May 5, 1925. 1,536,483

W. N. ELLIOTT

TRACK SUPPORT

Filed Dec. 18, 1923

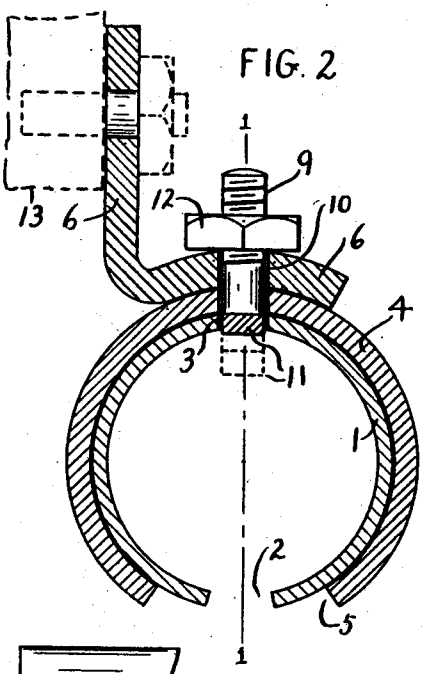


FIG. 2

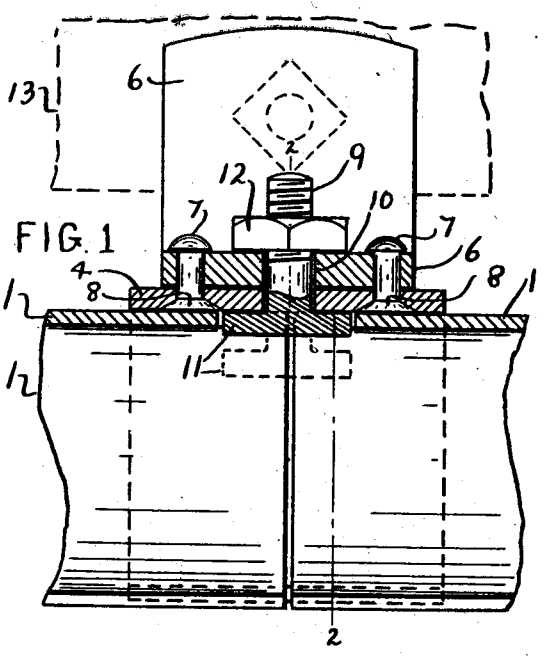


FIG. 1

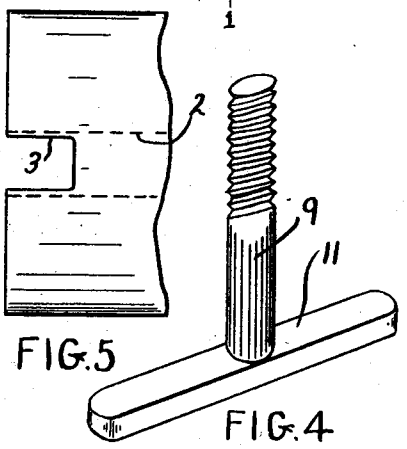


FIG. 5

FIG. 4

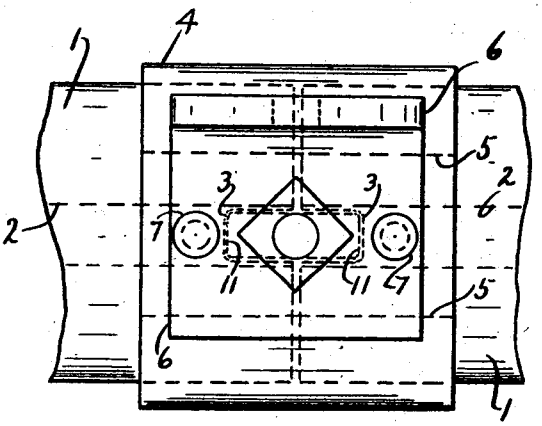


FIG. 3

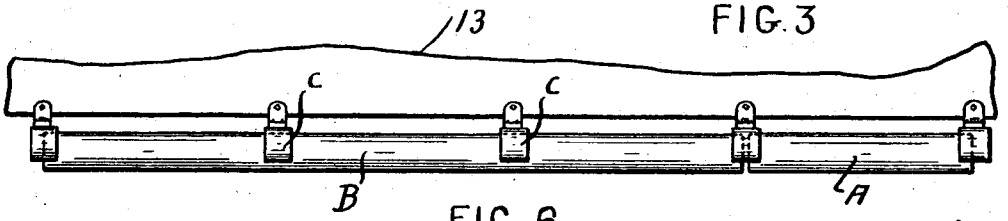


FIG. 6

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UNITED STATES PATENT OFFICE.

WILBERT NELSON ELLIOTT, OF HAMILTON, ONTARIO, CANADA, ASSIGNOR TO THE N. SLATER COMPANY, LIMITED, OF HAMILTON, ONTARIO, CANADA.

TRACK SUPPORT.

Application filed December 18, 1923. Serial No. 681,421.

To all whom it may concern:

Be it known that I, WILBERT NELSON ELLIOTT, a subject of the King of Great Britain, and a resident of the city of Hamilton, in the county of Wentworth, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Track Supports, of which the following is the specification.

My invention relates to improvements in track supports with more particular reference to devices for supporting overhead tubular tracks such as are used for door hangers, overhead trolleys and the like, and the object of the invention is to provide an improved form of combined coupling and hanger support for this purpose which will simplify and lower the cost of manufacture as well as expedite the work of erecting these tracks.

