

1,020,046.

A. H. NELLER.
SUSPENDED TRACKS.
APPLICATION FILED DEC. 20, 1909.

Patented Mar. 12, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

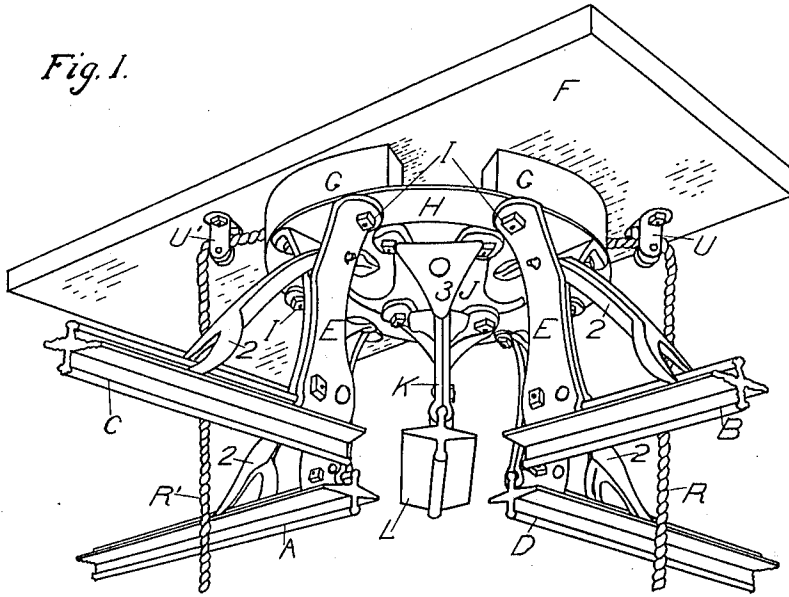
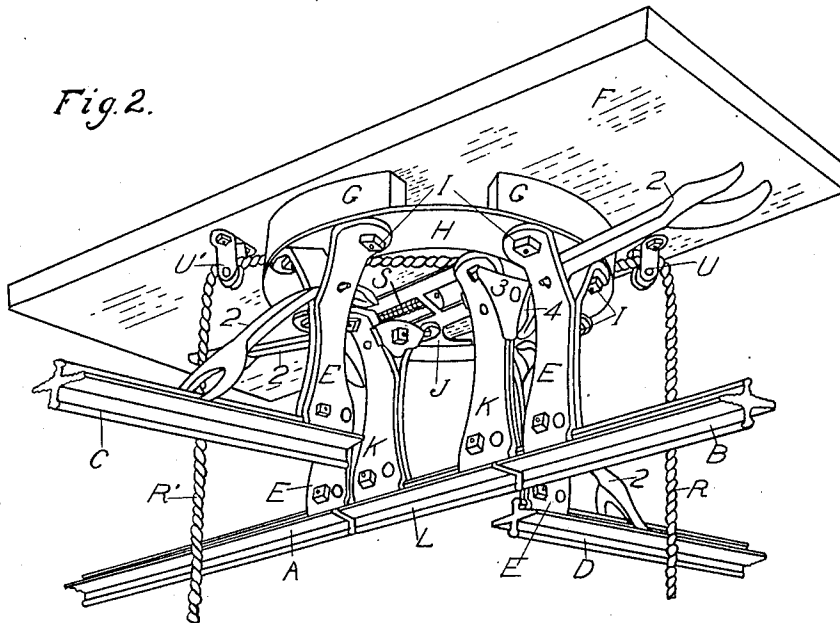


Fig. 2.



