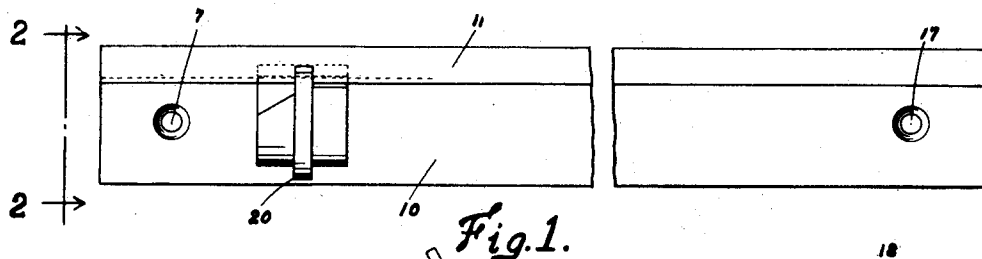
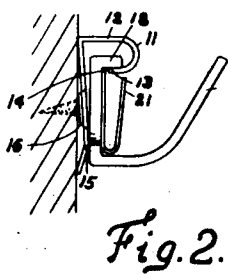
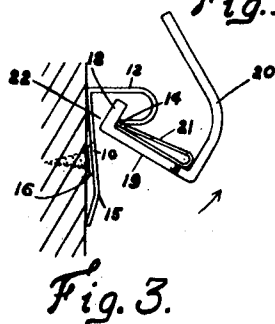
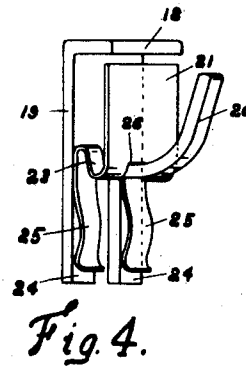
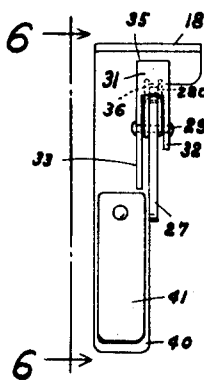
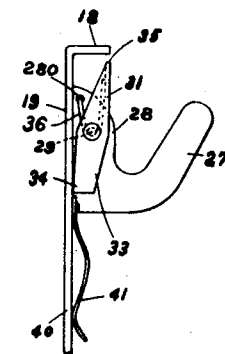
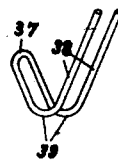
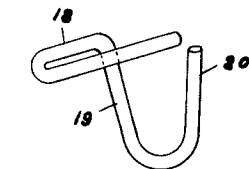


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E. W. CHRISTY
 DISPLAY RAIL AND HOOK
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DISPLAY RAIL AND HOOK

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9 Claims. (Cl. 248—48)

This invention relates to a means whereby various objects may be suspended at selected places and has for its principal object the provision of a display rail and a slidable detachable utility hook which is readily inserted or removed at any place along the rail, but which cannot be accidentally separated from the rail.

Another object is to provide a very simple, effective and inexpensive rail fashioned in such manner as to cooperate with the hook members in producing a strong support for articles of various sizes and weights.

These and other objects are attained by the means described herein and disclosed in the accompanying drawing, in which:

Fig. 1 is a front elevational view of a rail and hook of the invention.

Fig. 2 is a view on line 2—2 of Fig. 1.

Fig. 3 is a view similar to Fig. 2 but showing the abutment member depressed and the hook swung into position for removal from the rail.

Fig. 4 is a perspective view of a modified form of the hook of the invention.

Fig. 5 is a front elevation view of a preferred form of the hook.

Fig. 6 is a view on line 6—6 of Fig. 5.

Fig. 7 shows in perspective the spring and abutment member of the device of Fig. 5.

Fig. 8 is a perspective view of a bent wire hook member usable with the rail strip shown in Figs. 1, 2 and 3.

The present invention provides a means for use in hanging various objects such as wall maps either in roll cases or on rods, any kind of bulletin board or other object, provided with one or more eyelets or grommets, and also capable in its preferred forms of suspending single, sheets, charts, cards, pictures, etc. which have no eyelets or suspending means. The alternative form of Fig. 8 is capable of employment with the simple rail of the invention in pantries, on doors, etc., for hanging utensils of various kinds.

