

(1) Publication number:

**0 311 436** A1

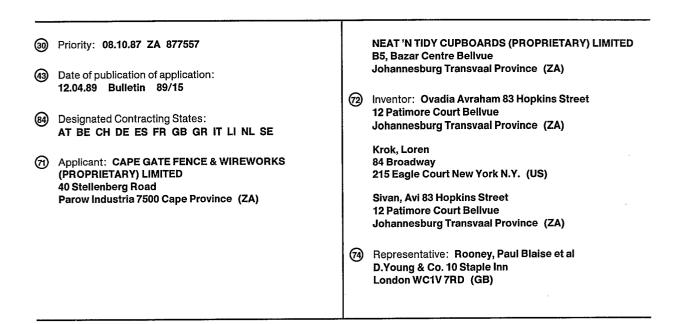
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# EUROPEAN PATENT APPLICATION

(2) Application number: 88309396.5

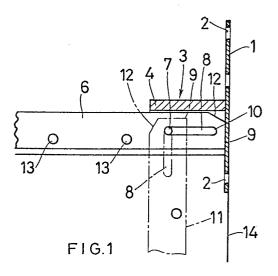
22 Date of filing: 07.10.88

(5) Int. Cl.4: A 47 G 25/06



### 54) Clothes hanger assembly.

 $\bigcirc$  A clothes hanger assembly for use in confined spaces wherein the hanger can be moved from horizontal to vertical positions and be retained in the horizontal position by a support bar (6, 20, 30, 40) engaging a wall bracket (1, 3) and hang freely from the bracket (1, 3) in the vertical position, the bar (6, 20, 30, 40) being pivotally and slidably connected to the bracket (1,3).



### Description

# CLOTHES HANGER ASSEMBLY

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This invention relates to a clothes hanger assembly, particularly, but not exclusively, suitable for use in confined spaces.

## BACKGROUND TO THE INVENTION

In many buildings, rooms are small and accordingly space is at a premium. Clothes which hang in a cupboard or in other areas take up a large amount of space and this is undesirable, particularly since clothes are generally only selected from the hanging area once or twice a day. One problem with trying to limit the hanging area is that when clothes are bunched or packed together the selection of individual items becomes difficult.

There is thus a need for a generally improved clothes hanger assembly which to some extent ameliorates the aforementioned problems.

According to the present invention there is provided a clothes hanger assembly, characterised by including a bar with means along its length to carry clothes thereon and a wall bracket securable to a substantially vertical support surface, with the bar being pivotally and slidably connected by one end thereof to the bracket such that the bar may be moved between first and second positions, the first position in which, in use, the bar is supported horizontally, and the second position in which the bar hangs substantially vertically with the free end thereof below the brackets.

Preferably the pivot is slidable in a slot formed in either the bracket or the bar, between first and second positions.

Conveniently the bracket provides a support member which supports the end of the bar horizontally in the first position of the pivot but allows the bar to pivot down to a vertical position about the pivot in the second position.

The support member on the bracket may be in the form of a socket open at the bottom.

The bar may have a plurality of support arms projecting at right angles to the bar axis and together defining a substantially horizontal plane when the bar is in its first position. The support arms may extend on both sides of the bar. The ends of the support arms remote from the bar may be angled to the arm axis to provide clothes retaining formations.

The bar may have a plurality of holes formed along the length thereof.

The bar may have any convenient cross-sectional shape and an inverted channel section bar is specifically envisaged.

For a better understanding of the present invention, and to show how the same may be carried into effect, reference will now be made to the accompanying drawings, in which:

Fig 1 shows a part sectional side elevation of a first embodiment of the invention;

Fig 2 shows a part sectional end elevation of the embodiment of Fig 1;

Fig 3 shows a plan view of the rod of the embodiment of Fig 1;

Fig 4 shows a cross-sectional side view of a second embodiment of the invention;

Fig 5 shows a cross-sectional end view of the embodiment of Fig 4;

Fig 6 shows a cross-sectional side view of the rod used in the embodiment of Fig 4;

Figs 7 and 9 show views of a third embodiment of the invention; and

Fig 10 shows a plan view of a fourth embodiment of the invention.

Referring initially to Figs 1 and 2, a clothes hanger assembly of the invention is shown comprising a wall bracket including a plate 1 having holes 2 through which suitable fasteners (not shown) will pass in order to secure the plate 1 to a suitable support surface such as a wall, inside of a cupboard door or the like. The wall plate 1 has a support member 3 projecting at right angles to the outer face thereof to complete the bracket. The support member 3 is in the form of an inverted channel having a web 4 and flanges 5.

