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⑴ Applicant: **F.C. Brown (Steel Equipment) Limited,**
Queens Road, Bisley Surrey GU24 9BJ (GB)

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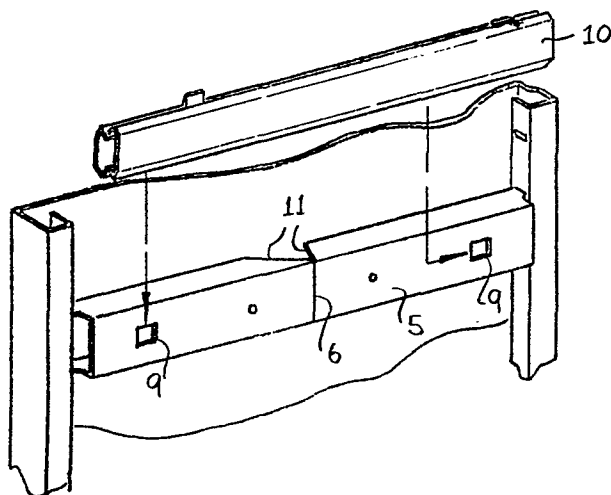
⑹ Inventor: **Flynn, Christopher John, Laburnum**
Cottage 39 Mincing Lane, Chobham Surrey (GB)

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⑺ Representative: **Bannerman, David Gardner et al,**
Withers & Rogers 4 Dyer's Buildings Holborn, London,
EC1N 2JT (GB)

⑸ **Furniture element and furniture incorporating it.**

⑹ A hinged constructional element to fit between spaced surfaces of an item of furniture, especially office furniture, and which can be inserted between the surfaces by folding it about the hinge, fixed in position by straightening it, and then locked against subsequent folding. Also an item of furniture, especially office storage furniture, incorporating at least one such element.



FURNITURE ELEMENT & FURNITURE INCORPORATING IT

This invention relates to improvements in and relating to elements used in the construction of furniture, and is more particularly but not exclusively related to such elements for office storage furniture, e.g. cupboards and filing cabinets. it also
5 concerns furniture constructed or assembled using such elements.

In the assembly of furniture, it is frequently necessary to fit a constructional element in such
10 a way that it fits into a space between two surfaces which are fixed and spaced apart. Especially in the construction of office storage furniture, such an element must often be capable of being fitted in one of a number of alternative positions, depending on the
15 precise use to which the article of furniture concerned is to be put. For example, a horizontal element for supporting a shelf or drawer or other internal storage fitting must often be capable of being fitted between two vertical spaced supports at a variety
20 of different levels, depending on the number, spacing or size of the internal fittings that are to be incorporated. This horizontal element may for example carry a suspension slide, from which a storage fitting such as a roll-out filing frame, roll-out shelf, or roll-out

drawer may be suspended.

With conventional constructions, it is difficult to provide an element which can exactly fit into a space between two members, and which can at the same
5 time be easily and quickly fixed without special tools in one of a number of alternative positions.

According to this invention we therefore provide a constructional element for an article of furniture to fit between spaced surfaces
10 thereof, the element having fixing means at opposite ends to enable it to be attached to the two surfaces, a hinge between these two ends so that by folding the element about the hinge the distance between the fixing means can be altered, and means enabling
15 the element to be locked against hingeing when the fixing means are a desired distance apart.

We also provide an article of furniture assembled using one or more of such constructional elements. The element, which may be an elongated beam of channel cross-section, is
20 preferably provided with fixing lugs projecting from its ends and which can fit into corresponding slots on the surfaces of the two members between which it is to fit. The hinge is preferably at about the centre of the beam, and enables the beam to be at least partially folded from a configuration
25 in which it is straight. The means enabling the beam to be locked against hingeing are preferably attachment means, at least one on either side of the hinge, to enable

a rigid member to be attached to the said element so that it lies against it and locks it against hingeing. These attachments may, for example, be holes in one face of the member, to receive fixing lugs or the like on the rigid member.

5 The rigid member may also serve as a functional member of the article of furniture. For example, it may be a slide for a drawer or a filing frame.

 We also provide an article of furniture, especially an article of office furniture, incorporating at least one element as defined above and fitted into a space between two other members.

