

(No Model.)

N. C. MILLS.
TIE JOINT FOR SUSPENDED CHANNEL BAR TRACKS.
No. 537,699.
Patented Apr. 16, 1895.

Fig. 1.

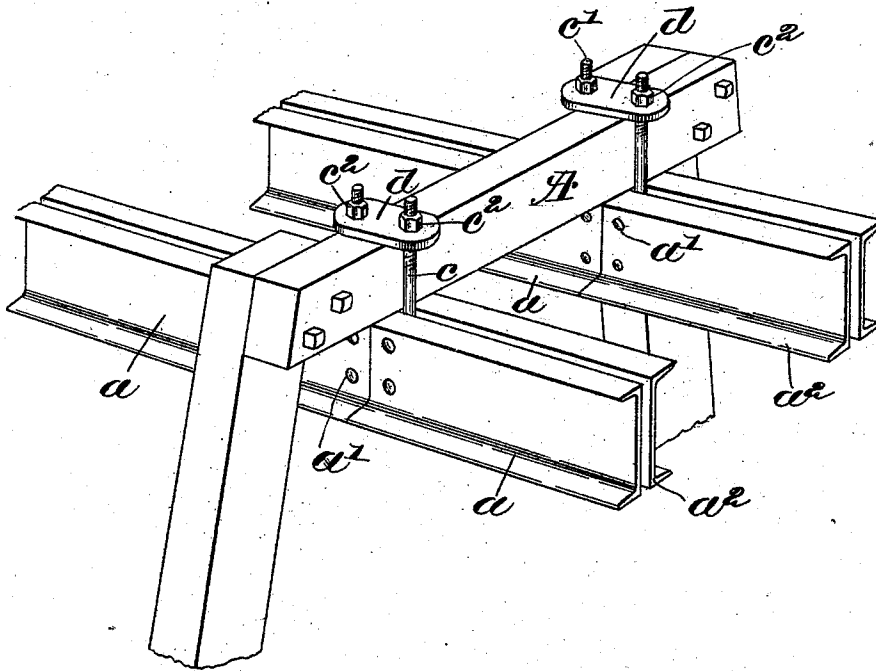


Fig. 2.

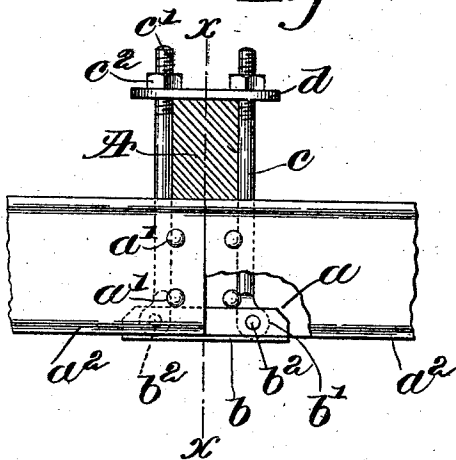
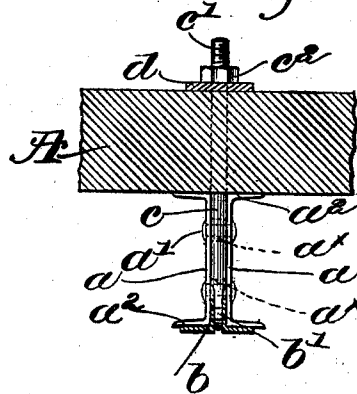


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

NATHANIEL C. MILLS, OF SOMERVILLE, MASSACHUSETTS.

TIE-JOINT FOR SUSPENDED CHANNEL-BAR TRACKS.

SPECIFICATION forming part of Letters Patent No. 537,699, dated April 16, 1895.

Application filed August 28, 1894. Serial No. 521,535. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL C. MILLS, of Somerville, county of Middlesex, State of Massachusetts, have invented an Improvement in Tie-Joints for Suspended Channel-Bar Tracks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

In the excavation of sewers, ditches, and the like, it is customary to erect a trestle work along the line of excavation, and suspend from the trestle head tracks formed of channel bars, said tracks each consisting of two series of channel bars bolted or riveted together and with their flanges out turned, upon which the wheels of the travelers move. The abutting ends of the pairs of channel bars are frequently held together by hangers depending from the trestle head and engaging the connecting bolts or rivets between the channels, in order that the sections may be readily erected or taken down. Such joints are objectionable for the reason that the flanges of two adjacent sections of track are apt to move out of line, and so make irregularities which tend to throw the travelers from the track, causing much annoyance and delay.

