

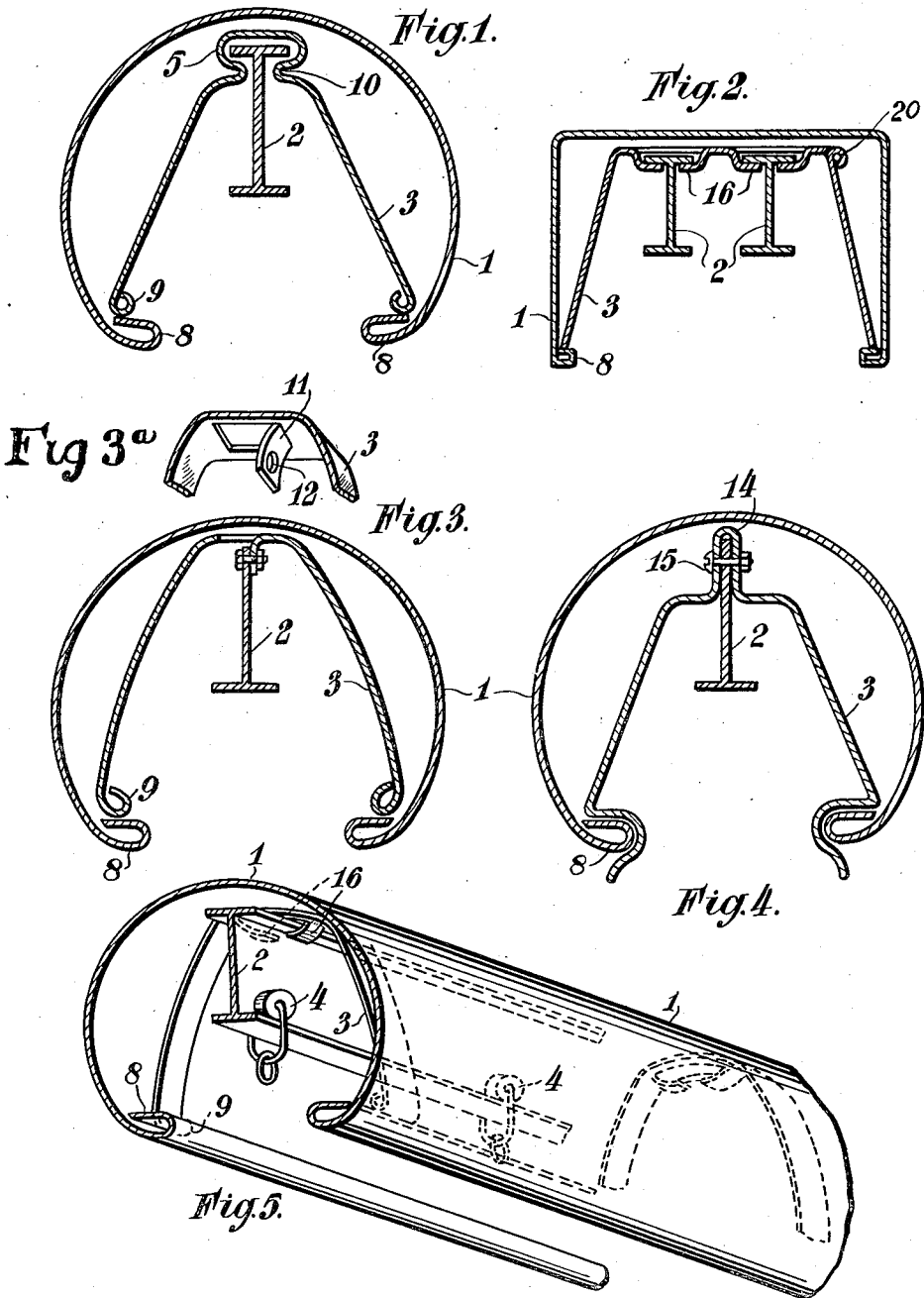
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CURTAIN RAIL

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## CURTAIN RAIL

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This invention relates to curtain rails of the kind comprising a slotted tube in which is disposed one or more carrier rails for the runners to which the curtain rail is to be attached, (hereinafter referred to as "of the kind described").

In a known construction of the kind described the carrier rail and tube are made in separate parts, but the carrier rail is fixedly arranged in the tube. Bending of such a tube is practically impossible without incorrectly shaping the carrier rail. Further, in another known construction in which the carrier rail has to be inserted from one end into the tube, bending is very difficult because the insertion of the carrier rail after separate bending is not practicable. Moreover, the carrier rail is secured by lips pressed in the tube, or by special brackets engaging from outside in the tube, so that the outer surface of the tube is unpleasantly interrupted by the heads of nails, or screws, or incisions or brackets.