The rail or molding of the invention is inexpensively formed from flat strip metal 10 along the top of which is formed an integral forwardly extending U-shaped channel 11 having its top arm 12 connected to the strip 10, and its lower arm disposed in horizontal position with its end 14 terminating at a distance from the forward face of strip 10 to admit the thickness of the material of which the hook member is formed.

The strip 10 preferably has a longitudinally extending slight bend or "break" 15 close to its bottom edge so that a space is formed behind the thin metal for accommodating the slightly countersunk cups 16 which are formed about the screwholes 17 provided at intervals for attaching the rail or molding to the sidewall of a room or along the top of a class room blackboard. The strip 10 may be quite thin since the forma-

tion of the U-shaped member 11 at the top imparts great rigidity and strength to the part that bears the load of a case map or other of the heavier objects which may be suspended therefrom. In addition to this the "break" 15 further strengthens the strip.

The hook member in its various forms consists essentially of a body which is suspended from the top or inner face of arm 13 by a lug such as 18, while the body 19 itself rests against the face of the body 10 of the molding strip or rail. A suitable hook finger 20 completes the device insofar as it may be inserted or removed at any point along the rail, and that it will sustain any object within reasonable limits of weight suspended therefrom. In Figs. 2, 4 and 5 the hook body and lug is formed of sheet metal. In Fig. 8 the parts are formed from a length of wire or rod stock.

In order to remove the hook member from the rail, it is necessary to tilt the body 19 forwardly (as shown in Fig. 3) sufficiently to withdraw lug 18 downwardly through the space between strip body 10 and the edge of arm 13. When manipulating a fairly rigid object at arms length with a view to hanging or removing said object from one or a pair of the hooks there may be a tendency to disturb the position of the hooks sufficiently to separate them from the rail if some means is not provided to guard against such accident. In the device of Fig. 8 this is partially provided for in that the lug 18 consists of two spaced and somewhat resilient arms which bind slightly within the U-shaped channel.

In Figs. 2 and 4 a member of spring steel is secured, by spot welding or otherwise, onto the body 19 and has an abutment finger 21, the end of which is normally positioned closely adjacent and spaced below the lug 18. By manually depressing the finger 21, as with the thumb, the lug 18 may be entered and the hook member moved into operative position on the rail. Release of the spring abutment finger 21 then positions the end of that member as shown in Fig. 2 from which it cannot again be displaced without manually depressing the finger 21. The hook, while incapable of accidental separation from the rail, may nevertheless be slid along the rail to any desired point.

It is to be noted that in order to attain the position shown in Fig. 3 the abutment finger must first be manually depressed toward the body 19 so that lug 18 can be hooked into or from the interior of the channel through the restricted longitudinal opening 22 between the end 14 of the arm 13 and the body 10 of the rail or molding.

In the embodiment shown in Fig. 4 the body of the spring abutment finger 21 has an S-bend at 23 where it is spot welded to the body 19. The depending portion of the body is slitted to provide for the hook finger 20 and the depending legs 24

each have a spring finger 25 pressing on the face thereof. The fingers 25 result from the slotting of the lower part of the spring body from the bottom up through the S-bend. This gives the upper part a firm seat on the hook finger 20 at a point 26 spaced forwardly of the body 19 and allows the abutment finger 21 to move radially from that point only.

Various objects may be suspended from hook finger 20 and single sheets and cards may be inserted between legs 24 and the suitably curved ends of spring fingers 25.

