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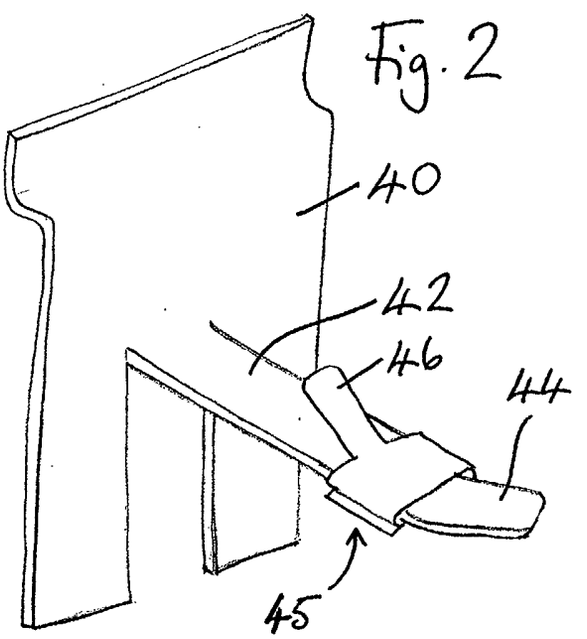
(71) Applicant: **Whittle, Maurice Henry**
Poynton, Cheshire SK12 1SL (GB)

(72) Inventor: **Whittle, Maurice Henry**
Poynton, Cheshire SK12 1SL (GB)

(74) Representative: **Barker, Rosemary Anne et al**
Urquhart Dykes & Lord
Greg's Buildings
1 Booth Street
Manchester M2 4DU (GB)

(54) Clip device

(57) A clip device (45, 50) for mounting upon a hook (42) of point of sale display apparatus comprises a resilient ramp (46, 53) disposed between respective engagement means, such as resilient curved edge margins (54) and/or a strap (56) and pull through fastener (58) therefor, or a strap with a snap-fastener engagement. The ramp allows items easily to be pushed on to the hook, but needs to be depressed, usually requiring use of two hands, to allow removal of each item, thus minimising the likelihood of theft of multiple items.



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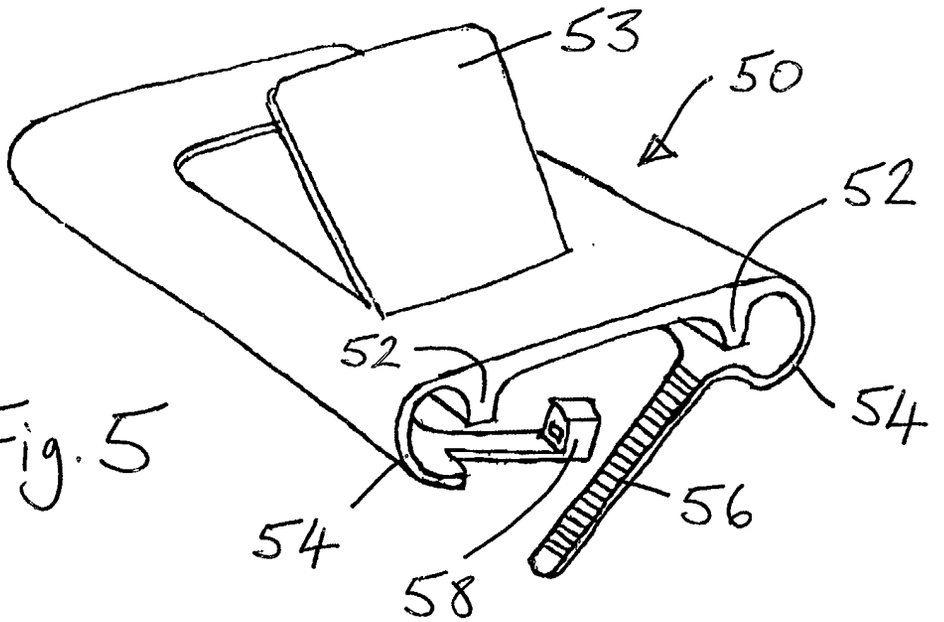


Fig. 5

Description

[0001] This invention concerns a clip device, particularly for mounting upon a hook of point-of-sale display apparatus.

