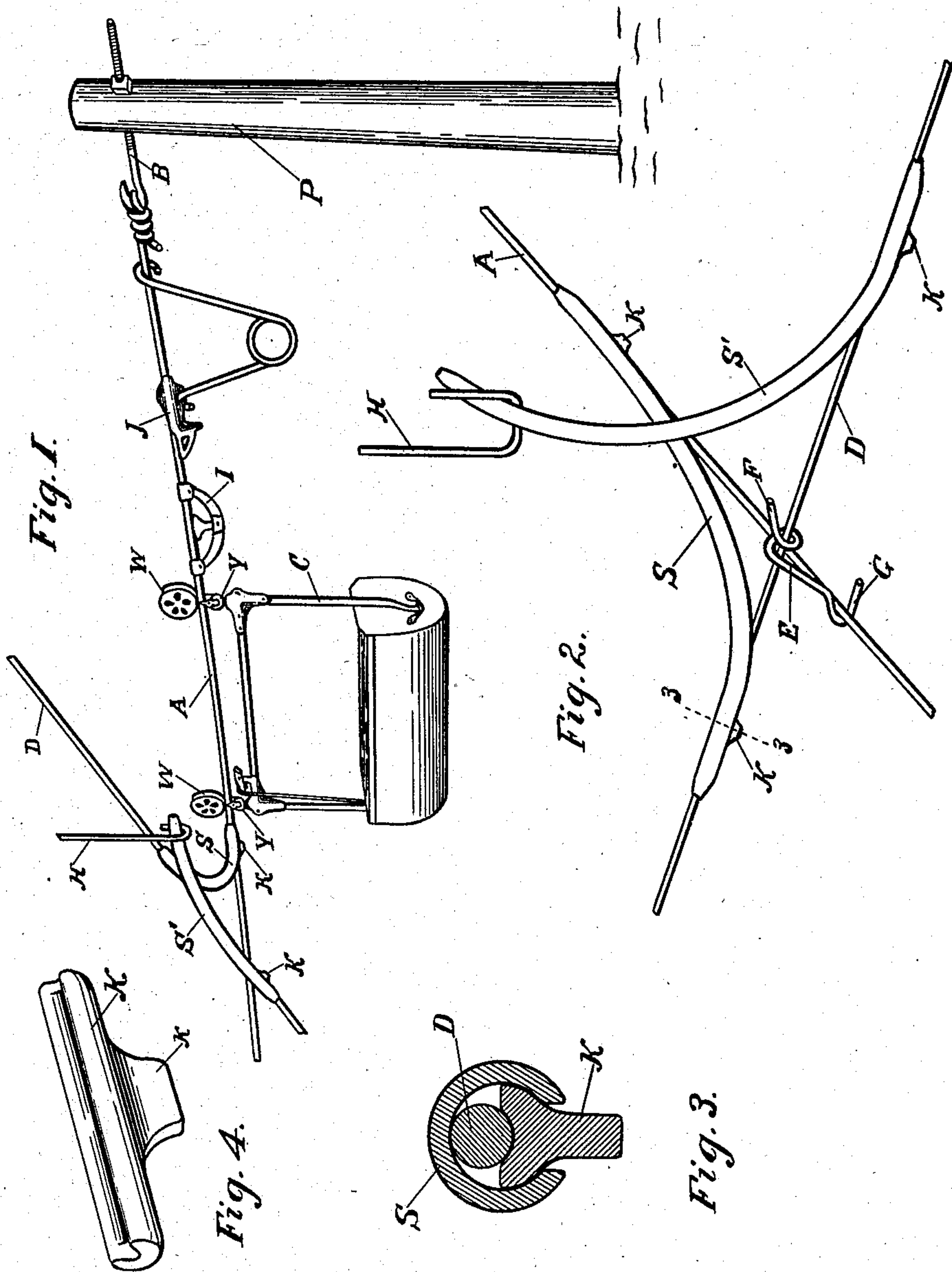


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ELEVATED CARRIER.
APPLICATION FILED JAN. 24, 1908.

900,682.

Patented Oct. 6, 1908.



Witnesses:-
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UNITED STATES PATENT OFFICE.

ALBERT H. NELLER AND WILLIAM LOUDEN, OF FAIRFIELD, IOWA, ASSIGNORS TO LOUDEN MACHINERY COMPANY, OF FAIRFIELD, IOWA, A CORPORATION OF IOWA.

ELEVATED CARRIER.

No. 900,682.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Original application filed September 3, 1907, Serial No. 390,998. Divided and this application filed January 24, 1908. Serial No. 412,400.

To all whom it may concern:

Be it known that we, ALBERT H. NELLER and WILLIAM LOUDEN, citizens of the United States, residing at Fairfield, in the county of Jefferson and State of Iowa, have invented a new and useful Improvement in Elevated Carriers, of which the following is a specification, this application being a division of application Serial No. 390,998, filed September 3, 1907.