 An item of office furniture (i.e. a storage cupboard) embodying the invention will now be described by way of example and with reference to the accompanying drawings in which:

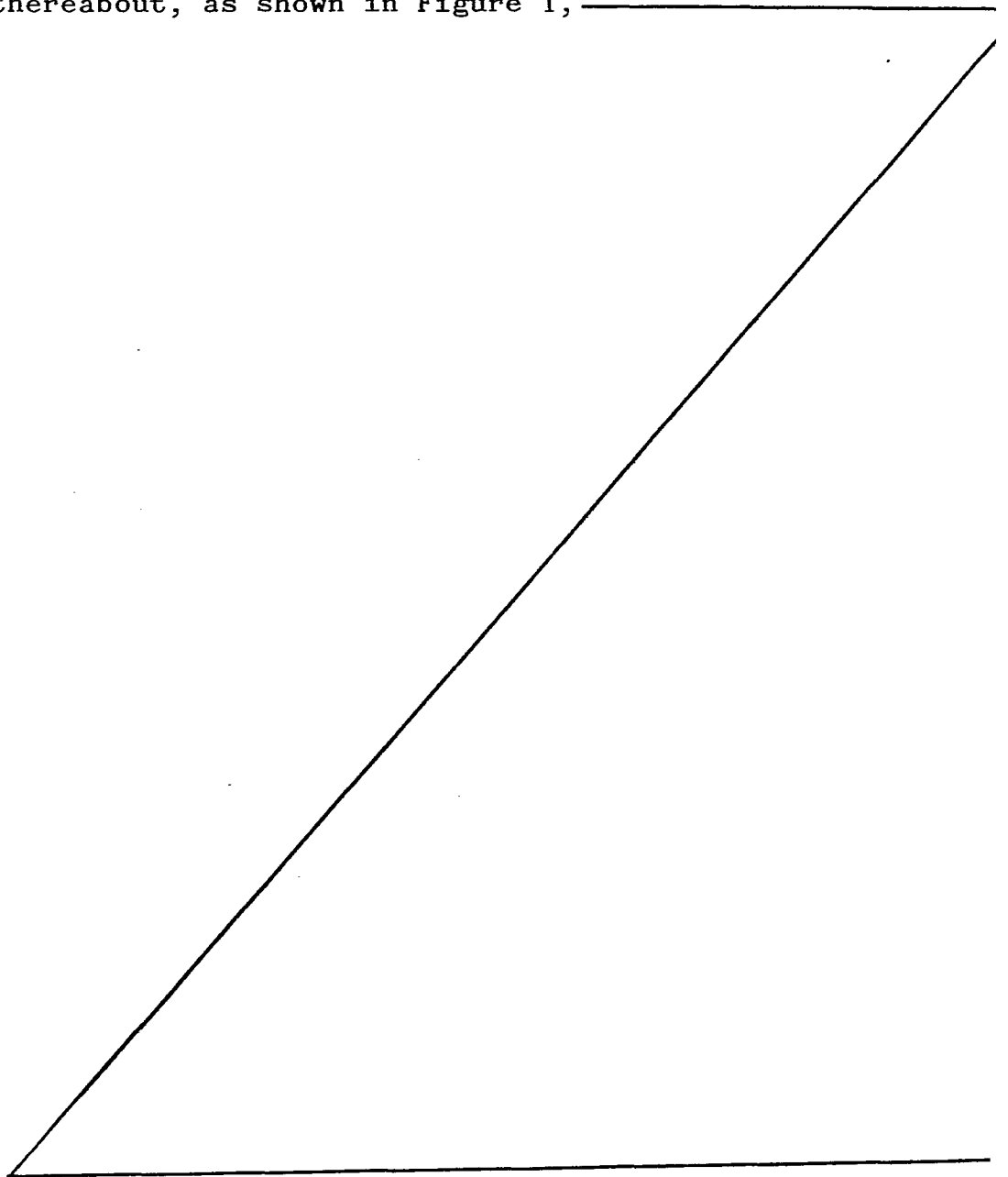
 Figure 1 is a perspective view of the constructional element in accordance with the invention in a part-folded condition and a wall portion of the article of furniture to which it is about to be fitted.

 Figure 2 shows in perspective the same element fitted to the same article of furniture, and a rigid member about to be fitted to the element; and

20 Figure 3 shows in perspective the same element, article of furniture, and rigid member, all assembled together.

 A storage cupboard 1 includes a side wall panel 2 provided with end flanges 3, 4 forming spaced-apart vertical members. The space between these members 3, 4 can be spanned by a hinged beam 5, which is the constructional element of the present invention. This beam 5, when fitted, is arranged to support a suspension slide 10 which can

carry out a roll-out drawer, shelf, or filing frame. The beam 5 has a front wall hinged along hinge line 6, and is provided at each end with a pair of vertically-spaced lugs and parallel top and bottom walls cut away at 11 adjacent to the hinge line to permit limited hingeing thereabout, as shown in Figure 1,



which lugs can fit into correspondingly-spaced slots 8 in the vertical members 3 and 4. These vertical members include a row of such slots 8 evenly spaced apart so that each end of the beam 5 can be fixed to any desired pair of adjacent slots and so can be fixed between the vertical members 3 and 4 at a variety of different heights, to suit the exact use to which the cupboard is to be put.