A bar 6 is located between the flanges 5 and is held in position by a pivot pin 7 which passes through holes formed in the flanges 5 and through an elongate slot 8 in the bar 6. This pin 7 secures the bar 6 to the support member 3. The slot 8 extends along the axis of the bar 6 which is thus able to slide on the pin 7 between the two ends of the slot 8. The depth of the bar 6 above the slot 8 is such that the edge of the bar will locate slidably against the inner surface of the web 4.

In the first position of the bar 6 the end 9 of the bar 6 will be located up against the face of the wall plate 1. In this first position the web 4 of the support member 3 will prevent the bar 6 pivoting about the pin 7. Thus, in this position the bar 6 will be held horizontal.

In the second position of the bar 6 the bar 6 will have been slid over the pin 7 until the pin 7 is located in the end 10 of the slot 8. In this position the bar 6 can pivot about the pin 7 to a substantially vertical position as shown by dotted lines 11. In this position the end 9 of the bar 6 beyond the slot is made so that the bar 6 is able to pivot passed the underside of the web 4 without interference. An upper corner of the bar 6 may be bevelled as shown at numeral 12 to facilitate this pivoting.

The bar 6 may be of any suitable configuration and may have a plurality of fittings or formations affixed thereto to enable the bar 6 to carry articles of clothing. In the simplest form of the invention the bar 6 has a plurality of holes 13 formed transversely therethrough. These holes 13 will be adapted to receive the hooks of conventional wire or similar clothes hangers. It will be appreciated that clothes hangers located in the holes 13 will be held spaced apart when the bar 6 is in a horizontal position and thus articles of clothing located on these hangers may be easily selected from individual hangers. In the second position of the bar 6 as shown at numeral 11 the clothes hanging on the separate hangers will

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lie against each other and will be held up against the support surface 14 below the wall plate 1. It will be appreciated that only a minium of space will be utilized by the clothes hanger assembly when it is in this second position.

The bar 6 shown in Fig 3 has a plurality of support arms 15 fixed thereto. These support arms 15 extend to one side of the bar 6 at right angles to the length of the bar 6. In the first position of the bar 6 the arms 15 will together define a substantially horizontal plane and articles of clothing may be carried on these arms 15. The arms 15 will be suitable for holding such items of clothing as pairs of trousers and the like. The free ends 16 of the arms 15 have been bent to lie substantially parallel with the bar 6. These ends 16 will retain articles of clothing on the arms 15 as the bar 6 is moved between its first and second positions in use.

It is envisaged that other formations may be fixed to the bar 6. For example, support arms 15 may be fixed to both sides of the bar 6. Other formations specially designed to carry particular articles of clothing may be provided.

The clothes hanger assembly in Figs 4, 5 and 6 is of substantially the same configuration as that described above. However, in this embodiment the bar 20 is of inverted channel shaped configuration. Such a configuration will facilitate the fixing of different types of support arms on opposite sides of the bar 20. It is also envisaged that a channel shaped bar will be aesthetically more attractive and can be made to have a greater strength to weight ratio.

In the embodiment shown in Figures 7 to 9 the support bar 30 is of inverted U-shaped configuration having one flange 31 longer than the other. This longer flange 31 has a series of holes 32 spaced along its lengths adapted to receive the hooks of conventional clothes hangers. The other flange 34 has a series of short rods 35 spaced along its length adapted to carry belts, ties or like articles of clothing. The support bar 30 has a pair of slots 36 formed through the flanges at one end thereof through which the rod can be connected to a support bracket in a similar manner to the arrangement shown in Fig 1.

The clothes hanger assembly shown in Figure 10 includes a support bar 40 has one end 41 fixed at right angles to a stub 42. The stub 42 is preferably of inverted channel section and has slots 43 for pivotally mounting it on a pivot pin (not shown) in a manner similar to that shown in Figure 1. The support bar 40 is bent parallel to the stub with its free end bent back at right angles to the stub. It has fixed thereto a series of transverse rods 44 which will carry clothes in use.

Clearly, many different types of connections between the bar and the wall plate will be possible which will provide the features of the device described herein. For example, it will be possible to form the slot in the support means rather than in the end of the bar. Different types of socket formations are envisaged which will allow the bar to pivot between horizontal and vertical positions. Also, as previously mentioned, the bar and the clothing support fixtures affixed thereto may differ quite considerably from that described herein. It is however believed that the collapsible nature of the wall hanger and the ability of the bar to be held in a horizontal position firmly supported by a spigot and socket arrangement for the purposes of clothing selection will prove to be advantageous, particularly in areas where space is confined.