[0002] It is well known to display items for sale by suspension from a hook, of a type which comprises an elongate finger-like projection attached to an upright support surface, such as a wall or partition panel. Some items displayed in this way are packed in a semi-rigid plastics casing, commonly known as a "bubble-pack", which is provided with a aperture through which the hook is inserted. Other items are enclosed in more flexible packaging, but this is still provided with a slot of a size just sufficient to be located onto the hook.

[0003] Such hooks are standard in salesrooms and shops and are most commonly formed from a loop of wire. Other hooks for the same purpose may be formed from an elongate strip of metal or plastics. Some of either types, may be bent so as to have a slight upward incline, in use, at the outer end thereof.

[0004] Shoplifting is known as a widespread problem and is most likely to occur when there is an opportunity for swift removal of items from display by customers. Particularly with suspended items there is a risk that a series of items suspended one behind the other on a common hook can be swept off together.

[0005] An object of this invention is to provide a device for fitting to display hooks which should reduce this risk of theft.

[0006] With this object in view, the invention provides a clip device comprising a resilient ramp formation disposed between respective engagement means.

[0007] The clip device is adapted for mounting upon a hook of point-of-sale display apparatus to hinder removal of items suspended from said hook. The respective opposing engagement means may comprise formations, which are preferably substantially arcuate, engage with opposing sides ofthe hook, either clipping therearound, or in the case of a wire loop hook, possibly being braced therebetween. Additionally or alternatively the respective engagement means may comprise a strap and a pull-through or snap fastener therefor.

[0008] The resilient ramp formation disposed between the respective engagement portions projects from the hook and should be orientated so that its lower end is nearest the free end of the hook, thereby allowing items fairly easily to be pushed onto the hook, but requiring to be depressed, and therefore use of two hands to remove each item from the hook.

[0009] The clip device of the invention may be formed in one piece, but in some cases a two part unit may be more appropriate and just as easy to manufacture.

[0010] The invention will be described further, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a conventional bracket-mounted hook for display purposes;

Figure 2 is a similar view of another known style of bracket-mounted hook to which a first embodiment of the device of the invention has been fitted;

Figure 3 is an enlarged scale perspective view of a second embodiment of the device of the invention;

Figure 4 is a similar view of a third embodiment of the device of the invention;

Figure 5 is a similar view of a fourth embodiment of the device of the invention; and

Figure 6 is a similar view of a fifth embodiment of the device of the invention.

[0011] Figure 1 shows a conventional slat wall mounting bracket (10) to which a hook (12), formed as a loop of wire, is permanently secured, e.g by welding and/or by pressing the ends of the looped wire into apertures in the bracket (10). The bracket (10) is formed of a sheet of metal or plastics and has one edge margin (14) bent into an L-shaped cross section of a shape and size appropriate for location in and suspension from a slot in a conventional slat wall lining. The hook (12) projects substantially at right angles to the main body of the bracket (10) and its outer end is bent to provide an upward incline (16) in the orientation in which the bracket (10) will be suspended.

[0012] To hinder removal of suspended items (not shown) from the hook (12), a clip device (20) or (30) or (50) or (60) as shown in Figs. 3 or 4 or 5 or 6, is fitted adjacent the incline (16), at the position indicated by arrow A.

[0013] The device (20) shown in Figure 3 is formed from a single piece of spring steel sheet with opposing inwardly curved edge portions (22) to engage around and partially embrace the opposing wire limbs of the hook (12). An outward lip (24) at each edge facilitates flexing of the device (20) as it is being fitted in place. Centrally, a flap (26) is cut and pushed up from the plane of the steel sheet to provide a resilient ramp. The device (20) is fitted to the hook (12) so that the flap (26) projects upwards in a direction towards the bracket (10) (as shown) and this prevents ready removal of items from the hook. Nevertheless a single item can be removed with some measure of manipulation, using one hand to depress the flap (26), while using the other hand to lift a slot in the items' packaging over the flap. Certainly, ready removal of multiple items is not possible. This should cut down on theft of multiple items.

