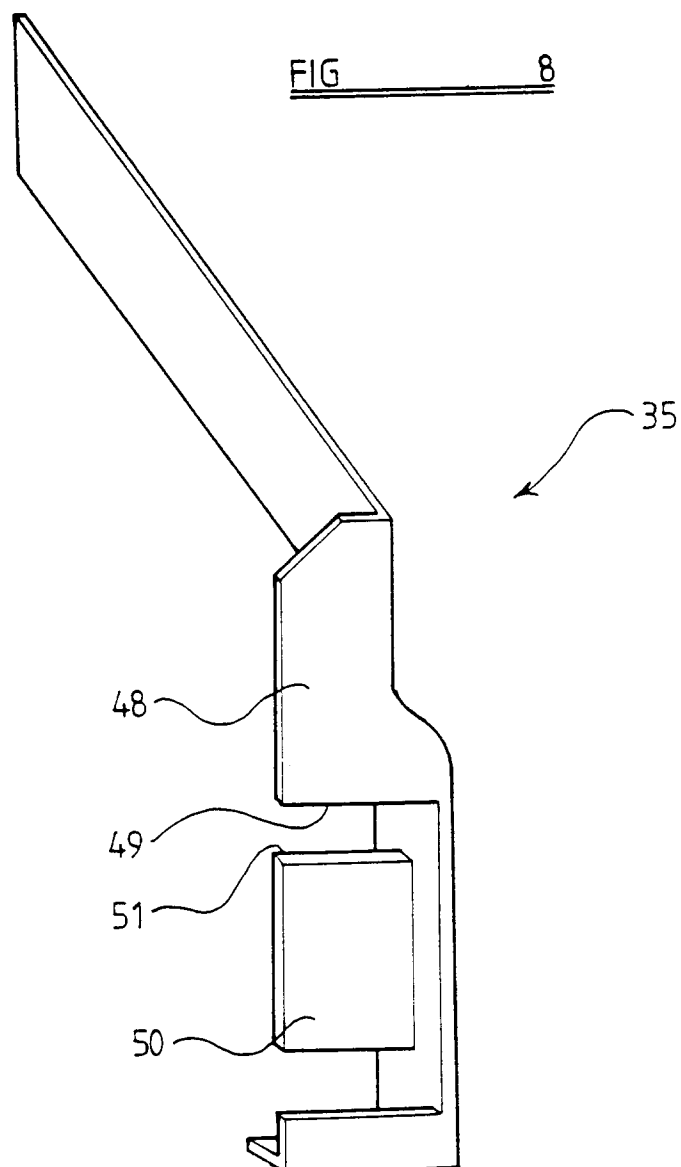


FIG 6







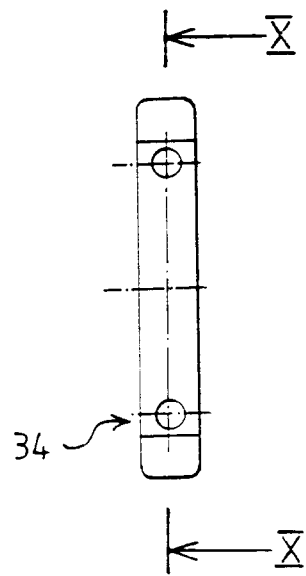


FIG 9

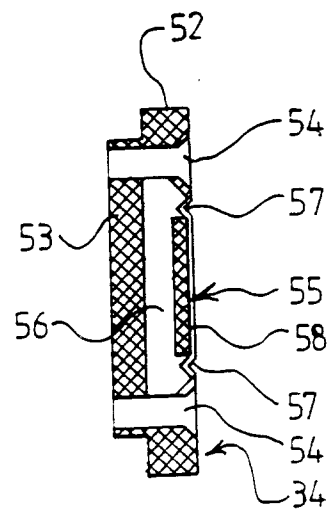


FIG 10