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A. H. NELLER.

CURVE FOR OVERHEAD TRACKS.

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Fig. 1.

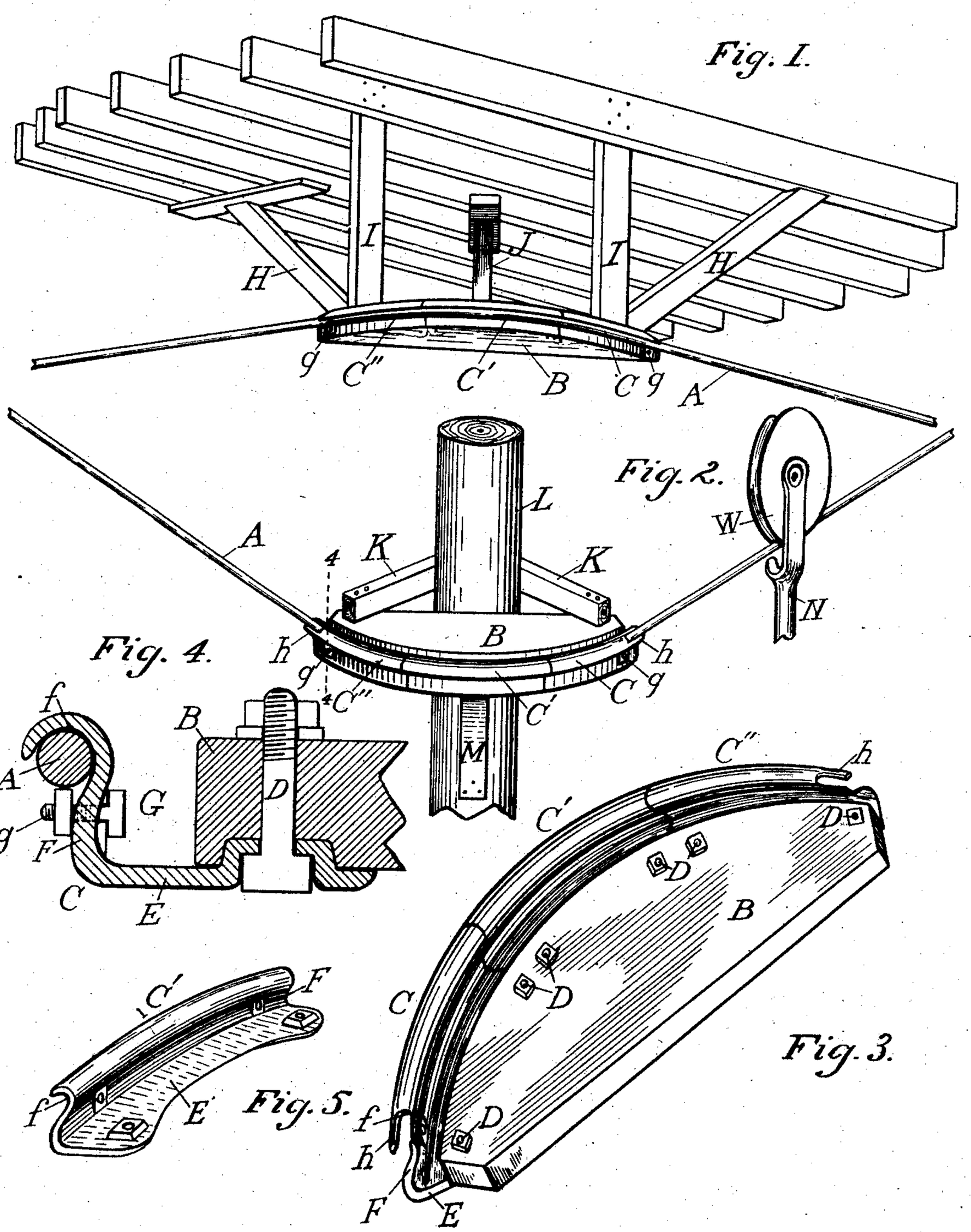

Fig. 2.

Fig. 4.

Fig. 5.

Fig. 3.

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CURVE FOR OVERHEAD TRACKS.

No. 883,663. Specification of Letters Patent. Patented March 31, 1908.

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To all whom it may concern:

Be it known that I, ALBERT H. NELLER, a citizen of the United States, residing at Fairfield, in the county of Jefferson and State of Iowa, have invented a new and useful Improvement in Curves for Overhead Tracks, of which the following is a specification.