[0014] On the other hand, replacement of items onto the hook (12) by pushing the slot in the packaging of each item over the ramp (26), in the direction of the bracket (10) should be fairly easy as the ramp (26) will flex downwards during this operation.

[0015] The clip device (30), shown in Figure 4, is an alternative version, made of metal or plastics material. It has enlarged opposing edge portions (32) which are a shallow C-shape in cross section so as to engage inwardly of the opposing limbs of the wire hook (12), the device (30) then being braced therebetween. A ramp (34) provided intermediate the two edge portions (32) serves the same purpose outlined above in connection with the flap (26).

[0016] The clip device (50), shown in Figure 5, is another version, this time made of plastics material. Adjacent each side edge it is formed with a downward ridge (52) and each edge margin (54) is resilient and curves inwards, thereby defining means adapted to engage around and partially encircle the respective wire limbs of the hook (12). Additionally however, the edge margins (54) extend at opposing locations to provide a cable tie style ridged strap (56) and a pull through fastener (58) therefor. In use these are fastened below the hook (12) to secure the clip (50) thereon and provide adjustable tension. Again, a flap (53) is pushed out centrally of the device (50) to provide a ramp.

[0017] The clip device (60) shown in Figure 6, is yet another version, again of plastics material. This also has a respective downward ridge (62) adjacent each side edge and inwardly curving resilient edge margins (64). At two locations one side edge margin is extended to provide two straps (56) which can extend below the hook (12) in use, and engage by snap on connection means (68) at the other side edge of the device. The snap on (68) connection means are any conventional mutually engageable projections, usually having a sloping run-in surface. However the material of the clip device (60) is chosen so that disengagement is possible by application of reasonable manual force. Adjustable tension is provided by means of the elastic nature of the strap (66).

[0018] As in the preceding embodiment a flap (63) is pushed out centrally to provide a ramp.

[0019] In modified versions of both the aforesaid embodiments the ridges (52, 62) may be omitted and only a single strap (56, 66) may be provided.

[0020] In other embodiments of the clip device of the invention (not illustrated) the ramp may be formed as a solid wedge or barb, so long as it is resilient or springy. Alternatively the ramp may be hinged at its junction with the body and the resilience may be provided by a spring.

[0021] Figure 2 shows a bracket (40) provided with a hook (42) in the form of a flat strip, again having a terminal incline portion (44). The device (20) (Figure 3) would be suitable for fitting thereto or modified versions of the devices (50) or (60) without the respective downward ridges (52, 62). Another embodiment (45) of a clip device in accordance with the invention is shown in Figure 2 wherein a flap projects slightly upwards in the manner of a tongue (46) from one end of thereof.

[0022] The respective incline portions (16), (44) on the hooks (12), (42) are not essential to the fitting or functioning of any of the clip devices of the invention. Some hooks are known, which are not bent in this way. Clip devices in accordance with the invention will work just as well upon those. In this respect, clip devices, such as those in Figs. 2 and 3 and in Figs. 5 and 6, will be designed to grip tightly around the edges of the hook and will not be readily slidable therealong. Once fitted they are intended to remain in position, so provision for their removal is not necessary.

[0023] Incidently, the clip devices (20, 30, 45, 50, 60) need not necessarily be mounted on the top of the hooks (12), (42) as illustrated. They could equally well be mounted on the underside of the hooks.

