

1,152,630.

Inventor
Peter L. Hoffman.
By Adams & Jackson, Attys.

UNITED STATES PATENT OFFICE.

PETER L. HOFFMAN, OF AURORA, ILLINOIS, ASSIGNOR TO RICHARDS-WILCOX MANUFACTURING COMPANY, OF AURORA, ILLINOIS, A CORPORATION OF ILLINOIS.

BRACKET FOR TROLLEY-TRACKS.

1,152,630.

Specification of Letters Patent.

Patented Sept. 7, 1915.

Application filed February 15, 1915. Serial No. 8,323.

To all whom it may concern:

Be it known that I, PETER L. HOFFMAN, a citizen of the United States, and a resident of Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Brackets for Trolley-Tracks, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to trolley-tracks designed more particularly for use in connection with wheeled door-hangers, but which may be advantageously employed for other purposes where an overhead track is used for supporting and guiding a wheeled carriage.

15 More particularly, the invention has reference to the brackets that are employed for securing such track to the usual support, and the object of the invention is to provide such brackets with improved means for securely clamping the track and bracket together. I accomplish this object as illustrated in the accompanying drawings and as hereinafter specifically described.

25 That which I believe to be new will be set forth in the claims.

In the drawings, Figure 1 is a perspective view of my improved devices applied over the abutting ends of two sections of track; Fig. 2 is a perspective view of one set of clamping devices detached from a bracket; Fig. 3 is a perspective view of one of the improved wedges; and Fig. 4 is an end view of the parts as shown in Fig. 1, the track, however, being shown in section.

35 In the several figures of the drawings, in which corresponding reference characters indicate the same parts: A indicates sections of track of well-known form, each section constructed of a single sheet of metal, the bent edge portions of which constitute the tracks proper. B indicates a supporting bracket for the track A, as many of such brackets being employed in connection with a given length of track as required. Each bracket is formed of a single piece of sheet-metal and conforms in a general way to the shape of the track A so as to embrace and hold the same. The bracket, however, is of

greater height than the track, and thereby, when the two parts A and B are in proper position with reference to each other, a considerable space is left between the top walls of the two members, and within this space are the devices for removably clamping the bracket and track together. Referring now to such clamping devices,—C indicates a bolt that passes through holes in the side walls of the bracket B, such bolt extending through the space mentioned and being substantially midway between the top wall of the bracket and the top of the track.

D and E indicate wedges, each movably mounted upon the bolt C, they being arranged with their inclined faces in engagement with each other, and their horizontal edges respectively opposite the inner and outer surfaces of the top walls of the bracket and track, whereby, as will be evident, a movement in the proper direction of one of the wedges with respect to the other will cause the wedges to frictionally engage the said top walls of the bracket and track, and thus bind or clamp said two members firmly together. This movement of one wedge against the other is effected by the bolt C and a nut F screwed thereon, such nut lying within the space between the bracket and track and being of such size that the top walls of the bracket and track hold it against rotation with the bolt, and as a result cause it to be drawn against the large end of the wedge-member E. Each of the wedges D, E, is, as shown, made from a single piece of sheet-metal bent to provide the required inclined surface and substantially triangular sides,—the edges of such sides bearing against the top walls of the bracket and track. Wedge members thus made are amply strong for the service required and are more readily made and at less expense than solid wedges. To provide for the necessary passage of the bolt through them, each wedge has formed in its inclined surface a slot extending nearly the full length of the wedge, such slot in each wedge being indicated by c. At the ends of each wedge the metal of the inclined surface oppo-

site the ends of the slot is pressed or bulged out to form suitable concave seats *b*, in which the bolt *C* rests—such pressing or bulging out being, of course, in an opposite direction at the smaller end to that at the larger end of the wedge. So forming these pressed out bolt-seats does not interfere with the free working of the inclined surface of one wedge on the corresponding surface of the other, for when the two wedges are in coöperative working position the bulge that is then in an upward direction at the smaller end of the uppermost wedge will overlies the upwardly-extending bulge at the large end of the other wedge, and vice versa. Making the wedges duplicates of each other in all respects, is an advantageous feature, as it facilitates the work of assembling at the factory.