My invention consists of the construction and arrangement of parts all as hereinafter more particularly described and illustrated in the accompanying drawings in which:—

Fig. 1 is a central longitudinal section showing two sections of tubular overhead tracks coupled and supported according to my invention, the section being taken on the line 1, 1 of Fig. 2.

Fig. 2 is a transverse section on the staggered line 2, 2 of Fig. 1.

Fig. 3 is a plan view of Fig. 1.

Fig. 4 is a perspective view of a peculiar T-shaped bolt used in my invention.

Fig. 5 is a fragmentary view of the end of an overhead tubular track section with which my invention is used.

Fig. 6 is a diagrammatic view of an overhead tubular track connected and supported according to my invention.

In the drawings like characters of reference indicate corresponding parts in the different views.

1 are overhead tubular track sections which have the longitudinal opening 2 therein after the usual practice.

At each end of each track section 1 is formed a longitudinal recess or slot 3, said slots being situated diametrically opposite to the longitudinal opening 2 in the track section.

4 is a tubular coupling member having the longitudinal opening 5 therein. The inside diameter of this coupling member 4 is equal to the outside diameter of the track sections 1.

A hanger bracket 6 is secured to the coupling member 4 by rivets 7 the inner heads 8 of these rivets being countersunk flush with the interior periphery of the coupling member 4.

9 is a bolt extending through aligned orifices 10 in the members 4 and 6, said orifice 10 being located diametrically opposite to the opening 5 and centrally of the length of the coupling member 4.

This bolt 9 is provided with a peculiar elongated T-shaped head 11 and carries a nut 12 at its outer end.

The construction and operation of my invention is as follows.

It will be observed (see Fig. 1) that the ends of adjacent track sections 1 telescopically engage within the coupling member 4 and, since the rivet heads 8 are countersunk and made flush with the interior periphery of this coupling member, the track sections may be slid into the coupling.

When the nut 12 has been tightened upon the bolt 9, the T-shaped head 11 is drawn against the interior face of the coupling member 4 and forms a longitudinal, elongated protuberance projecting from the interior periphery of the member 4.

The coupling of two adjacent track sections 1 is thus accomplished by simply inserting the ends thereof within the coupling member 4.

In this operation the track sections must be turned so that the T-head 11 of the bolt 9 passes into the slots or recesses 3.

This engagement of the head 11 within the slots 3 positively insures the exactly correct alignment of the track sections, so that the longitudinal openings 2 in the sections are in proper alignment and therefore, when once assembled it is impossible for the sections to become displaced to throw the openings 2 out of alignment.

In the drawings a supporting structure to which the hanger brackets 6 are secured is indicated at 13.

This supporting structure is indicated in broken lines in Figs. 1 and 2 and in full lines in Fig. 3.

When comparatively short track sections

are used the couplings joining adjacent track sections will also provide sufficient support for the track but in the case of long sections it will be necessary to provide supports at points intermediate of the length of these long sections.

In Fig. 6 at "A" is indicated a short track section in which the end couplings provide sufficient support while at "B" is indicated a long section requiring the intermediate supports "C".

Ordinarily a special form of intermediate support must be provided since the end couplings as hitherto made will not slide along the track.

With my construction however the same type of support may be used both as an intermediate support and an end coupling and thus the manufacturing cost is considerably reduced since only one form of support need be made.

When the support is to be used as an end coupling the T-headed bolt 11 is inserted but when used as an intermediate support this bolt is omitted and it will be noted that, in this case, there being no protuberance on the interior of the member 4 this member may be slid along the track to any desired position.

In Figs 1 and 2 the partially slackened bolt 9 is indicated in broken lines.

From the foregoing it will be clear that I have devised valuable improvements in track supports of the class described which will greatly expedite the manufacture and erection of these tracks as well as positively insuring proper alignment.

What I claim as my invention is:

1. The combination with a tubular track of a coupling therefor, the inner periphery of the coupling conforming to the outer periphery of the track and slidable longitudinally thereof, and a protuberance detachably associated with the coupling and projecting from its inner periphery.

2. The combination with two tubular track sections to be connected, of a tubular coupling telescopically engaging the adjacent ends of said sections, and a protuberance detachably carried by the coupling and projecting beyond the periphery thereof, said protuberance adapted to engage within recesses formed in said adjacent ends of the track sections.

3. The combination with two tubular track sections to be connected, of a tubular coupling telescopically engaging the adjacent ends of said sections, and a longitudinally elongated protuberance detachably carried by the coupling and projecting beyond the periphery thereof, said protuberance adapted to engage within recesses formed in said adjacent ends of the track sections.

4. The combination with two tubular track sections to be connected, of a tubular coupling telescopically engaging the adjacent ends of said sections, a bolt mounted in the coupling, and an elongated T-shaped head on said bolt situated within the coupling, said T-shaped head adapted to engage within recesses formed in said adjacent ends of the track sections.

5. A coupling and support for overhead tubular tracks comprising, a tubular coupling member, a protuberance detachably associated with the interior periphery thereof and a hanger bracket carried by said coupling member.

6. A coupling and support for overhead tubular tracks comprising a tubular coupling member, a hanger bracket carried thereby, a bolt extending outwardly through an orifice in the coupling member, and an elongated T-shaped head formed on the bolt and forming a protuberance projecting from the inner periphery of the coupling member.

7. A coupling and support for overhead tubular tracks comprising a tubular coupling member having a longitudinal opening therein, a hanger bracket secured to the exterior of said coupling member, said coupling member provided with an orifice therein at a point diametrically opposite the aforesaid opening and centrally of the length of the coupling, a bolt mounted in said orifice, and an elongated T-shaped head formed on said bolt, said head forming a protuberance projecting from the inner periphery of the coupling.

WILBERT NELSON ELLIOTT.

Witnesses:

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