Claims

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thereon and a wall bracket securable to a substantially vertical support surface (14), with the bar (6, 20, 30, 40) being pivotally and slidably connected by one end (9) thereof to the bracket such that the bar may be moved between first and second positions, the first position in which, in use, the bar is supported horizontally, and the second position in which the bar hangs substantially vertically (11) with the free end thereof below the brackets. 2. A clothes hanger assembly as claimed in

1. A clothes hanger assembly, characterised

by including a bar (6, 20, 30, 40) with means (13,

15, 35, 44) along its length to carry clothes

2. A clothes hanger assembly as claimed in claim 1, in which the pivot is slidable in a slot (8,36, 43) and is carried by the bracket with the slot in the bar (6, 20, 30).

3. A clothes hanger assembly as claimed in claim 2, in which the bracket provides a support member (3) which supports the end (9) of the bar (6, 20, 30) horizontally in the first position of the pivot (7), but allows the bar to pivot down to a vertical position (11) about the pivot (7) in the second position.

4. A clothes hanger assembly as claimed in claim 3, in which the support member (3) on the bracket is in the form of a socket open at the bottom.

5. A clothes hanger assembly as claimed in claim 1, in which the bar (6) has a plurality of support arms (15) projecting at right angles to the bar axis and together defining a substantially horizontal plane when the bar (6) is in its first position.

6. A clothes hanger assembly as claimed in claim 5, in which the support arms (15) extend on both sides of the bar.

7. A clothes hanger assembly as claimed in claim 1, in which holes (13) are provided through the bar along its length to receive hooks of conventional clothes hangers.