By reason of the wedges being formed of a bent piece of metal, as explained, the nut *F* that is forced against the lower wedge by the turning of the bolt *C* should be made fully as long as the width of the wedge so as to bear on the ends of both of the sides of the wedge, thus distributing the pressure evenly. The nut *F* is so made in the construction illustrated. After the wedges have been drawn together by the rotation of the bolt so that they clamp the bracket and track together with the required firmness, a nut *d* on the end of the bolt is to be screwed up, preferably against a lock-washer *e* interposed between it and the side of the bracket *B*.

f indicates an opening in the top of the hanger, through which a bolt can be passed for securing the device, as usual, to an overhead support. Each track-supporting bracket may be provided with two sets of the wedging devices described, if desired, and, indeed, where such a bracket is arranged at a joint in the track so as to support the abutting ends of two track sections, two such sets of devices would be employed with the bracket, as shown in Fig. 1. So employed, the abutting ends of the track sections will be held in perfect alinement, and thus insure smooth joints and consequent smooth running of the wheeled carrier that is used in connection with the track.

By the construction herein shown and described, a very effective means for securely clamping the track and bracket together is provided which can be operated very readily and quickly. One very important and desirable feature of the invention is that the clamping devices can be placed on the bracket at the place of its manufacture and need not be removed at any time by the user, as all that is necessary for the user to do in order to put the bracket on a section of track is to partially unscrew the nut *d* so

that the wedges may be slightly drawn away from each other, whereupon it will be possible to slip the bracket over the track. All danger of losing or mislaying the clamping parts is therefore eliminated.

That which I claim as my invention, and desire to secure by Letters Patent, is,—

1. In a track-bracket comprising two side walls and a connecting top wall, the combination with a bolt passing through said side walls, of clamping means mounted on said bolt and adapted by the turning of the bolt to be forced into engagement with said top wall of the bracket and also with a track-member supported between said side walls.

2. In a track-bracket comprising two side walls and a connecting top wall, the combination with a bolt passing through said side walls, of longitudinally-movable wedging means on said bolt, and a non-rotatable device screw-threaded onto said bolt and adapted by the turning of the bolt to move said wedging means into frictional engagement with said top wall of the bracket and also with a track-member supported between said side walls.

3. In a track-bracket comprising two side walls and a connecting top wall, the combination with a bolt passing through said side walls, of two coöperating wedge-members through which said bolt passes, and a non-rotatable nut screw-threaded onto said bolt and adapted by the rotation of the bolt to force one of the wedges toward the other.

4. In a track-bracket comprising two side walls and a connecting top wall, the combination with a bolt passing through said side walls, of a wedge having a slot through its inclined surface through which the bolt passes, a non-rotatable nut screw-threaded onto the bolt and acting, when the bolt is turned, to move said wedge longitudinally of the bolt, and a second wedge with which said first wedge coöperates for causing a frictional engagement between said bracket and a track supported therein.

5. In a track-bracket comprising two side walls and a connecting top wall, the combination with a bolt passing through said side walls, of a wedge having a slot through its inclined surface through which the bolt passes and having the upper face of one of the end walls of the slot and the lower face of the other end wall recessed to form seats for the bolt, a non-rotatable nut screw-threaded onto the bolt and acting, when the bolt is turned, to move said wedge longitudinally of the bolt, and a second wedge with which said first wedge coöperates for causing a frictional engagement between said bracket and a track supported therein.

6. In a track-bracket comprising two side walls and a connecting top wall, the com-

5 bination with a bolt passing through said side walls, two coöperating wedges each having a slot through its inclined surface through which the bolt passes, a non-rotatable nut screw-threaded onto the bolt and acting, when the bolt is turned, to move one of said wedges endwise into operative en-

gagement with the other wedge for causing a frictional engagement between said bracket and a track supported therein.

PETER L. HOFFMAN.

Witnesses:

G. E. RUNKLE,
F. A. SUTPHEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."