My invention relates to a curve for overhead track, and it consists of a device by means of which an elevated carrier, supported by hangers having one open face or side and running upon a continuous tension track of wire or other material, may run along the wire on the outside of the curve; also, in other details as hereinafter set forth and more specifically pointed out in the claims.

In the accompanying drawings forming a part of this specification, Figure 1 is a perspective, (looking upward) of an outside curve embodying my invention, supported upon the joists of a ceiling. Fig. 2 is a perspective (looking downward), of the same supported by a post. Fig. 3 is an enlarged perspective of the device shown in Figs. 1 and 2. Fig. 4 is a transverse section on line 4—4 of Fig. 2. Fig. 5 is a detail view of a section of a segmental track supporting plate.

Referring to the drawings, A represents a continuous overhead tension track, being preferably a wire stretched between two supports.

B, is a frame or body block having a rounded edge, on the under side of which segmental plates C, C′ and C″ are secured by means of bolts D or otherwise. As clearly shown in the drawings, the said plate sections are angular in shape, or formed of a base plate E, which is an arc or segment of a circle, having a vertical integral flange F at right angles thereto on its outer side. The said vertical flange F has at its upper edge an outwardly overhanging portion containing an open groove *f* formed to receive and hold beneath it the continuous track A. Preferably, the base plates E are countersunk or dished to receive the bolt heads, and recesses are made in the under side of the body block to receive the dished portions of the base plates. This holds them more rigidly in position and leaves the under side clear and free of obstructions. The said plates are, furthermore, secured to the said frame or body block B in such manner as to leave a space G (see Fig. 4.) between the flange F and the outer edge of the block.

The track A is supported and held in place in the track groove *f* preferably by means of bolts *g* passing through the vertical flange F in such manner that the heads or nuts thereof will secure the wire in its proper position. Any number of these bolts *g* may be used, but one in each end of the flange F of the assembled device is sufficient.

In the completed device illustrated there are three sections of the segmental track supporting plate, but it is evident that the track plate might be one integral piece of metal, or a greater or lesser number of the segments used according to the angle of the curve, or as may be most convenient in construction. It is also obvious that the track plate and frame block might be constructed as one integral piece.

In constructing an overhead track and using this outside curve device the frame B may be suspended by means of supporting timbers, H. I. and J. from ceiling joists as shown in Fig. 1., or otherwise secured to the structure of the building as may be convenient. Fig. 2 illustrates the manner in which the device may be attached to a post by means of braces K bolted or otherwise secured to the frame B and the post L, and further supported by a brace M fixed to the said post L beneath the said frame.

In Fig. 2 is shown a grooved wheel W of an elevated carrier running upon the track and supported by an open hanger N and which may therefore be lifted off or put on the track at any point thereof. In passing around the curve the grooved wheel W runs upon the upper face of the overhanging portion of the plate C, immediately above the groove *f* containing the track, the inner flange of the said wheel W entering the space G between the flange *f* and the outer edge of the body block B, and passing freely by the said block. To enable the wheel to pass over the edge of the segmental plate more smoothly, the outer ends *h* of the plates are beveled or made at an angle, making the rise or slope from the wire to the plate gradual, and causing as little obstruction as possible to the movement of the wheel thereon.

The construction of the device shown is suitable for use in an overhead track for elevated carriers with heavy loads and having large wire and strong tension. And is furthermore useful and convenient in that it enables the wire to be supported without

crimping or otherwise damaging it. Also, by means of the bolts *g* passing through the vertical flange F, it may be readily secured in and released from the supporting device should it become necessary while the track is otherwise or at other points in operative position. Furthermore, in this construction, while the hangers N will pass freely by the outside of the curve, the wheels W will not be deflected away from the continuous line of the track, but will at all points follow it closely. By this means the track will be made simpler and the curved portions will be better supported.

What I claim is:—

1. A continuous overhead tension track supporting device by means of which a curve may be constructed to enable an elevated carrier to run on the outside thereof, having a vertical flange on its outer side formed with a groove in its upper edge to hold or contain the track, and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve.

2. A continuous overhead tension track supporting device by means of which a curve may be constructed to enable an elevated carrier to run on the outside thereof along the line of the tension track, having a vertical flange on its outer side formed with a groove in its upper edge to hold or contain the track and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve.

3. A continuous overhead tension track supporting device by means of which a curve may be constructed to enable an elevated carrier to run on the outside thereof, comprising a segmental frame and a track supporting plate having a vertical flange on its outer side the flange being formed with a groove in its upper edge to hold or contain the track and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve.