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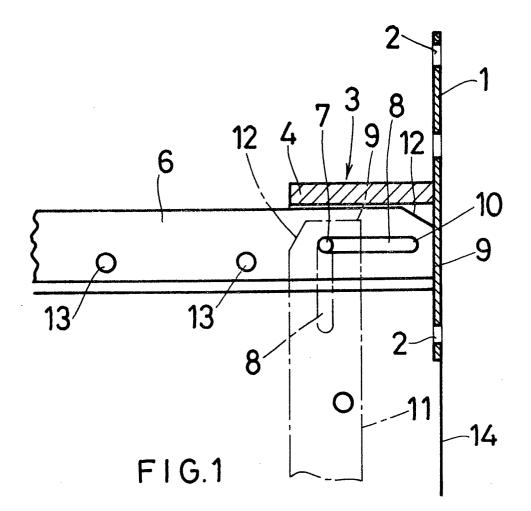
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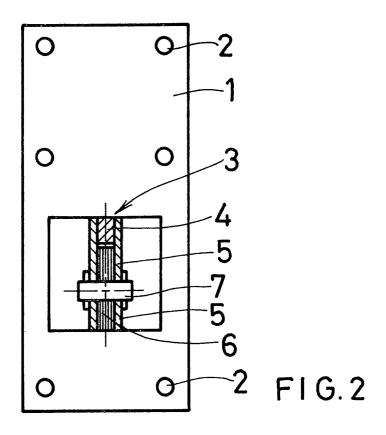
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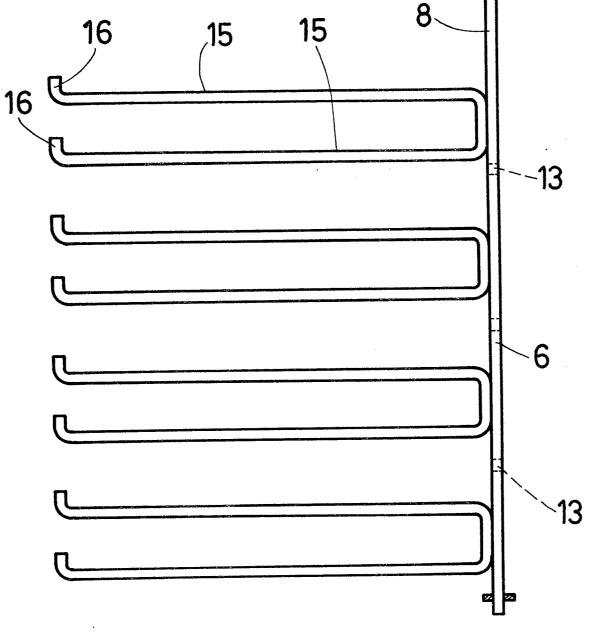
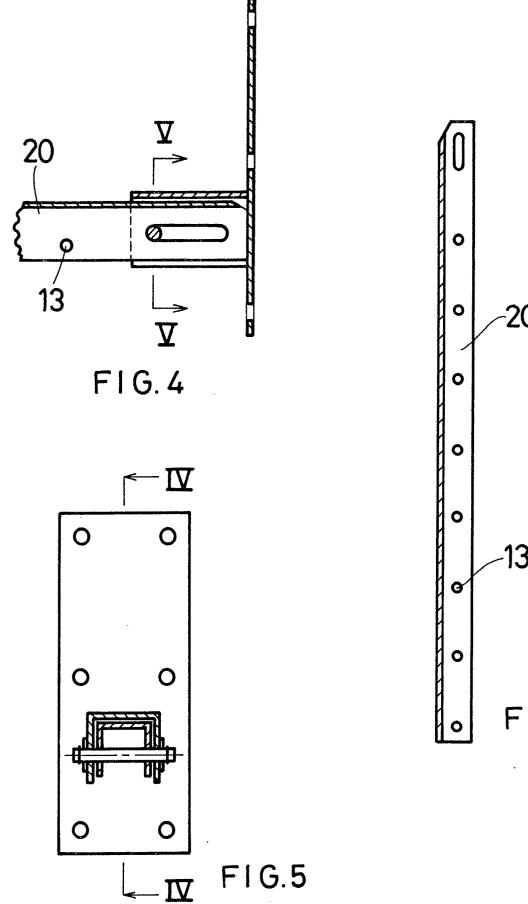
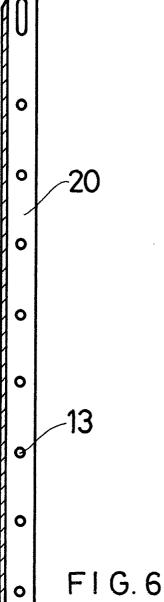
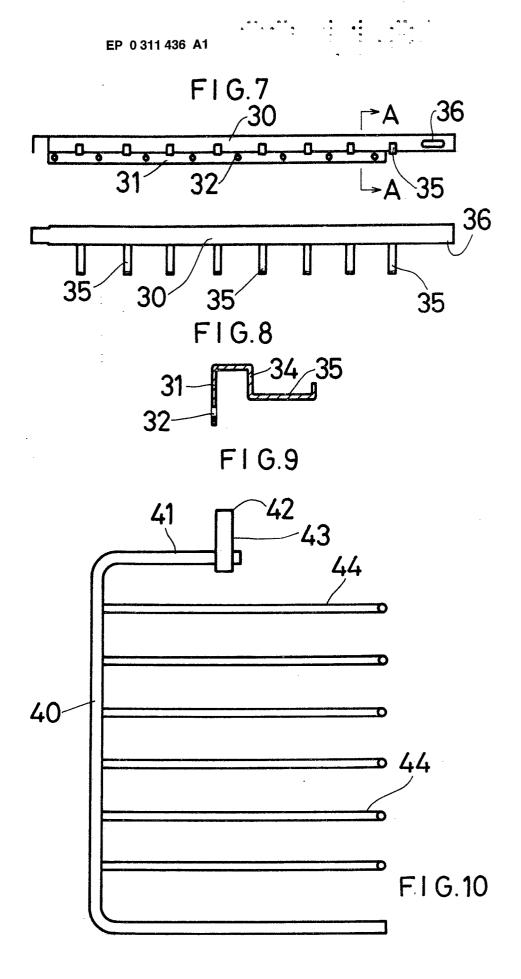


FIG. 3

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European Patent Office

# EUROPEAN SEARCH REPORT

Application Number

EP 88 30 9396

ategory	Citation of document with indicat of relevant passage	ion, where appropriate, s	Relevant to claim	CLASSIFICATION OF TH APPLICATION (Int. Cl.4 )
x	BE-A-482190 (DECKERS ET AL.		-6	A47G25/06
	* figures 1-4 *			
x	US-A-4611721 (HECKAMAN)	,	-6	
<b>^</b>	* figures 1-4 *			
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×	US-A-2492701 (KIRK)	1	-4	
	* figure 1 *			
A	GB-A-694576 (LAMONT)	1	-3,7	
	* figure 1 *			
				TECHNICAL FIELDS
				SEARCHED (Int. Cl.4)
				A47G
	The present search report has been d	rawn up for all claims		
	Place of search	Date of completion of the search	- <u>T</u>	Examiner
	THE HAGUE	17 JANUARY 1989	BEUG	ELING G.L.H.
	ATEGORY OF CITED DOCUMENTS	T : theory or principle (	Inderlying the	invention
X : part	icularly relevant if taken alone	E : earlier patent docun after the filing date	nent, but publi	shed on, or
Y : particularly relevant if combined with another document of the same category		D · document cited in the application L : document cited for other reasons		
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