

PATENT SPECIFICATION

(11) 1 600 990

1 600 990

- (21) Application No. 48118/77 (22) Filed 18 Nov. 1977
(23) Complete Specification Filed 15 May 1978
(44) Complete Specification Published 21 Oct. 1981
(51) INT. CL.³ E04B 2/74
(52) Index at Acceptance
E1D 2047 364 506 605 650 672 LAS
(72) Inventor: GEOFFREY BALLANTYNE ASHTON

(19)



(54) SECTIONAL SCREENS

(71) We, ASHELWOOD PRODUCTS PTY. LTD., a company incorporated under the laws of the State of South Australia of: 20 Selby Street, Adelaide, State of South Australia, Commonwealth of Australia, (and formerly of 138 Sturt Street, Adelaide) do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:-

This invention relates to sectional screens and in particular it relates to screens of the type which can be used in buildings as temporary divisions and which can be arranged in various ways without necessarily forming permanent structures.

Briefly the invention comprises a series of panels which preferably comprise curved corner panels and straight panels of different width, the panels consisting of a frame and two outer walls secured thereon, between which walls preferably is placed insulation for sound deadening and possibly strengthening purposes, and these panels are joined together in use by clips which have on them a series of pins so arranged that the pins can engage in sockets in the upper surface of the panels for the purpose of joining adjacent panels together.

The panels can have any selected type of outer surface according to ornamentation or purpose required, and can have any suitable configuration along the lower edges which will ensure good seating on a floor, and may be provided with locating pins but normally these are not necessary because the panels are generally designed to be self-standing by utilising corner members in association with the straight wall members to give the necessary stability.

The clips which join the panels preferably comprise a plate having four pins projecting therefrom, one near each corner of a square plate and the upper surfaces of the panels

have at appropriate locations, such as at the edges, sockets which can be engaged by the pins on the clips and these sockets are preferably arranged in groups of four with the sockets corresponding to the position of the pins so that a clip can be placed at the junction of two panels with two of the pins projecting in to the sockets of one panel and the other two pins projecting into the sockets of a next panel.

The reason why four sockets are used in each panel at each locality where a junction is to be made is that the clips can be engaged on a panel by inserting two outermost pins in the two outermost sockets in the panel so that the clip then has two free pins which can engage in the outermost sockets of the next panel which is to be joined thereto, this ensuring a firm junction between the tops of the panels which also ensures that they remain correctly in line.

If however a third panel is to be joined at such a junction, which panel is disposed at right-angles to the other two panels, the two main panels are connected by one pin on the clip engaging in one of the outermost sockets of the one panel and the other pin engaging in the socket of the other panel and the two remaining pins can then be engaged in the two outermost sockets of the joining panel, but generally it is preferred to use two pins of a clip in engagement with each of the panels being joined and to use another locality on the panels to join another panel thereto at right angles, so that in each case two pins engage each panel to ensure the required rigidity and alignment.

The tops of the panels can have groups of sockets intermediate the ends.

The bottom edges of the panels can have apertures to similarly join the panels together by placing the clips on the floor with the pins upwardly projecting and the panels placed on them with the appropriate pins engaged in the apertures.

50

55

60

65

70

75

80

85

90

Thus the invention comprises a sectional screen for building dividers comprising screen panels and clips for said panels adapted to be joined together by said clips, each clip engaging two of the said panels, said panels comprising rigid members of generally rectangular form and arranged one to butt against another and to be joined at the junctions by pins fast with said clips engaging apertures in the edges of the panels, said panels optionally including curved as well as planar panels to achieve a stable sectional screen, at least the upper edge of each said panel having a plurality of apertures arranged therein, said apertures being arranged in adjacent pairs so that when two panels are butted together and joined by one clip having at least four pins projecting from one face of the clip two pins of the clip can engage a pair of apertures of one panel and two other pins of the clip can engage a pair of apertures of the other panel, whereby to hold the panels together in a fixed aligned relationship.

