

UNITED STATES PATENT OFFICE.

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TRACK-JOINT.

SPECIFICATION forming part of Letters Patent No. 752,878, dated February 23, 1904.

Application filed August 25, 1903. Serial No. 170,685. (No model.)

To all whom it may concern:

Be it known that I, JAMES ARMITAGE, a citizen of the United States, residing at North Tonawanda, in the county of Niagara and State of New York, have invented new and useful Improvements in Track-Joints, of which the following is a specification.

This invention relates more particularly to a track-joint or connection for the meeting ends of the separable sections comprising the circular supporting-tracks for roundabouts, merry-go-rounds, and analogous machines. The invention is, however, applicable to any similar track or rail.

The circular track for the roundabout is composed of a plurality of segmental sections each consisting of wooden stringer and a flat steel rail or plate on top of the stringer.

One object of the invention is to provide a rigid smooth joint which will hold the track from deflection, while at the same time enabling the sections to be readily connected and disconnected.

Another object is to prevent the meeting ends of the steel rail-sections from sinking or cutting into and destroying the stringer and rendering the top surface of the track uneven.

In the accompanying drawings, Figure 1 is a plan view of the meeting ends of two track-sections connected by a joint embodying the invention. Fig. 2 is a longitudinal vertical section thereof. Fig. 3 is a transverse section, on an enlarged scale, in line 3 3, Fig. 1.

Like letters of reference refer to like parts in the several figures.

Each track-section consists of a wooden stringer or base A, preferably formed of two pieces or thicknesses securely bolted together, and a flat steel rail or plate B, which is secured on the top face of the stringer by bolts, screws, or other securing means *b*. The meeting ends of the stringer-sections are reduced in thickness or provided with extensions C, which overlap and form a lap-joint.

D E represent the two plates of a clamp, which are arranged at the opposite side edges of the track. The two plates of the clamp are connected and drawn tightly against the edges of the stringers by a cross-bolt F, passing

through the body of one of the stringers and the two plates of the clamp and provided with a nut *f*, and both clamp-plates are provided with inwardly-extending horizontal flanges *g*, which embrace the edges of the stringers and prevent the clamp-plates from turning or shifting vertically on the stringers. The clamp-plates are arranged opposite to the overlapping ends of the two stringer-sections and hold the latter against relative sidewise movement.

The clamp-plate E is provided with an outwardly-projecting lug H, and a plate I, provided with a similar outwardly-projecting lug, is securely fixed, by screws *i* or otherwise, to the stringer of the other track-section opposite to the lug H. A bolt J, arranged longitudinally at the outer edge of the track, passes through holes in said outwardly-projecting lugs and is provided with a nut *j*. By tightening the nut on its bolt the two lugs H and I and the track-sections to which they are secured are drawn tightly together to close the joint between the track-sections. The latter are thus rigidly held together from movement longitudinally or crosswise of the track. The joint is further stiffened in a vertical direction by the steel rails or plates, one of which overlaps the joint between the overlapped ends of the stringers. To lessen the jolt due to the wheels crossing the joint between the ends of the steel plates or rails, the ends of the same meet on an oblique line, as indicated at *k* in Fig. 1. To prevent the sharp corners or edges of the steel plates or rails from cutting or sinking into the wooden stringers under the weight on the wheels crossing the joint, thin steel wear-plates L are embedded in and secured to the wooden stringers flush with the top face thereof, by screws *l* or in any other suitable manner. Two wear-plates are shown; but a single continuous plate could be employed. The wear plate or plates greatly increase the life of the wooden stringer by preventing the steel rails from cutting or sinking into the same and hold the top faces of the meeting edges of the rail-sections in the same horizontal plane, thus producing a smooth even joint and avoiding the

knocking or jolting of the wheels in crossing the joint.

I claim as my invention—

5 1. The combination of two track-sections provided with lapped end portions, plates arranged at opposite sides of said lapped end portions, a device connecting said plates and securing the same to one of said sections, a
10 device secured to the other section, and means connecting said device and one of said plates, substantially as set forth.

2. The combination of two track-sections provided with lapped end portions, plates arranged at opposite sides of said lapped portions, a bolt connecting said plates and passing through one of said sections, one of said
15 plates having an outwardly-projecting lug, an outwardly-projecting lug secured to the other section, and a bolt connecting said lugs, substantially as set forth.

3. The combination of two track-sections provided with lapped end portions, clamp-plates arranged at opposite sides of said track opposite to said lapped end portions, and having
25 inwardly-projecting flanges embracing said track-sections, a bolt connecting said clamp-plates and passing through one of said sections, one of said clamp-plates having an outwardly-projecting lug, an outwardly-projecting lug secured to the other track-section, and a bolt connecting said lugs, substantially
30 as set forth.

4. The combination of two track-sections each consisting of a stringer and a metal rail, said stringers having lapped end portions, and
35 means for holding said stringers together and preventing relative lateral movement thereof, one of said metal rails overlapping the joint between said stringers, substantially as set forth.

5. The combination of two track-sections each consisting of a stringer and a metal rail, means connecting the meeting ends of said stringers, the metal rail of one stringer overlapping the joint between said stringers, and
45 a wear plate or plates secured to the other stringer beneath the meeting ends of said metal rails, substantially as set forth.

6. The combination of two track-sections each consisting of a stringer and a metal rail, means connecting the meeting ends of said stringers, said rails meeting in oblique line and the metal rail secured to one stringer overlapping the joint between said stringers, and a wear plate or plates secured to the other
55 stringer beneath the meeting ends of said rails, substantially as set forth.

Witness my hand this 11th day of August, 1903.

JAMES ARMITAGE.

Witnesses:

W. D. TRIMBLE,
J. M. PATTEN.