The suspension slide 10 includes a pair of spaced-apart projecting lugs having downwardly hooked ends (not shown) and the beam 5 has on its front face two corresponding spaced apart openings 9 into which these lugs can be fitted.

In use, the beam 5 is fitted in a horizontal position between the vertical members 3 and 4, by folding it about the hinge line 6 to the configuration shown in Figure 1 so that the overall length of the beam is shortened, thereby allowing the beam, including the projecting lugs 7, to be inserted between the members 3 and 4. The beam 5 is positioned so that the lugs 7 are aligned with the desired holes in the vertical members 3 and 4, and then straightened to the configuration shown in Figure 2 so that the lugs become inserted into the holes. The suspension slide 10 is then fitted to the beam 5 in the manner shown in Figure 3, the hooked lugs hooking into the openings 9 in the beam, and, being rigid, prevents any subsequent folding of the beam 5 about the hinge line 6, so that the beam 5 remains firmly fixed in the desired position

between the vertical members 3 and 4. The suspension slide 10 thus constitutes the rigid element mentioned above.

The opposite side wall of the cupboard 1 is a mirror-
5 image of that illustrated and a second beam 5 carrying
a second suspension slide 10 is fitted to that side
wall and at the same height as that described above.
These suspension slides are of conventional type and
a fitting such as a roll-out fitting frame, shelf,
10 or drawer can be fitted in known manner to them.

In order to change the position of the beams 5,
for example if a different configuration of fittings
is to be incorporated into the cupboard, each suspension
slide 10 is disconnected from its assembled beam 5
15 so that the beam can then be folded again about the
hinge line 6. Folding of the beam in this way enables
the lugs 7 to be withdrawn from the holes 8, and the
beam can then be moved vertically and the lugs re-
fitted in different holes at the desired new height.
20 The beam is then re-straightened and the suspension
slide 10 re-fitted.

CLAIMS

1. A constructional element for an article of furniture to fit between spaced surfaces thereof, characterised in that it has fixing means at opposite ends
5 to enable it to be attached to the two surfaces, a hinge between these two ends so that by folding the element about the hinge the distance between the fixing means can be altered, and means enabling the element to be locked against hingeing when the fixing means are at a
10 desired distance apart.

2. A constructional element according to claim 1, characterised in that it is in the form of an elongated beam of channel cross-section having two spaced parallel walls spanned by a hinged transverse wall, at least one
15 of the parallel walls being cut away in the vicinity of the hinge to permit folding of the beam about the hinge, the beam being straight when the fixing means are at the desired distance apart.

3. A constructional element according to claim 1 or claim 2, characterised in that the fixing means
20 comprises at least one lug extending from each end of the beam.

4. A constructional element according to claim 2, characterised in that the fixing means comprises a pair
25 of spaced lugs extending from each end of the beam.

5. A constructional element according to any preceding claim, characterised in that the means enabling the element to be locked against hingeing comprises at least a pair of aligned fastening means, one on each side
5 of the beam, to which a rigid element can be fixed.

6. A constructional element according to claim 5, wherein each fastening means comprises an opening into which lugs of the rigid element can engage.

7. An assembly, comprising a constructional element
10 according to claim 5 or 6, and a rigid element in the form of a suspension slide having fastening means to interengage with the fastening means on the constructional element.

8. An article of storage furniture having spaced
15 apart side walls between which a fitment is to be housed, wherein each side wall is provided with a pair of inwardly-directed vertical flanges and each flange has an internal vertical row of fixing holes, characterised by a constructional element having at least one fixing lug
20 extending from each end of the beam, in that the beam is hinged to permit it to be folded from a configuration in which it is straight, and in that the beam has means enabling it to be locked in said straight configuration with the lugs engaged in the fixing holes in the flanges.

9. An article of storage furniture according to claim 8, characterised in that the constructional elements associated with the two side walls are fixed at the same height and are locked in the straight configuration by rigid elements in the form of suspension slides between
5 which a furniture storage fitting can be supported.