This invention has for its object the production of a tie joint for channel bar tracks whereby the adjacent track sections are always kept in alignment in a simple and effective manner.

In accordance therewith my invention consists in a tie joint for adjacent channel bar track sections, comprising a flanged seat upon which the abutting ends of the sections rest, and provided with a web portion interposed between the channel bars of each section, hangers extended between the channel bars of each section and secured to the seat, a top plate adapted to rest upon a trestle head and through which the upper ends of the hangers project, and retaining nuts for the hangers, substantially as will be described.

Other features of my invention will be hereinafter described and particularly pointed out in the claims.

Figure 1 in perspective represents a sufficient portion of a trestle head, to be understood, with my invention applied thereto.

Fig. 2 on a larger scale, and partly broken out, represents in side elevation two adjacent track sections, with the tie joint therefor; and Fig. 3 is a section thereof on the line $x-x$.

Each track section is composed of like channel bars a secured together by rivets a' , as herein shown, the flanges a^2 of the bars being overturned to form tracks for the wheels of the travelers. The ends of adjacent sections are abutted and the upper flanges of the channel bars rest against the under side of the cross bars A forming the trestle heads, and are rigidly held in such position by tie joints, now to be described.

As herein shown each tie is composed of two angle irons b , the vertical webs b' of which are connected by rivets b^2 to the preferably flattened ends of hangers c extended between the angles. The hangers are of such diameter that they can pass freely between each pair of connected channel bars a , as clearly shown in Fig. 3 the upper ends of the hangers projecting above the channels and beyond the cross bars A , and threaded at c' . A top plate d rests on the cross bar, and is provided with holes to receive the ends of the hangers, which are retained in place by set nuts c^2 resting on the upper side of the top plate.

As shown best in Fig. 3 the angle irons b are inserted between the channel bars of the adjacent sections, the flanges a^2 of the channels resting on the horizontal portions of the angle irons, which latter extend across the joints, and form a seat for the ends of the sections. The hangers c pass up between the channel bars outside of the bolts a' connecting them, and thence through the top plate d . By tightening the nuts c^2 the angle irons draw the channels tightly against the cross bar A , retaining them rigidly in place, and the hangers bearing against the bolts a' prevent longitudinal movement of the track sections to separate them.

It will be seen that by the foregoing it is impossible for the flanges a^2 of one section to drop below or get out of alignment with the flanges of the next section, or for the adjacent sections to separate.

Blocks may be interposed between the channel bars forming each section, if desired, to preserve them at the proper distance apart,

or collars, as a^x , in dotted lines, Fig. 3 may be placed upon the rivets, or bolts a' between the channel bars, for the same purpose.

It is obvious that instead of two angle irons secured to the hangers, as herein shown, the hangers may be secured to the web of a $\perp$ -shaped angle, the flanges supporting the superposed channel bars, precisely as herein shown.

My invention is not restricted to the precise construction and arrangement as herein shown, for changes may be made therein without departing from the spirit and scope of my invention, and it is applicable to any form of apparatus wherein channel-bar track sections are used.

I claim—

1. A tie joint for adjacent channel-bar track sections, consisting of a flanged seat upon which the abutting ends of the sections rest and provided with a web portion interposed between the channel bars of each section,

hangers extended between the channel bars of each section and secured to the seat, a top plate adapted to rest upon a trestle head and through which the upper ends of the hangers project, and retaining nuts for the hangers, substantially as described.

2. Two track sections consisting each of two channel bars connected at their ends, a flanged seat upon which the adjacent ends of the sections rest, hangers secured to the seat and extended between the channel bars of the sections outside of the connections at their ends, and means to secure the upper ends of the hangers to an overhead support, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NATHANIEL C. MILLS.

Witnesses:

JOHN C. EDWARDS,
EMMA J. BENNETT.