One object of the present invention is to provide a curtain rail of the kind described in which the rail and tube may be bent separately and subsequently easily assembled.

Another object of the present invention is to provide a curtain rail of the kind described in which the outer tube presents a smooth uninterrupted surface.

Another object of the present invention is to provide a curtain rail of the kind described in which the carrier rail or rails may be readily disconnected from and connected to the slotted tube.

According to the present invention means are provided for supporting the carrier rail in the slotted tube which permit the rail to be inserted into and withdrawn from the slotted tube through the slot therein.

The carrier rail may be supported in the slotted tube by a number of supports, the arrangement being such that the rail and the said supports can be simultaneously inserted into or withdrawn from the slotted tube.

The supports may be in the form of brackets which can be collapsed to pass them into the slotted tube and subsequently opened out when in the tube, the said brackets being supported in the tube.

In carrying out the invention the carrier rail for the runners may be supported on spring brackets or like members which can be sprung into the tube and supported therein.

The spring brackets or like members may suitably be supported along the inner edges of the slot in the tube, the said edges being preferably curled over to form horizontal supporting surfaces. The carrier rail and tube can, therefore, easily be again separated at any time without undoing screws, rivets, or the like. Moreover, the slotted tube can be separately bent and/or formed into an angle, and, subsequently the carrier rail,

bent correspondingly, can be sprung into position by means of the spring bracket or like member.

The invention is illustrated, by way of example, in the accompanying drawing, wherein Figs. 1-4 are respectively cross-sectional views of various forms of curtain rails made according to the invention. Fig. 3<sup>a</sup> is a detail view of Fig. 3, and Fig. 5 is a perspective view of a further modification.

In all figures, 1 indicates a tube having a slot along its lower edge, which may be of any suitable width. 2 are the carrier rails on which the runners 4 (Fig. 5) can roll. 3 indicates the means employed in each case for supporting the carrier rail in the tubular casing 1.

The tube 1 is made of iron having a brass coating, and the open edges are curled over as at 8 to form substantially horizontal bearing surfaces for the lower ends of the brackets 3, which are also preferably curled over as at 9.

Referring more particularly to Figs. 1, 3, 4 and 5, the tube 1 is in each case of circular cross-section.

In Fig. 1 the bracket 3 is pressed inwards at 10 to form a neck, so that the bracket can be slidden over the upper flange of the I-section carrier rail 2, the neck 10 forming thus a supporting surface for the rail 2. In Figs. 3 and 3<sup>a</sup> a tongue 11 is stamped out of the bracket 3 and turned downwards. The tongue 11 is provided with an aperture 12 by means of which it can be secured to the end of the web of the inverted T-section rail 2 by a screw, the web of the section 2 being provided with a corresponding screw aperture. In Fig. 4 the walls of the bracket 3 are pressed together at the apex as indicated at 14 and the inverted T-rail 2 is connected to the bracket 3 by a screw bolt 15 passing through apertures in the walls 14 and in the web of the rail 2. In this figure the lower ends of the bracket 3 are curved to embrace the edges 8 of the tube 1 and the curved ends project somewhat below the edges 8, thus forming a convenient means for inserting and removing the bracket. In Fig. 5 the upper flange of the I-rails 2 is engaged by tongues 16 stamped out of the material of the brackets. This figure also shows the runners 4 in position on the lower flange of the I-rail.

In the form shown in Fig. 2 the tube 1 is a trough section open at the bottom. In this figure two I-rails 2 are carried in two pairs of tongues 16 stamped out of the material of the brackets 3. In this figure also one side of the bracket 3 is hingeably connected at 20 to the body of the bracket. In this form the bracket 3 may be made of springy material or otherwise. If it is not made of springy material the bracket can be passed through the slot in the tube 1 by moving the side

hinged at 20 around the hinge, thereby reducing the width of the bracket during its passage through the slot.

It will be understood that the invention is in no way limited to the particular shape of the tubes 1 and brackets 3 shown, nor to the sections of carrier rails shown.

In order to mount the rail 2 in the tube 1, the rail 2 is first connected to the brackets 3 and the assembly can then be passed into the tube 1 through the slot therein, the brackets 3 thereupon opening out in order to be supported on the edges 8 adjacent the slot. As previously mentioned the rail can subsequently be readily removed from the tube by pressing the walls of the bracket 3 together and drawing out from the tube. Thus the parts can readily be assembled or separated after they have been individually bent, or curved.