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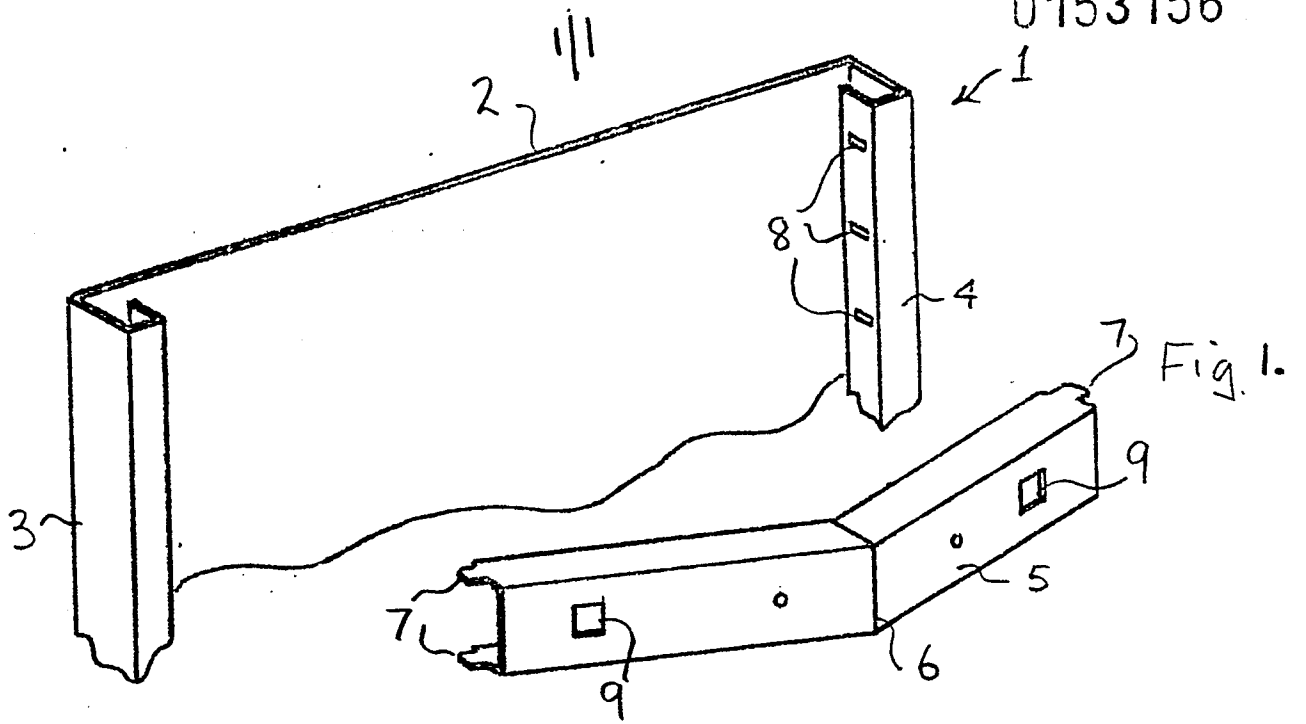


Fig. 2.

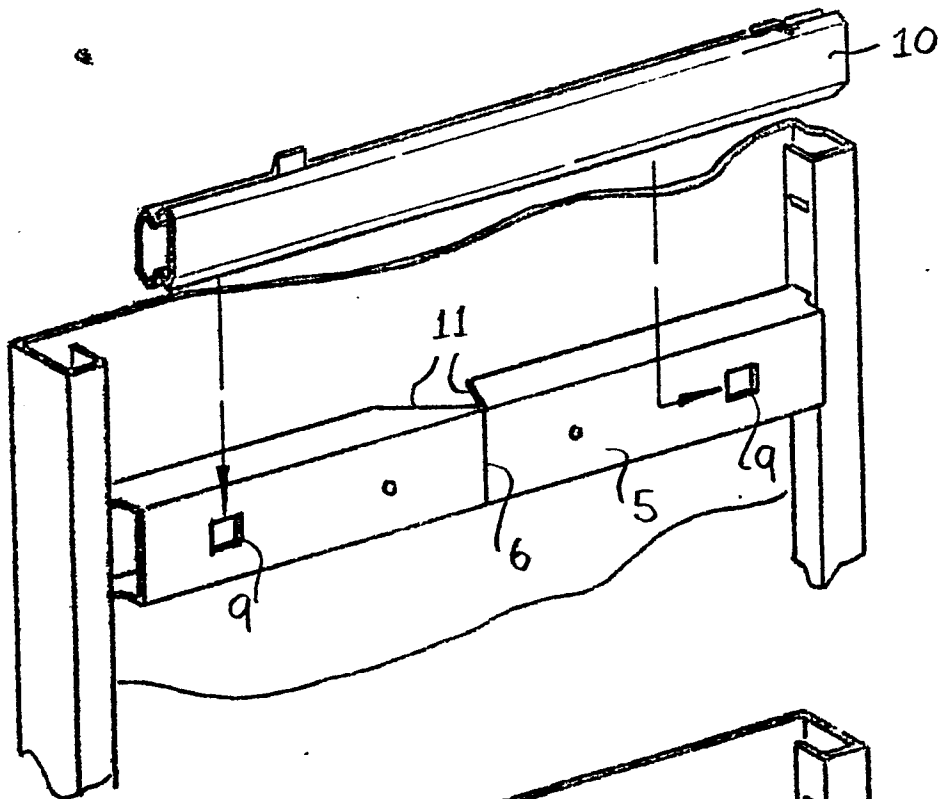


Fig. 3.