[0024] Many variations in design detail of these clip devices are possible within the scope of the invention. In particular, embodiments may be provided which have opposing ramps, one projecting upwards above the hook on which the clip device is mounted, and another projecting downwards below the hook. Such ramps would required to be squeezed together to allow removal of a packaged item from the hook, but would both flex towards each other to allow ready replacement of items. A practical embodiment of this type may be similar to that shown in Fig. 3 or 4 or 5 or 6, but formed of plastics material with a central substantially rectangular aperture. A separate flap component formed from a folded over V-shaped piece of spring steel may then be secured at its fold into a groove in one end of that aperture, to provide the respective divergent ramps, one projecting upwards, one downwards. Alternatively the ramps may be hinged and the resilience provided by a spring.

[0025] Also, embodiments may be provided where a single ramp tapers or slopes not in a fore/aft direction on the hook, but in a transverse direction. This would function in substantially the same way, being pushed down if above the hook, or upwards if below the hook, to allow individual items to pass thereover. A similar transverse orientation would also be possible for a pair of opposing ramps.

[0026] Obviously the form of hook to which clip devices of the invention can be fitted may vary and need not be bracket-mounted, i.e could be independently mounted directly onto a panel or rail or other display apparatus.

Claims

1. A clip device (20; 30; 45; 50; 60) comprising a resilient ramp (26; 34; 46; 53; 63) disposed between respective engagement means (22, 24; 32; 52, 54, 56, 58; 62, 64, 66, 68).

2. A device according to claim 1 wherein the engagement means include substantially arcuate engagement surfaces.

3. A device according to claim 1 or 2 wherein the engagement means include at least one strap (56; 66)

and a pull through (58) or snap (68) fastener therefor.

4. A clip device (20; 30; 45; 50; 60) adapted for mounting upon a hook (12) of point-of-sale display apparatus to hinder removal of items suspended from said hook, said device having respective means engageable with the hook and a resilient ramp (26; 34; 46; 53; 63) disposed therebetween to project from the hook.

5. A clip device according to claim 4 wherein the engageable means comprise formations providing substantially arcuate engagement surfaces to embrace, partially, opposing sides of the hook.

6. A clip device according to claim 4 or 5 wherein the engageable means include at least one strap (56; 66) and a pull through (58) or snap (68) fastener therefor.

7. A device according to any preceding claim wherein the resilient ramp is formed as a flap extending from a web between the respective engagement means.

8. A device according to claim 5 wherein the flap is formed as a cut out from the web.

9. A device according to any of claims 1 to 6 wherein the resilient ramp is formed as a pair of divergent flaps extending from a web between the respective engagement means.

10. A clip device comprising a clip body having means for secure mounting upon a hook and having a resilient ramp or pair of ramps extending from said body in any direction facilitating loading of the hook but preventing easy unloading of the hook.

Fig. 1

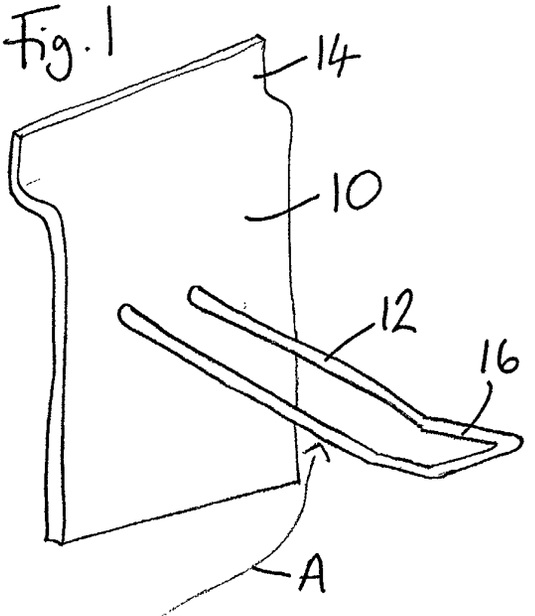
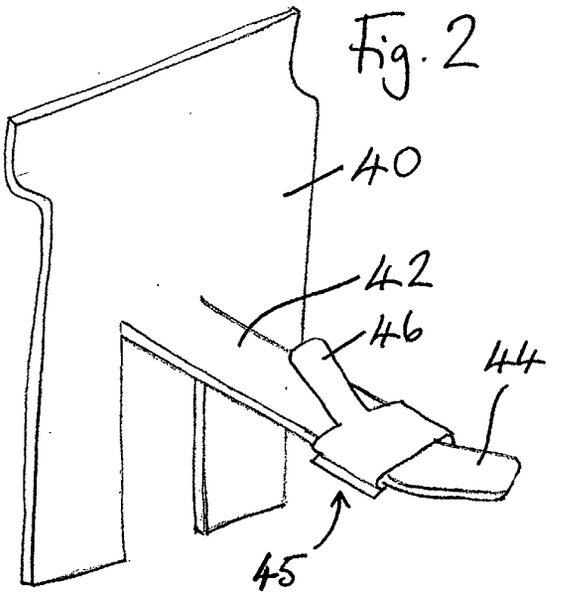