Preferably four apertures are positioned to define a square in the top edge of each panel adjacent to each end of the screen section, and the clip has four pins arranged to define a similar square, whereby two panels can be butted together in line and joined together by engaging the pins of the clip in the longitudinally outermost apertures on each panel, or can be butted together at right angles and joined together by engaging pins of the clip in two apertures along the longitudinal edge of one panel and other pins of the clip in the pairs of apertures in the longitudinally outermost apertures of the other panel.

In order that the invention can be more fully appreciated a preferred embodiment will be described with reference to the accompanying drawings in which:-

Figure 1 is a perspective view of the panels set up as a screen,

Figures 2, 3 and 4 show respectively a curved panel, a short panel and a long panel,

Figure 5 is an enlarged fragmentary view of the corner A (Figure 1) showing the sockets, and

Figure 6 is a perspective view of the joining clip.

The panels are designated 1, 2 and 3, the panels 1 being corner panels while panels 2 and 3 are a narrow and a wider planar panel respectively. The clip is designated 4.

The clip 4 has four pins 5 which are spaced to engage sockets 6 in various locations, the pins and sockets being equidistant so that any two pins along one side of the clip can engage any two sockets along an edge or side of a panel and so spaced that when two panels are abutted in any configuration the pins engage at least

one but preferably two sockets in each panel. All of the pins 5 of each clip 4 project in the same direction as one another from one face of the clip, the opposite face presenting a flat surface.

It will be realised from the foregoing that a modular panel construction is provided in which a series of panels can be joined together by the joining clips, and screens can thus be erected according to required configuration and can be rendered stable by using the curved corner members, or panels can be joined at the required locations to give the necessary stability.

It will of course be obvious that the clip could be varied to suit requirements and could have other than four pins, which are however the preferred number to cooperate with a plurality of holes in each of the panels to give the required lock. While pins projecting from the joining clip is a preferred method of joining it will be realised that the joining clips can be of different forms provided there is an interlock between the clip and each of the panels being joined.

WHAT WE CLAIM IS

1. A sectional screen for building dividers comprising screen panels and clips for said panels adapted to be joined together by said clips, each clip engaging two of the said panels, said panels comprising rigid members of generally rectangular form and arranged one to butt against another and to be joined at the junctions by pins fast with said clips engaging apertures in the edges of the panels, said panels optionally including curved as well as planar panels to achieve a stable sectional screen, at least the upper edge of each said panel having a plurality of apertures arranged therein, said apertures being arranged in adjacent pairs so that when two panels are butted together and joined by one clip having at least four pins projecting from one face of the clip, two pins of the clip can engage a pair of apertures of one panel and two other pins of the clip can engage a pair of apertures of the other panel, whereby to hold the panels together in a fixed aligned relationship.

2. A sectional screen according to claim 1, wherein four apertures are positioned to define a square in the top edge of each panel adjacent to each end of the screen section, and the clip has four pins arranged to define a similar square, whereby two panels can be butted together in line and joined together by engaging the pins of the clip in the longitudinally outermost apertures on each panel, or can be butted together at right angles and joined together by engaging pins of the clip in two apertures along the longitudinal edge of one panel and other pins of the clip in the pairs of apertures in the longitudinally outermost apertures of the other panel.



Thus the invention comprises a sectional screen for building dividers comprising screen panels and clips for said panels adapted to be joined together by said clips, each clip engaging two of the said panels, said panels comprising rigid members of generally rectangular form and arranged one to butt against another and to be joined at the junctions by pins fast with said clips engaging apertures in the edges of the panels, said panels optionally including curved as well as planar panels to achieve a stable sectional screen, at least the upper edge of each said panel having a plurality of apertures arranged therein, said apertures being arranged in adjacent pairs so that when two panels are butted together and joined by one clip having at least four pins projecting from one face of the clip two pins of the clip can engage a pair of apertures of one panel and two other pins of the clip can engage a pair of apertures of the other panel, whereby to hold the panels together in a fixed aligned relationship.