Witnesses:
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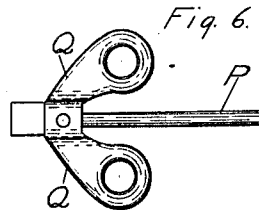
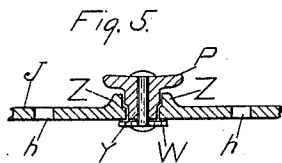
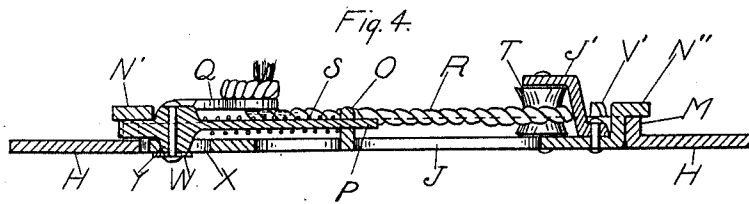
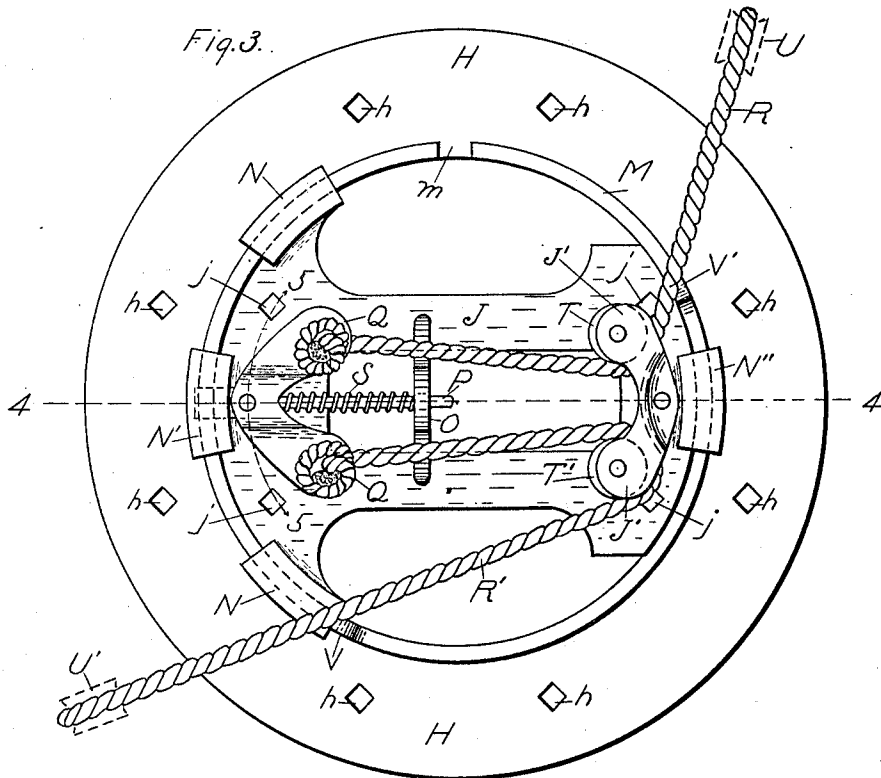
Inventor:
Albert H. Neller

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2 SHEETS—SHEET 2.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

ALBERT H. NELLER, OF FAIRFIELD, IOWA, ASSIGNOR TO LOUDEN MACHINERY COMPANY, OF FAIRFIELD, IOWA, A CORPORATION OF IOWA.

SUSPENDED TRACKS.

1,020,046.

Specification of Letters Patent. Patented Mar. 12, 1912.

Application filed December 20, 1909. Serial No. 534,237.

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, State of Iowa, have invented a new and useful Improvement in Suspended Tracks, of which the following is a specification.

My invention relates to suspended tracks which are adapted to cross each other in substantially the same plane of elevation with a short open space at the intersection, and it consists of means whereby a relatively short centrally suspended section of track in said open space will connect with the adjacent ends of one of the tracks whereby a practically continuous trackway will be formed for the passage of a carrier thereover, and at the same time, an opening will be made in the other track for the passage of the carrier therethrough; also, in other features set forth in the specification and more particularly pointed out in the claims.

In the accompanying drawings forming a part of the specification, Figure 1 is a perspective looking from the lower side. Fig. 2, is the same showing the central section of track in a different position. Fig. 3 is an enlarged plan view of the operating mechanism, looking from the upper side. Fig. 4 is a cross section on line 4—4 of Fig. 3. Fig. 5 is the same on line 5—5 of Fig. 3. Fig. 6 is an enlarged detail view.