Our invention relates to tracks for overhead carriers and it consists of an improvement whereby cross tracks may be readily joined together or separated apart, so that a carrier may run from one track to the other or upon either track as may be desired. Also, in other features set forth in this specification and more specifically pointed out in the claims.

In the accompanying drawings forming a part of this specification, Figure 1 is a perspective of a track mounted in position to support a carrier, a portion of the drawing being broken away to show the anchoring device. Fig. 2 is a perspective showing cross tracks joined together so that a carrier may run from one track to the other. Fig. 3 is a transverse section on line 3—3 of Fig. 2. Fig. 4 is an enlarged perspective of one of the details.

Referring to the drawings, A represents a main track which is preferably a wire stretched between two points, one generally being the building in which the carrier is used (not shown in drawing), and the other a post P set out in the yard. The end of the track wire is fitted with a loop and a tension bolt B, having a thread and nut on one end and a hook on the other to catch in the loop, is passed through the top of the post. The thread on the bolt is made long so it can be adjusted to secure the required tension of the track wire. D represents an additional track wire similarly supported and arranged to cross the main track wire at an angle and preferably passing above it. S and S' are switches by means of which the carrier C may be transferred from one of these tracks to the other. The switches are preferably made of pipe curved so their ends will be in line with the wires A and D. The ends are slotted on their under sides so they will fit over the wires and are held in position thereon by keys K, as plainly shown in Fig. 3. The slots

should be cut a sufficient length to give the ends of the switch a good bearing on the wires and to make an easy incline from the ends to the point where it curves away from the wire. The slotted portions of the switches will fit down over the wires more at their ends than where they curve away from the wires, thus permitting the wedges to enter easily and to become wedged tightly as they are driven back and to form secure fastenings for the switches.

When two switches are used at the same crossing, so as to connect the main track with both ends of the cross track, a support such as a hook H, is necessary to hold the end of one of the switches up from the main track so the carrier may run on the other switch and on to the end of the cross track with which it is connected. The hook H may be used to hold up the end of the switch S while the switch S' is connected to the track A and in this way the carrier may be run on to the opposite end of the track D. Any desired kind of a carrier C having wheels W to run on the track may be used, but it is preferable that the wheels should be mounted in yokes Y which are open on one side and that they be arranged to swivel in the frame of the carrier so they can be changed to run on either side of the track wire.

To make the change so the carrier will run on to either end of the cross track D, all that is necessary is to change the switches, as already noted, and to lift the carrier wheels W off the track (one at a time), swivel them around and place them on the track again with the yoke Y on the other side of the track. The changing of the yokes to the other side of the track wire is preferably done while the receptacle is empty, in which case the change is easily and quickly made. Any desired kind of key may be used to wedge the switch on to the track wire, but the form shown in Fig. 4 is preferable. Its upper side is grooved to fit the track wire, while its lower side is rounded to fit the inside of the switch pipe and it is provided with a lug k which projects down through the slot in the pipe by means of which it may be easily driven in or out.

While the switches are being used to transfer the carrier from the track A to either end of the track D it is desirable that the track wires be held securely together. To effect

this result we have provided a coupler E having on one end an open coil terminating in a projecting point F and on the other end a laterally extending hook G as shown in Fig.

2. To disconnect the wires from this position, the hooked end of the coupler is pushed back from the wire A until its body will pass down behind it. Pushing the hooked end under the wire D and up on the opposite side, the coiled end will become disengaged from the wires and they will be free to separate. When thus free to separate the main wire A will sag so the carrier may be run on it below the cross wire D. To connect the wires together again the body of the coupler is held substantially parallel with and behind the main wire A, and immediately back of the cross wire D; or the hooked end G may be raised above the wire A, so that the point F can be passed under the wire D, on the near side of the wire A. By turning the hooked end down and under the cross wire D, and bringing it up so it will hook on the main wire, as shown in Fig. 2, the coiled end will be passed around and will hold both of the wires securely together.

I represents a trip stop and J an end stop which are used in connection with the carrier C, and which are duly described in the application from which this was divided.

L is a log or timber which is generally planted in the ground, as shown, and M is a bolt which is passed up through the log. It has a nut and a long thread on its upper end, which end is passed up through a hole in the central part of a yoke N. A loop O is passed around the upper end of the post P so as to be above the tension bolt B on the inner side of the post and below it on the outer side. A pin Q is passed crosswise through the top of the post close to the tension bolt and preferably above it, so that the loop O will rest upon it and be prevented from slipping down on the post. If desired, a small notch or crease may be cut on the inner side of the post so that the upper portion of the loop will catch in it.