Preferably four apertures are positioned to define a square in the top edge of each panel adjacent to each end of the screen section, and the clip has four pins arranged to define a similar square, whereby two panels can be butted together in line and joined together by engaging the pins of the clip in the longitudinally outermost apertures on each panel, or can be butted together at right angles and joined together by engaging pins of the clip in two apertures along the longitudinal edge of one panel and other pins of the clip in the pairs of apertures in the longitudinally outermost apertures of the other panel.

In order that the invention can be more fully appreciated a preferred embodiment will be described with reference to the accompanying drawings in which:-

Figure 1 is a perspective view of the panels set up as a screen,

Figures 2, 3 and 4 show respectively a curved panel, a short panel and a long panel,

Figure 5 is an enlarged fragmentary view of the corner A (Figure 1) showing the sockets, and

Figure 6 is a perspective view of the joining clip.

The panels are designated 1, 2 and 3, the panels 1 being corner panels while panels 2 and 3 are a narrow and a wider planar panel respectively. The clip is designated 4.

The clip 4 has four pins 5 which are spaced to engage sockets 6 in various locations, the pins and sockets being equidistant so that any two pins along one side of the clip can engage any two sockets along an edge or side of a panel and so spaced that when two panels are abutted in any configuration the pins engage at least

one but preferably two sockets in each panel. All of the pins 5 of each clip 4 project in the same direction as one another from one face of the clip, the opposite face presenting a flat surface.

It will be realised from the foregoing that a modular panel construction is provided in which a series of panels can be joined together by the joining clips, and screens can thus be erected according to required configuration and can be rendered stable by using the curved corner members, or panels can be joined at the required locations to give the necessary stability.

It will of course be obvious that the clip could be varied to suit requirements and could have other than four pins, which are however the preferred number to cooperate with a plurality of holes in each of the panels to give the required lock. While pins projecting from the joining clip is a preferred method of joining it will be realised that the joining clips can be of different forms provided there is an interlock between the clip and each of the panels being joined.

WHAT WE CLAIM IS

1. A sectional screen for building dividers comprising screen panels and clips for said panels adapted to be joined together by said clips, each clip engaging two of the said panels, said panels comprising rigid members of generally rectangular form and arranged one to butt against another and to be joined at the junctions by pins fast with said clips engaging apertures in the edges of the panels, said panels optionally including curved as well as planar panels to achieve a stable sectional screen, at least the upper edge of each said panel having a plurality of apertures arranged therein, said apertures being arranged in adjacent pairs so that when two panels are butted together and joined by one clip having at least four pins projecting from one face of the clip, two pins of the clip can engage a pair of apertures of one panel and two other pins of the clip can engage a pair of apertures of the other panel, whereby to hold the panels together in a fixed aligned relationship.

2. A sectional screen according to claim 1, wherein four apertures are positioned to define a square in the top edge of each panel adjacent to each end of the screen section, and the clip has four pins arranged to define a similar square, whereby two panels can be butted together in line and joined together by engaging the pins of the clip in the longitudinally outermost apertures on each panel, or can be butted together at right angles and joined together by engaging pins of the clip in two apertures along the longitudinal edge of one panel and other pins of the clip in the pairs of apertures in the longitudinally outermost apertures of the other panel.



3. A sectional screen according to claim 1 or claim 2 having additional apertures in the top edge of the said panels arranged intermediate the ends of the said panels whereby to allow further panels to be butted against said panels intermediate the ends thereof.
4. A sectional screen according to any preceding claim wherein the base of the panels is apertured to allow clips with upwardly projecting pins to be used to join the panels together.
5. A sectional screen comprising panels and clips constructed substantially as described and illustrated with reference to the drawings.

MEWBURN ELLIS & CO.,
Chartered Patent Agents,
70-72 Chancery Lane,
London, WC2A 1AD.

Printed for Her Majesty's Stationery Office,
by Croydon Printing Company Limited, Croydon, Surrey, 1981.
Published by The Patent Office, 25 Southampton Buildings,
London, WC2A 1AY, from which copies may be obtained.