Referring to the drawings, A, B, C and D represent four sections of overhead track- rails supported at substantially right angles to each other and converging toward a common center, but having a short space between their inner ends, which ends are held in place by hangers E attached to a plank or platform F, which in turn is secured to an overhead support not shown in the drawings. The sections A and B are in alinement with each other and the section C is in alinement with the section D. The outer ends of the track sections may be extended to any distance required and be supported in any suitable manner.

On the under side of the plank F are blocks G and on the under side of the blocks is a circular shaped plate H, which may be called the body-plate. The blocks G, plate H and hangers E are preferably secured together and to the plank F by bolts I passed through them, the hangers E having brackets on their upper ends to fit against the

plate H and to receive the bolts I which are passed through holes *h* therein. Upon the body plate a smaller plate J is centrally mounted, as most plainly shown in Fig. 3. Two hangers K preferably similar to the hangers E are secured to the plate J, (one at each end), to support a relatively short track section L, which is of the proper length to fill the space between the sections A and B, and C and D. These hangers are preferably secured to the plate J by bolts which are passed through holes *j*, as shown in Fig. 3.

The body-plate is provided on its inner edge with a circular shaped upstanding flange M, and the plate J has upwardly extended offset lugs or lips N, N' and N'' which are adapted to slide upon the flange M, while it is held in place by its body resting against the inside of the flange.

P represents a latch having one end projecting through an opening under the lug N', and the other, through a hole in a cross bar O joined to the sides of the plate J. It is also provided with two arms Q having eyes in their ends to which cords R and R' are secured. A coiled spring S is mounted on the end of the latch passing through the bar O so as to normally hold it in contact with the part of the plate J under the lug N'.

In the upstanding flange M there are two notches, one being shown at *m* and the other being under the lug N' (see Fig. 3), and the end of the latch projecting through the opening under the lug N' is adapted to catch in the notch which may be opposite and will thus hold the plate J in rigid position on the body plate. These notches are so arranged in the flange M, that when the contacting end of the latch is in one of them the plate J with its hangers and the section L will be held in alinement with the sections A and B, or C and D, thus forming with the one or the other, a continuous line of track for the passage of a carrier thereon and leaving an opening in the other track for the passage of the carrier therethrough. In Fig. 2 it is shown in line with the sections A and B while in Fig. 1 it is shown half way between the two sets of sections. The object of the cords R and R' is to release the latch from the notch and to draw the plate J from one position to the other so the section L will connect with the sections A and B or C and D as desired. To do this the cords are

passed around guide sheaves T and T' which are secured by means of a bracket cap J' to the end of the plate J opposite the latch P. The cords are then passed over other guide sheaves U and U' which are preferably secured to the plank F, and in such position that by pulling on first one cord and then on the other, the plate J will be drawn from one position to the other.

In Fig. 2, the plate J has been drawn by the cord R until the section L is in alinement with the sections A and B, and in operative position therewith. In Fig. 1 the cord R' has been drawn sufficiently to bring the section L part way from one position to the other, and by a further pull on the cord, it will be brought fully into alinement with the sections C and D. It will then be in operative position with them, and the projecting end of the latch will be in the notch *m*. The plate J is drawn from one position to the other, first by the draft of the cord R from the sheave T to the sheave U, and second of the cord R' from the sheave T' to the sheave U'. Shoulders V and V' are formed on the flange M so as to come in contact with the lugs N on either side of the plate J, and thus to limit the movement of the plate thereon.

To hold the latch more securely in place, a slot X is made in the plate J behind the lug N' in line with the latch P, and a boss Y is formed on the lower side of the latch to slide in the slot. It is preferable to make a hole in this part of the latch through which a rivet may be passed and then use a washer W to prevent the boss from getting out of the slot. Flanges Z may also be used to support the sides of the latch as shown in Fig. 5.