Fig. 2



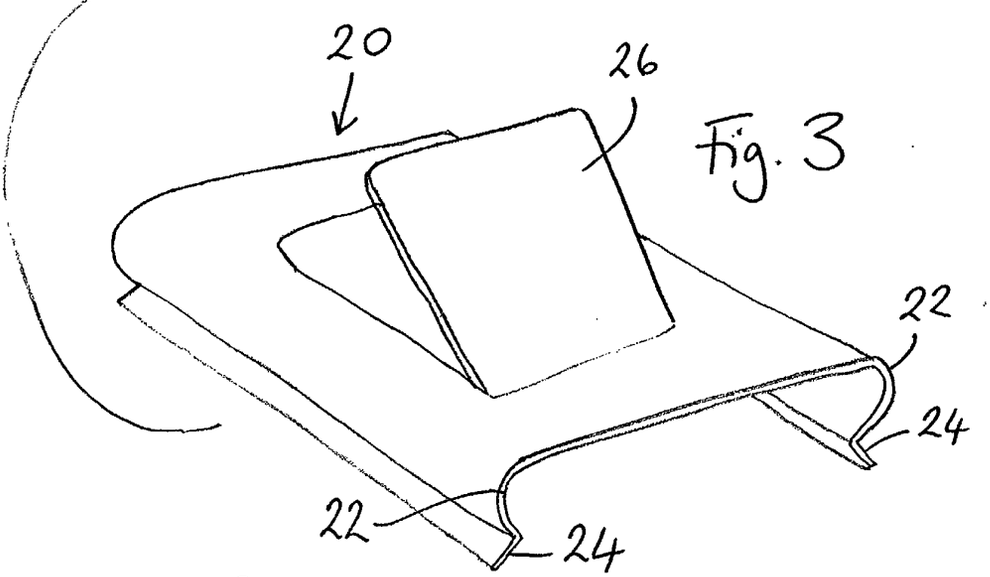


Fig. 3

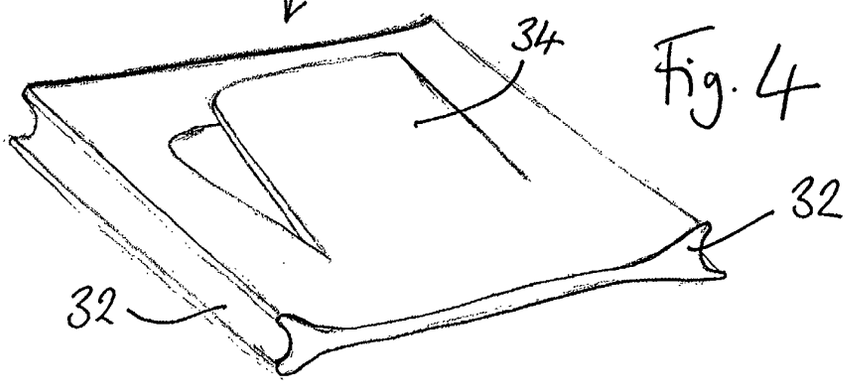