R is an anchor wire having a loop on its upper end into which the wire constituting the loop O is connected. The loop O is preferably made with a small loop on each end of the wire composing it, and these small loops are linked into the loop on the end of the wire R. An inverted V shaped wire V, having a loop on each of its lower ends which are connected to hooks on the ends of the yoke N, is also connected in its central or V shaped portion to a loop in the lower end of the anchor wire R. In this way the upper end of the post carrying the tension bolt B is connected to the log L, and by means of the threads and nuts on the tension bolt and on the anchor bolt M, the set of the post may be varied and the tension of the track wire A

regulated to suit requirements. The threaded end of the bolt M being passed through the center of the yoke N, at a distance from the loops of the wire V, and being above the ground, the nut is easily adjusted thereon to regulate the distance from the loop O to the log L. The loops on the ends of the wire R may be made in any desired way but it is preferable to form hooks on the ends of the wire bent parallel to the body of the wire and then to use clamps T to hold them in position and to prevent the connections from becoming disengaged. In this way the connections can be more readily made or disengaged from one another and will be securely held together.

The entire apparatus forms an extremely simple, cheap, easily arranged and effective device, and one which may be readily adapted to almost any situation. Instead of using the log L or planting it in the ground, the bolt M may be connected to any suitable holding means such as a tree, a sill of a building or other means, such as will readily occur to those skilled in the art.

What we claim is:—

1. In elevated carriers, two overhead track wires crossing each other, a carriage to run on said wires, a tubular switch-piece curved so the ends will co-incide with the wires, a slot cut in the lower side of each end of the piece so as to fit down over the wires and means to key the piece thereon.

2. In elevated carriers, two overhead track wires crossing each other, a carriage to run on said wires, a tubular switch-piece curved so the ends will co-incide with the wires, a slot cut in the lower side of each end of the piece so as to fit down over the wires, means to key the piece thereon, and means to hold one end suspended.

3. In elevated carriers, two overhead track wires crossing each other, a carriage to run on said wires, a tubular switch-piece curved so the ends will co-incide with the wires, a slot cut in the lower side of each end of the piece so as to fit down over the wires, and wedges to drive into the ends of the piece and key them thereon.

4. In elevated carriers, two overhead track wires crossing each other, a carriage to run on said wires, a tubular switch-piece curved so the ends will co-incide with the wires, a slot cut in the lower side of each end of the piece so as to fit down over the wires, and an overhead hook to hold one end of the piece suspended.

5. In elevated carriers, two overhead track wires crossing each other, a carriage to run on said wires, a tubular switch-piece curved so the ends will co-incide with the wires, a slot cut in the lower side of each end of the piece so as to fit down over the wires, and wedges to drive into the ends of the piece and key

them thereon, and lugs on the wedges adapted to project downward through the slots in the switch piece.

5 6. In elevated carriers, a main overhead track wire and another overhead track wire crossing the same, two switch pieces fastened at each end to the respective wires so as to form right and left hand switches thereon, means to alternately connect and disconnect
10 the ends of the switches to and from the main track wire, and a carriage having a swivel yoke carrying a wheel adapted to run on said wires and switches, the yoke being adapted to be placed on either side of the main wire
15 so the carriage will run on either the right or the left hand end of the cross wire.

7. In elevated carriers, a main overhead track wire and another overhead track wire crossing the same, two switch pieces fastened
20 at each end to the respective wires so as to form right and left hand switches thereon, means to alternately hold suspended one of the switch ends connected to the main wire, and a carriage having a swivel yoke carrying
25 a wheel adapted to run on said wires and switches, the yoke being adapted to be placed on either side of the main wire so the carriage will run on either the right or the left hand end of the cross wire.

30 8. In elevated carriers, two overhead track wires crossing each other, switches connecting said wires, a carriage adapted to run on said

track wires and switches, and removable means for connecting the wires together.

9. In elevated carriers, two overhead track wires crossing each other, switches connect- 35 ing said wires, a carriage adapted to run on said track wires and switches, and a device having an open coil adapted to be placed upon the wires to hold them together and to be removed therefrom. 40

10. In elevated carriers, two overhead track wires crossing each other, switches connecting said wires, a carriage adapted to run on said track wires and switches, and a device having an open coil with a projecting 45 point adapted to be placed upon the wires to hold them together and to be removed therefrom.

11. In elevated carriers, two overhead track wires crossing each other, switches connecting said wires, a carriage adapted to run on said track wires and switches, and a device having an open coil at one end adapted to be placed upon the wires to hold them together, and at the other end a laterally disposed hook 55 adapted to catch on one of the wires and hold the device in position.

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EDW. C. PETERKE.

It is hereby certified that in Letters Patent No. 900,682, granted October 6, 1908, upon the application of Albert H. Neller and William Loudon, of Fairfield, Iowa, for an improvement in "Elevated Carriers," an error appears in the printed specification requiring correction, as follows: On page 2, lines 31 to 80, inclusive, should be stricken out; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 19th day of January, A. D., 1909.

[SEAL.]

C. C. BILLINGS,
Acting Commissioner of Patents.