The modified form shown in Figs. 5, 6 and 7 consists of the usual body 19 having the suspending lug 18 as previously described. The hook finger 27 however is bent forwardly from the edge of body 19 and has a shoulder 28 where it joins body 19. This shoulder is transversely perforated to receive a pivot pin 29 which also passes through aligned perforations 30 in the arms of a channel shaped abutment finger which is formed of sheet metal and straddles the shoulder portion 28 of hook 27. The rear portion of member 31 is cut out to provide the straddle lugs 32 and 33. The lug 33 has an extended edge 34 which limits the outward movement of member 31 to the position shown in Fig. 6. Lug 32 may be cut off below the perforation 30. The upper portion of the abutment finger is tapered toward the rear portion 31 to permit the finger to be rocked on its pivot toward the body 19, thereby removing the end 35 from its position close to the outer end of lug 18 and permitting the device to be hooked into and removed from the molding rail in the manner shown in Fig. 3. A spring indicated generally as 36 is formed of a length of spring wire or the like by first forming a yoke bend 37 which passes through hole 280 in shoulder 28 of the hook finger 27, and then bending the arms 38 at 39 so that they straddle said shoulder, pass under pin 29 and exert their spring tension against the rear inner face of the abutment finger. The sides 32 and 33 confine and conceal the spring arms.

The depending leg or member 40 has a suitably secured spring finger or clip 41 secured thereto so that a thin light weight sheet or card may be inserted between them.

It will be understood that modifications of the hook members and molding rail shown may be made within the spirit of this invention and the scope of the appended claims.

What is claimed is:

1. In a device of the class described the combination with a substantially horizontal wall rail having an integral channel opening toward the rail and at the bottom of the channel, of a hook member for removable insertion into the channel at any point along said opening and means on said member normally precluding separation of the hook member and rail, said means being yieldably movable to an inoperative position under manually applied pressure.

2. In a hook member for use with a display rail having a rearwardly and downwardly opening supporting channel, the hook comprising a body having a forwardly extending lug for entry through the opening in the supporting channel and means presenting a normally rigid abutment upon the outer face of said channel to preclude accidental separation of the hook member from the rail, said abutment means being movable by manual force thereon to an inoperative position.

3. In a hook member of the class described, a body, a hook finger on said body, a forwardly extending lug at the top of the hook for suspending the body upon a suitable rearwardly extending ledge of a supporting rail and an abutment member on said body rigidly opposing movement of said body in a direction tending to separate said body from the supporting rail.

4. In a hook member of the class described the combination of a hook body, a lug extending forwardly from the top of the body and an abutment finger presenting an end beneath and substantially at right angles to the end of the lug, said abutment finger being depressible toward the hook body to remove the end of the finger from its position beneath the end of the lug.

5. In a display rail and hook the combination of a rail strip for wall mounting, a restricted U-shaped channel integral with the top of said strip and providing a continuous entry slot at the bottom of the channel along the forward face of the strip, a hook member comprising a body and a forwardly extending lug for entry through the slot into the channel whereby to support the body and yieldable abutment finger for contacting the exterior lower face of the channel beneath the end of the lug precluding accidental separation of the hook and rail and permitting slidable adjustment of the hook along the rail.

6. In a hook of the class described the combination of a body having at its top a forwardly extending suspending lug, a yieldable abutment finger extending substantially vertically of the free end of the lug and spaced therefrom sufficiently to allow the bottom face of the lug and the top end of the finger to receive a supporting ledge between them, the finger resisting tilting of the body and lug relative to such ledge.

7. In a hook of the class described the combination of a sheet metal hook body having a forwardly turned lug at its top, an integral hook member bent forwardly from one side of the body, said hook member having a perforated shoulder at the upper part of its juncture with the body, an abutment finger comprising a sheet metal body having parallel perforated sides and a rear portion slotted so that it may be mounted straddle wise of the shoulder, a pin extending through the perforations in the sides of said abutment finger and through said shoulder and a spring member extending through the hole in the shoulder and passing about the pin for pressing the finger outwardly of the hook body, the abutment finger having a portion below the pin for limiting such outward movement.

8. A hook member of the class described comprising a body, a supporting lug at the top of the body and an abutment finger mounted on the body and having a free end normally disposed beneath and in spaced relation to the end of the supporting lug, the end of said finger rigidly resisting downward end thrust and being yieldable toward the body under manually applied pressure on said abutment finger.

9. In a display hook the combination with a body having a hook and a forwardly extending suspending lug thereon and a spring metal member secured intermediate its ends to said body and providing at its top a rigid abutment and at its bottom a resilient finger.

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