To prevent a carrier from running off the track sections when open, guards 2 are used, they are pivoted in the upper ends of the hangers E and have forked ends to fit over the upper edge of the track rail so as to come in contact with the wheels of the carrier, and arrest its movement thereon. When the section L is brought into alinement with the sections A and B, or C and D, the guards on these sections are raised out of the way of the carrier by the triangular shaped plates 3, (which are secured to the hangers K,) coming in contact with and pressing down the heads of the guards which project through the hangers E on the sections in alinement, and thus raising the forked ends out of the way. When not in alinement with the sections the guards will be in position to arrest the movement of the carrier, as most plainly shown in Fig. 1.

If more than two cross-tracks are used, the flange M on the body-plate will have to be fitted with a notch for each track, or in other words, for each set of track sections which, with the use of the movable section

L, are adapted to form a continuous track way for a carrier. In this way the section L may be brought into alinement with a larger number of cross tracks than are shown in the drawings, and will be held in alinement with said tracks by means of the latch catching in said notches.

It is not intended to run the carrier on to the section L and then, as a turn-table, turn it to run in another direction, but simply to close up the space between the sets of track-sections so that either of the sets of sections may form a continuous track-way for the passage of a carrier thereon. The section L is therefore, made as short as the space for the passage of the carrier between the sections will permit.

The track-rails A, B, C and D, and also, the central section L, are preferably provided with horizontal wheel supporting flanges on opposite sides, as shown, and the parts are specially fitted and arranged to suit this form of track-rail.

What I claim is:—

1. In a device of the character described the combination of a plank adapted to be secured to an overhead support, a movable plate secured to the under side of said plank, a series of converging track-sections centrally suspended by depending hangers secured to the plank and adapted to cross one another at a common point under said plate and to form two or more continuous track-ways, an open space at the point of intersection and a central track-section secured to the movable plate by depending hangers and adapted to fill said space and aline with either of the series of track-sections to form a continuous track-way.

2. In a device of the character described the combination of a plank, adapted to be secured to an overhead support, a movable plate secured to the under side of said plank, a series of converging track-sections centrally suspended by depending hangers secured to the plank and adapted to cross one another at a common point under said plate and to form two or more continuous track-ways, an open space at the point of intersection, a central track-section secured to the movable plate by depending hangers and adapted to fill said space and aline with either of said series of track-sections, and means to move the plate whereby said central section will alternately aline with one of the series of track-sections to form a continuous track-way.

3. In a device of the character described the combination of a plank adapted to be secured to an overhead support, a movable plate secured to the under side of said plank, a series of converging track-sections centrally suspended by depending hangers secured to the plank and adapted to cross one another at a common point under said plate

and to form two or more continuous track-ways, an open space at the point of intersection and a central track-section centrally secured to the movable plate by a depending hanger at each end and adapted to fill said space and aline with either of the series of track-sections to form a continuous track-way.

4. In a device of the character described the combination of a plank adapted to be secured to an overhead support, a movable plate secured to the under side of said plank, a series of converging track-sections adapted to cross one another at a common point under said plate and to form two or more continuous track-ways, an open space at the point of intersection, depending hangers secured to the plank to centrally support the inner ends of the converging track-sections and a central track-section centrally secured to the movable plate by depending hangers and adapted to fill said space and aline with the series of track sections to form a continuous track-way.

5. In a device of the character described, a central overhead support, hangers secured to said support and connected to a series of converging track-sections having a space between their inner ends, a body-plate secured to the support, and having a circular opening centrally above said space, an upwardly extended flange on the edge of said body plate, adjoining the opening, a movable-plate having upwardly extended offset lugs mounted and adapted to slide on said flange, hangers secured to the movable-plate, and a track-section supported by the hangers and adapted to aline with said converging track sections, and to be held in alinement therewith.

