H. B. WEISS.

CAR MOVING DEVICE.

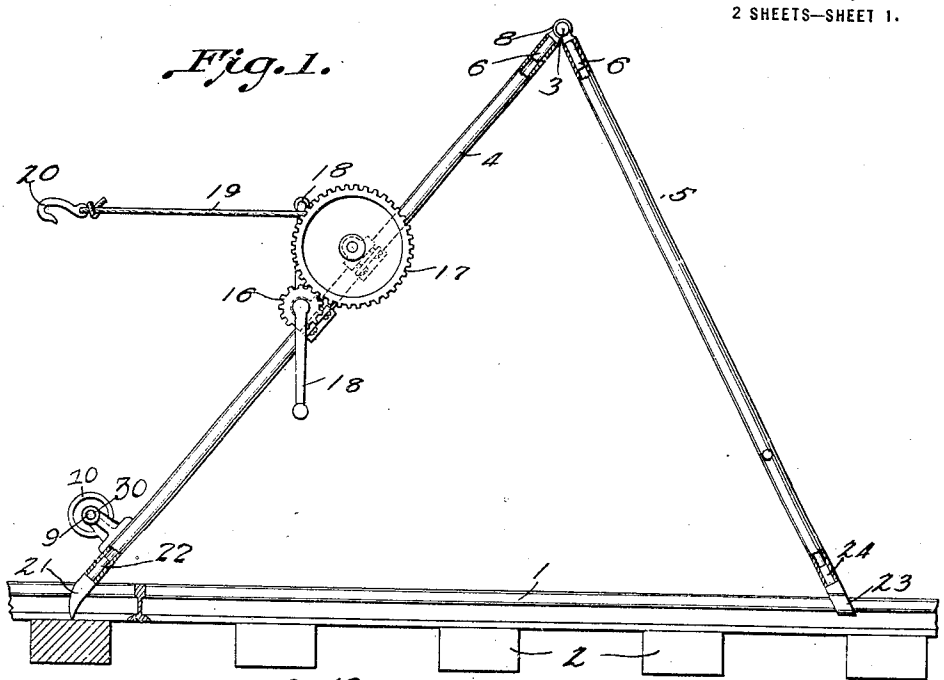
APPLICATION FILED APR. 20, 1920.

1,371,457.

Patented Mar. 15, 1921.

2 SHEETS—SHEET 1.

Fig. 1.