4. A continuous overhead tension track supporting device by means of which a curve may be constructed to enable an elevated carrier to run on the outside thereof, having a vertical flange on its outer side formed with a groove in its upper edge to hold or contain the track and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve, and bolts passing through the said vertical flange for securing the track in and releasing it from the said groove.

5. A continuous overhead tension track supporting device by means of which a curve may be constructed to enable an elevated carrier to run on the outside thereof, comprising a segmental frame and a track supporting plate having a vertical flange on its outer side, the flange being formed with a groove in its upper edge to hold or contain the track, and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve, and bolts passing through the said vertical flange for securing the track in and releasing it from the said groove.

6. A continuous overhead tension track supporting device by means of which a curve may be constructed to enable an elevated carrier to run on the outside thereof, comprising a segmental body block and a track supporting plate formed of an angle, one side of which constitutes a vertical flange, the vertical flange being formed with a groove in its upper edge to hold or contain the track and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve.

7. A continuous overhead tension track supporting device by means of which a curve may be constructed to enable an elevated carrier to run on the outside thereof, comprising a segmental body block and a track supporting plate formed of an angle, one side of which constitutes a vertical flange, the vertical flange being formed with a groove in its upper edge to hold or contain the track and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve, and bolts passing through the said vertical flange for securing the track in and releasing it from the said groove.

8. In a device of the character described, an overhead tension track, a carrier having a wheel to run on said track, a support having a curved or segmental edge free on its convex side, and a continuous open groove formed in said side so as to receive and support the track, and so as to permit the wheel to run along the track and upon the convex edge of the support.

9. In a device of the character described, an overhead tension track, a carrier having a wheel to run on said track, a support having a curved or segmental edge free on its convex side, and a continuous open groove formed in said side so as to receive and support the track, and so as to permit the wheel to run along the convex edge of the support upon the continuous line of the track.

10. In a device of the character described a flexible overhead continuous track, a carrier having a wheel to run upon said track, a supporting block having a curved or convex edge, a plate secured to said edge so as to conform thereto, and means on the outer edge of the plate to support the track and to permit the carrier wheel to run around the edge of the plate upon the line of the track.

11. In a device of the character described a flexible overhead continuous track, a carrier having a wheel to run upon said track, a supporting block having a curved or convex edge, a plate secured to said edge so as to conform thereto, and a groove in the outer

edge of the plate to support the track and arranged to permit the carrier wheel to run around the curve upon the line of the track.

12. In a device of the character described a flexible overhead continuous track, a carrier having a wheel to run upon said track, a supporting block having a curved or convex edge, a plate secured to said edge so as to conform thereto, a vertical flange on the outer edge of the plate having a space between it and the block, and a groove in the upper edge of said flange to support the track, so as to permit the carrier wheel to run along the flange upon the line of the track.

13. In a device of the character described a flexible overhead continuous track, a carrier having a wheel to run upon said track, a supporting block having a curved or convex edge, a plate secured to said edge so as to conform thereto, a vertical flange on the outer edge of the plate having a space between it and the block and having its upper edge rounded outward so as to form a groove in its under side to support the track and permit the carrier wheel to run upon it in the direct line of the track.

14. In a device of the character described a flexible overhead continuous track, a carrier having a wheel to run upon said track, a segmental frame having a vertical flange on its outer side formed with a groove in its upper edge to hold or contain the track, the said upper edge acting as a rail for the wheel of the carrier while the carrier is passing around the curve, and bolts passing through the said vertical flange for securing the track in and releasing it from the said groove.

15. In a device of the character described a flexible overhead continuous track, a carrier having a wheel to run upon said track, a segmental body block and a track supporting plate formed of an angle one side of which constitutes a vertical flange, the other side being adapted to be secured to the under side of the said block, and the vertical flange being formed with a groove in its upper edge to hold or contain the track and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve.

16. In a device of the character described a flexible overhead continuous track, a carrier having a wheel to run upon said track, a segmental frame, a track supporting plate formed of an angle one side of which constitutes a vertical flange formed with a groove in its upper edge to hold or contain the track and the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve, bolts to secure the other angle of the plate to the under side of the frame, the said other angle being dished to receive the bolt heads and to leave the under side of the plate smooth and clear of obstructions.

17. In a device of the character described a flexible overhead continuous track, a carrier having a wheel to run upon said track, a segmental flange having a vertical flange on its outer side, the said flange having its upper edge rounded outward so as to form a groove to support the track, the said upper edge acting as a rail for the elevated carrier while the carrier is passing around the curve, and the ends of the said upper edge being beveled to permit the wheel of the carrier to run smoothly thereupon.

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