It is to be understood that the tube 1 may be made of any other suitable metal or material; further, the brackets 3 and section 2 can be made of any suitable material.

It is to be understood that all the supports or brackets 3 shown in Figs. 1 and 3-5 may be arranged to suspend more than one rail 2 in the tube 1, the brackets being suitably shaped and provided with means for engaging the rails.

What I claim and desire to secure by Letters Patent is:—

1. A curtain rail for runners to which the curtain is attached comprising a slotted tube, a flanged carrier rail, and means for supporting the carrier rail in the slotted tube, the rail and means being insertable into and withdrawable from the slotted tube through the slot therein.

2. A curtain rail comprising a slotted tube, a carrier rail and means for supporting the carrier rail in the slotted tube, the said means, together with the carrier rail, being capable of ready insertion into and withdrawal from the slotted tube.

3. A curtain rail comprising a slotted tube, a carrier rail and means for supporting the carrier rail in the slotted tube, the said means being collapsible for the purpose of inserting them through the slot in the tube.

4. A curtain rail comprising a slotted tube, a carrier rail, means for supporting the carrier rail in the slotted tube, the said means comprising spring brackets which can be sprung into the tube through the slot therein.

5. A curtain rail comprising a slotted tube, a carrier rail, supports for supporting the carrier rail in the slotted tube, the said supports being collapsible to permit ready passage through the slot in the slotted tube, said supports when inside the tube being collapsible to permit of ready withdrawal of the said supports together with the carrier rail.

6. A curtain rail comprising a slotted tube, supporting portions disposed in the slotted tube adjacent the edges of the slot therein, a carrier rail, means for supporting the carrier rail on the said supporting portions in the slotted tube, the said means, together with the carrier rail, being capable of ready insertion into and withdrawal from the slotted tube.

7. A curtain rail comprising a slotted tube, supporting portions disposed in the slotted tube adjacent the edges of the slot therein, a carrier rail, means for supporting the carrier rail on the said supporting portions in the slotted tube, the

said means comprising resilient brackets the sides of which can be pressed together to permit passage through the slot in the tube, and opened out after passing through the slot to rest upon the supporting portions.

8. A curtain rail comprising a slotted tube, supporting portions disposed in the slotted tube adjacent the edges of the slot therein, a carrier rail, means for supporting the carrier rail on the said supporting portions in the slotted tube, the said means comprising brackets the sides of which can be pressed together to permit passage through the slot in the tube, and opened out after passing through the slot to rest upon the supporting portions, means being provided on the said brackets for connecting them to the said carrier rail.

9. A curtain rail as claimed in claim 7 wherein the carrier rail is of I-section and the brackets are provided with means for embracing the upper flange of the said I-section.

10. A curtain rail as claimed in claim 7 wherein the carrier rail is of inverted T-section and fastening devices are provided for connecting the carrier rail to the brackets.

11. A curtain rail as claimed in claim 7 wherein the brackets are of substantially inverted V-shape, and the carrier rail is suspended from the tops thereof.

12. In a slotted tube having supporting portions therein, means therein for supporting curtain carrier rails comprising a resilient support, and means associated with the support for securing the carrier rail thereto, the width of the support in places being normally greater than the width of the slot in the tube, but being de-creasable so that it can be passed through said slot and again resiliently expandible for support on said supporting portions.

13. In a slotted tube having supporting portions therein, means for supporting curtain carrier rails therein comprising spring brackets, means associated with the spring brackets for securing the carrier rail thereto, the width of the spring brackets in places being normally greater than the width of the slot in the tube, but being de-creasable by reason of their flexibility so that they can be passed through said slot, and again resiliently expandible for support on said supporting portions.

14. Means for supporting curtain carrier rails in a slotted tube having supporting portions comprising spring brackets, means associated with the spring brackets for securing the carrier rail thereto, the said means comprising tongues provided on the spring brackets, the arrangement being such that the spring brackets and carrier rail can be sprung into position inside the slotted tube, the spring brackets being supported on the supporting portions in the slotted tube.

15. Means for supporting curtain carrier rails in a slotted tube having supporting portions comprising spring brackets, means associated with the spring brackets for securing the carrier rail thereto, the said means comprising rolled edges provided in the spring brackets in which the carrier rail can be slidden, the arrangement being such that the spring brackets and carrier rail can be sprung into position inside the slotted tube, the spring brackets being supported on the supporting portions in the slotted tube.

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