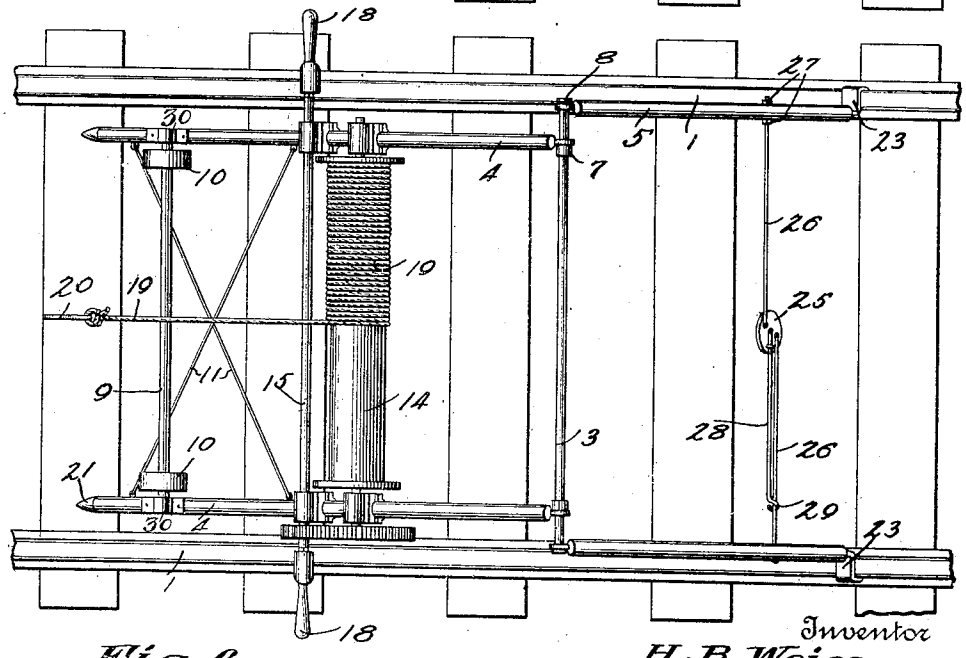


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

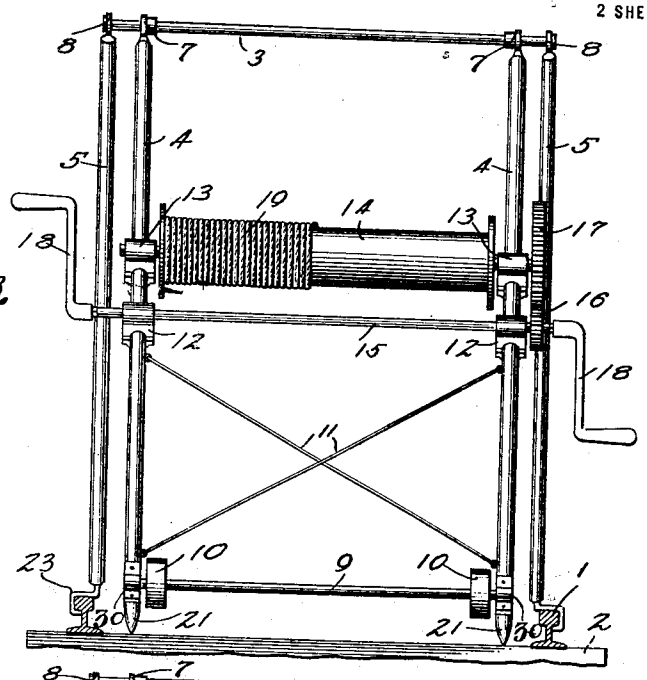
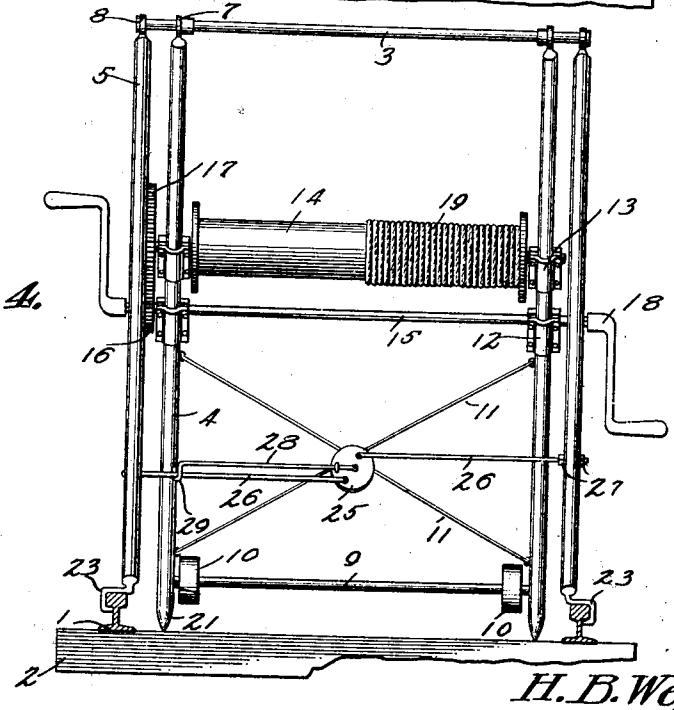


Fig. 4.



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CAR-MOVING DEVICE.

1,371,457. Specification of Letters Patent. Patented Mar. 15, 1921.

Application filed April 20, 1920. Serial No. 375,274.

To all whom it may concern:

Be it known that I, HARRY B. WEISS, a citizen of the United States, and a resident of Binghamton, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Car-Moving Devices, of which the following is a specification.

My invention is an improvement in car moving devices, and has for its object to provide a device of the character specified capable of being transported from place to place and carrying means for engaging a car and drawing the car toward the said device, and having means for anchoring the device to the track.

In the drawings:

Figure 1 is a side view of the device;

Fig. 2 is a top plan view;

Fig. 3 is a front view;

Fig. 4 is a rear view.

The present embodiment of the invention is shown in connection with a railroad track consisting of the usual rail 1 and ties 2, and the device comprises a shaft 3 having connected therewith a plurality of pairs of arms 4 and 5, the said arms extending forwardly and rearwardly at an acute angle with respect to each other. These arms and the shaft 3 may be of piping or tubing and, referring to Fig. 1, it will be seen that at their upper ends the pipes which constitute the arms 4 and 5 receive filling plugs or blocks 6 which are secured to the pipes in any suitable or desired manner, and these plugs having bearing rings 7 for the arms 4 and 8 for the arms 5. The arms 4 are connected near their lower ends by a cross shaft 9 which carries wheels 10, and the arms are braced against each other above the shaft 9 by means of inclined cross braces 11.

Pairs of bearings 12 and 13 are mounted on the arms 4, near the centers thereof, the members of the pairs being in alinement, and a reel 14 is journaled in the bearings 13, a crank shaft 15 being journaled in the bearings 12 and the shaft is parallel with the reel. The shaft and the reel are geared together by means of a pinion 16 on the shaft 15 and a gear wheel 17 on the reel.