6. In a device of the character described, a central overhead support, hangers secured to said support and connected to a series of converging track-sections having a space between their inner ends, a body-plate secured to the support, and having a circular opening centrally above said space, an upwardly extended flange on the edge of said body plate adjoining the opening, notches in said flange, a movable-plate mounted and adapted to slide on said flange, a spring pressed latch mounted on the movable-plate and having one end adapted to enter said notches, hangers secured to the movable-plate, and a track-section supported by the hangers and adapted to aline with said converging track-sections and to be held in alinement therewith by the engagement of the latch with the notches.

7. In a device of the character described, a central overhead support, hangers secured to said support and connected to a series of converging track-sections having a space between their inner ends, a body-plate secured to the support, and having a circular open-

ing centrally above said space, an upwardly extended flange on the edge of said plate adjoining the opening, notches in said flange, a movable-plate mounted and adapted to slide on said flange, a spring pressed latch mounted on one end of the movable-plate and being adapted to enter the notches, guide sheaves at the other end of the movable-plate, cords secured to the latch and passed over the sheaves to withdraw the latch from the notches, and a track-section secured to the movable-plate and adapted to aline with said converging track-sections and to be held in alinement therewith by the engagement of the latch with the notches and to be released therefrom by means of the cords.

8. In a device of the character described, a central overhead support, hangers secured to said support and connected to a series of converging track-sections having a space between their inner ends, a body-plate secured to the support, and having a circular opening centrally above said space, an upwardly extended flange on the edge of said plate adjoining the opening, notches in said flange, a movable-plate mounted and adapted to slide on said flange, a spring pressed latch mounted on the movable-plate and having one end adapted to enter said notches, a track-section supported by the movable-plate and adapted to aline with the converging track-sections, cords connected to the latch and passed over the guide pulleys so located that a pull on the cords will withdraw the latch from the notch and cause the movable-plate to rotate in one direction or the other so that the track-section connected thereto may be brought into alinement with either of the converging track-sections.

9. In a device of the character described, a central overhead support, blocks on the under side of said support, a body-plate having a circular opening on the under side of the blocks, hangers having their upper ends adjoining the under side of the body-plate and the whole secured together by bolts, a series of converging track-sections supported by the hangers arranged in sets in line with each other and having a space between their inner ends, a rotatable plate mounted on the body-plate centrally above said space and a track-section supported by the rotatable-plate and adapted to aline with the converging track-sections.

10. In a device of the character described, a central overhead support, hangers secured to said support and connected to a series of converging track-sections having a space between their inner ends, a body-plate secured to the support, and having a circular opening centrally above said space, an upwardly extended flange on the edge of said plate adjoining the opening, notches in said flange, a rotatable-plate having upwardly extended

off-set lugs on each end adapted to slide on said flange, a spring-pressed latch mounted on the rotatable-plate and having one end adapted to enter said notches, shoulders on the flange adapted to come in contact with the lugs to limit the movement of the rotatable-plate on the flange, hangers secured to said plate, and a track-section supported by the hangers and adapted to aline with the converging track-sections and to be held in alinement therewith.

11. In a device of the character described, a central overhead support, a series of converging track-sections arranged in sets in line with each other and having a space between their inner ends, hangers secured to said support and connected to the track-sections, a rotatable-plate centrally secured to the support, hangers attached to the rotatable-plate, a track-section supported by these hangers and adapted to aline with the converging track-sections and close the opening, and guards mounted in the track-section hangers and adapted to arrest the movement of a carrier on the track when

open, and to be raised out of the way by contact with the hangers when the opening is closed.

12. In a device of the character described, a central overhead support, a series of converging track-sections arranged in sets in line with each other and having a space between their inner ends, hangers secured to said support and connected to the track-sections, a rotatable-plate centrally secured to the support, hangers attached to said plate, a track-section attached to the lower ends of these hangers and adapted to aline with the converging track-sections and close the opening, guards mounted in the hangers and adapted to arrest the movement of a carrier on the track when open, and plates on the upper ends of the hangers to engage the heads of the guards and raise them out of the way when the opening is closed.

Fairfield, Iowa, Dec. 18th., 1909.

ALBERT H. NELLER.

Witnesses:

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