Fig. 4

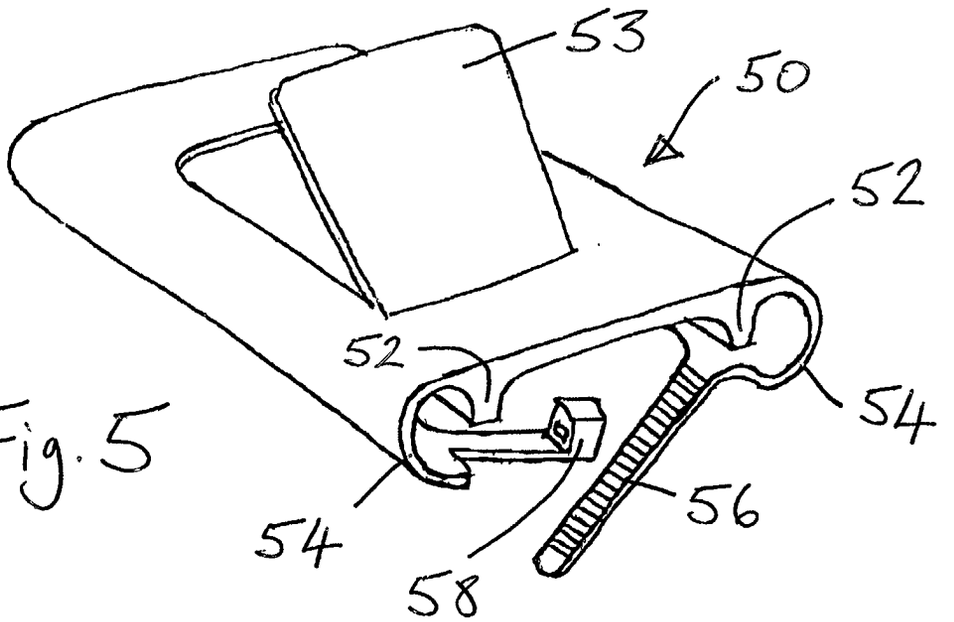


Fig. 5

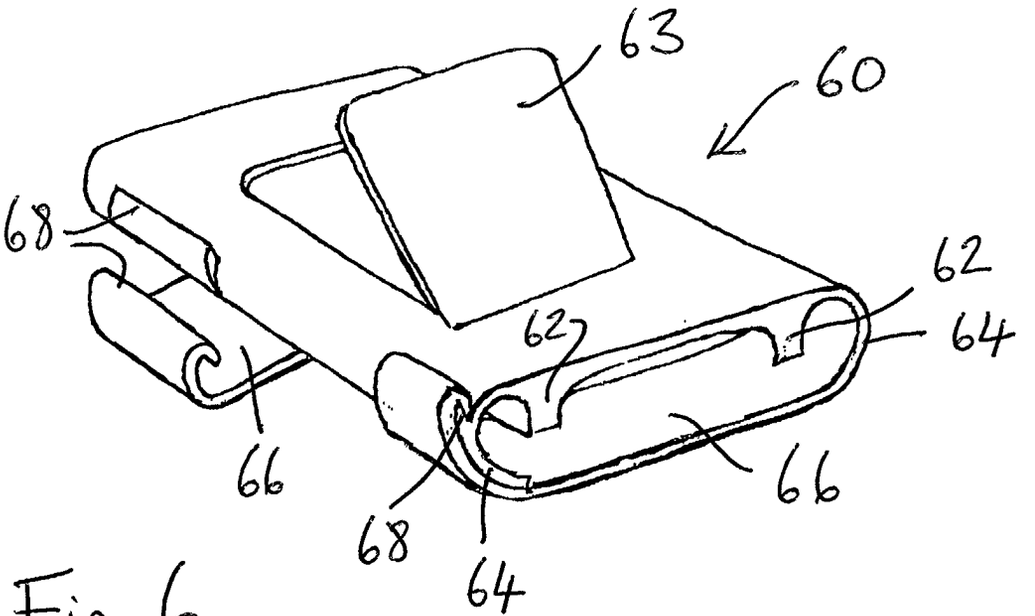


Fig. 6