The ends of the shaft 15 extend beyond the arms 5 which are arranged outside of the arms 4, and the said ends are polygonal to receive the sockets of cranks 18 for rotating the said shaft 15 and the reel. A rope or cable 19 is secured to the reel at one end and winds thereon, and the other end of the rope or cable is provided with a hook 20 which may be engaged with the car to be moved, as, for instance, with the coupling head.

In order to anchor the device to the railroad track to prevent movement thereof during the winding up of the cable, the arms 4 which extend forwardly have pointed spurs or anchoring lugs at their lower ends, while the arms 5 which extend rearwardly have means for grappling the rail. The spurs or lugs 21, which are adapted to engage a tie in the manner shown, have reduced extensions 22 which fit within the lower ends of the pipes forming the arms 4 and are secured thereto in any suitable or desired manner.

The grapples 23 connected with the arms 5 are substantially C-shaped members which have reduced extensions 24 fitting within the pipes forming the arms 5 and secured thereto. The grapples grip the heads of the rails engaging at the outer sides thereof, and mechanism is provided for drawing the arms 4 toward each other at the ends provided with the grapples for locking them in clamped position on the rails. The said means is in the form of a disk 25 having pivoted thereto at opposite points links 26. The outer end of each of these links is passed through an opening in the adjacent arm 5. One of the links, as shown in Fig. 4, is headed outside the arm 5 while the other is engaged by lock nuts 27 on opposite sides of the arm. A handle 28 extends radially from the disk and is rigid therewith, and this handle has at its outer end a hook 29. Referring to Fig. 1, it will be seen that the shaft 9 is journaled in bearing lugs 30 which are secured to the arms 4 so that the wheels are spaced away from the arms.

In operation, the device is taken to the point desired by wheeling it on the wheels 10, it being understood that the arms 4 and 5 may fold together, swinging on the shaft 3. When the desired point is reached the arms 4 and 5 are swung apart, the lugs or spurs 21 are engaged with the tie and the grapples 23 are engaged with the rails, the links 26 being at this time in substantial alinement with each other, that is, the hook 29 of the lever or handle 28 is released from the link, and the lever or handle is swung into substantially vertical position.

After the grapples 23 have been engaged with the rails from the outer side the handle

28 is swung down to the position of Fig. 4 and the hook 29 is engaged with the adjacent link 26. The grapples are now firmly locked upon the rail. Enough of the cable 19 is withdrawn from the reel to permit the hook to be engaged with the coupling head of the car. When now the cable is wound up by turning the shaft 15 it will be obvious that it will be moved toward the device, the device being anchored to the track. When not in use the cranks 18 may be removed from the ends of the shaft 15 and the arms 4 and 5 may be folded into approximately the same plane.

It will be evident from the description of the device that it comprises a substantially rectangular frame composed of the arms 4, the shaft 10, the reel 14 and the cross braces 11, bracing arms 5 pivoted to the frame, and means for clamping the frame and the arms to the track.

I claim:

1. A device of the character specified comprising a shaft, a substantially rectangular open frame connected with the shaft, arms pivoted to the shaft outside of the frame, the frame having pointed spurs for engaging a tie and the arms having grapples for engaging the rails, and means supported by the frame for drawing a car toward the frame, said means comprising a reel, means for rotating the reel, and a cable winding at one end on the reel and having at the other a hook for connection to the car.

2. A device of the character specified comprising a shaft, a substantially rectangular open frame connected with the shaft, arms pivoted to the shaft outside of the frame, the frame having pointed spurs for engaging a tie and the arms having grapples for engaging the rails and means supported by the frame for drawing a car toward the frame, the grappling means engaging the rails from the outer sides thereof, and means for drawing the said arms toward each other to clamp the grapples on the rails, said means comprising a disk, links pivoted to the opposite sides of the disk and connected to the arms and a lever for rotating the disk having means at its free end for engaging one of the links.

3. A device of the character specified comprising a shaft, a substantially rectangular open frame connected with the shaft, arms pivoted to the shaft outside of the frame, the frame having pointed spurs for engaging a tie and the arms having grapples for engaging the rails, means supported by the frame for drawing a car toward the frame, the grappling means engaging the rails from the outer sides thereof, and means for drawing the said arms toward each other to clamp the grapples on the rails.

4. A device of the character specified comprising a shaft, a substantially rectangular open frame connected with the shaft, arms pivoted to the shaft outside of the frame, the frame having pointed spurs for engaging a tie and the arms having grapples for engaging the rails, means supported by the frame for drawing a car toward the frame, and wheels for supporting said frame at the end remote from the shaft.

5. A device of the character specified comprising a shaft, a substantially rectangular open frame connected with the shaft, arms pivoted to the shaft outside of the frame, the frame having pointed spurs for engaging a tie and the arms having grapples for engaging the rails, and means supported by the frame for drawing a car toward the frame.

HARRY BERNARD WEISS.