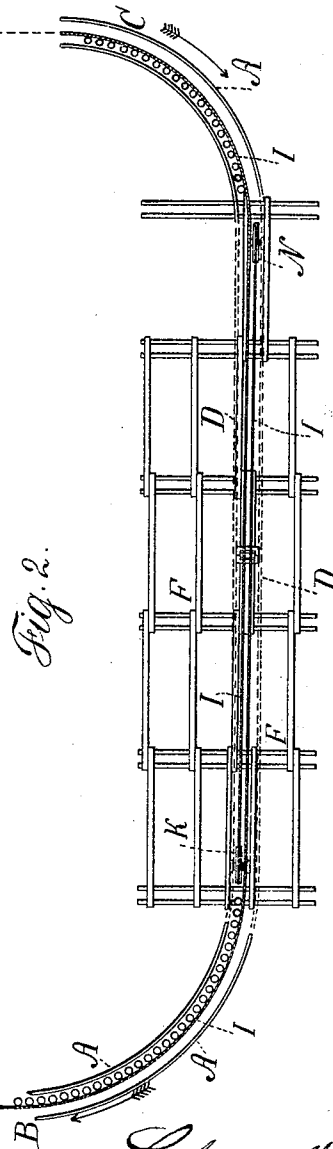
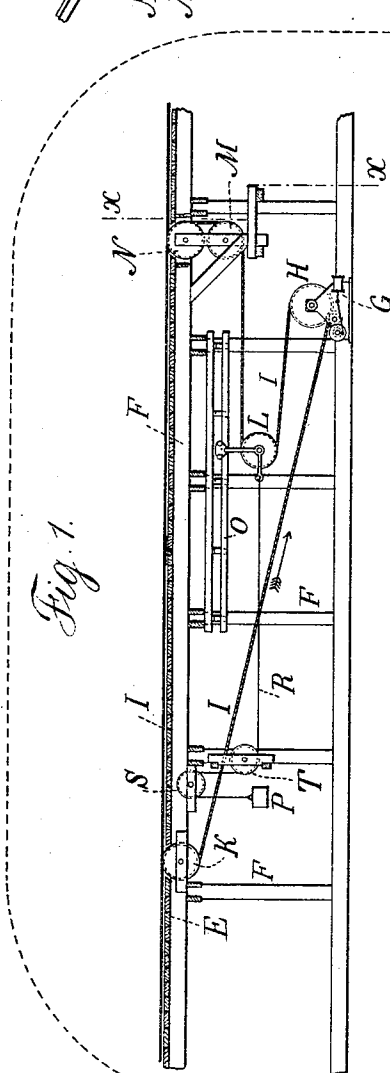
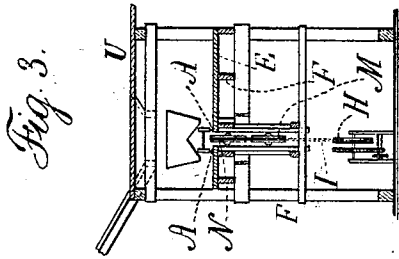


(No Model.)

C. W. HUNT.
CABLE RAILWAY.

No. 520,644.

Patented May 29, 1894.



Witnesses:
J. Stait
Charles Smith

Inventor:
Charles W. Hunt.
per Lemuel W. Perrell
Att'y.

UNITED STATES PATENT OFFICE.

CHARLES W. HUNT, OF WEST NEW BRIGHTON, NEW YORK.

CABLE RAILWAY.

SPECIFICATION forming part of Letters Patent No. 520,644, dated May 29, 1894.

Application filed February 20, 1894. Serial No. 500,833. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. HUNT, a citizen of the United States, residing at West New Brighton, in the county of Richmond and State of New York, have invented an Improvement in Cable Railways, of which the following is a specification.

This improvement is made especially for local or industrial railways in which the cars receive their loads at one or more places in traveling the circuit, and the loads are discharged at one or more places. In railways of this character the cars that receive coal, ore or other materials are connected with an endless cable and are drawn thereby along a track that is continuous and more or less circuitous, so that the cars may be loaded at any desired place or places while traveling over the route, and such cars are brought to one point of delivery.

A special feature of the present invention relates to an arrangement of wheels or sheaves over which the endless cable passes to the power and by which two parts of the endless cable are brought side by side along the space where the cars are to be loaded or unloaded, so that one part of the cable is used to bring the cars up to position and then the grip mechanism is disconnected to allow the cars to remain quiescent while being loaded or unloaded, and the grip mechanism is then connected with the other portion of the cable and the cars carried away from the point of delivery to the place where the cars are loaded, and then their movements are continued until they are brought around again to the place of discharge. By this improvement it becomes unnecessary to employ an attendant to each car or group of cars, because the cars are carried progressively around the entire track, and where the load is supplied into the car automatically it is not necessary to stop the car until it is brought around to the place of discharge. This is a great convenience because it prevents the necessity of changing the connection from one part of the cable to another part of the cable at the place where the cable passes down to the power during the time that the car is traveling the circuit of the track, and such change is effected by the attendant immediately after the dumping or discharge of the contents of the car.

In the drawings, Figure 1 is an elevation with a portion of the platform in section. Fig. 2 is a diagrammatic plan view without any boarding upon the timbers of the platform. Fig. 3 is a cross section at the line x , Fig. 1.

The rails A form a track which is to be extended continuously in any desired directions, so that the cars can pass off from the curve B and travel the entire circuit and come back to the curve C, and the portion D of the track which unites the curves B and C is preferably straight or nearly so, and such portion D of the track is upon a platform E that is supported by suitable framework or timbers F so as to leave the necessary space beneath the same for the motive power such as the engine G which is to be of any desired character and rotates the drum H, around which passes the endless cable I, and such cable I is drawn along the straight portion D of the track, around the pulley or drum K and down to the engine, and from the drum H the cable I passes around a tightener L and around the guide wheels M N and along the straight portion of the track D, around the curved portion B and thence around the whole of the track, as indicated by the dotted lines in connection with Fig. 2, coming back to the curved portion C of the track and thence to the straight portion D of the track and pulley K, and these pulleys K and N are located in such relation to the straight portion D of the track that the two parallel portions of the cable are closely adjacent to each other along the middle part of the straight track D.

It will now be understood that the loaded cars are brought in around the curved track C upon the straight portion D of the track by the cable and the grip is disconnected from the cable before such grip reaches the drum K, and the contents of the car are discharged either by opening the bottom of the car or the sides, or in any other desired manner, either upon the platform E or into chutes or receptacles suitably provided, and when this has been accomplished, the grips upon the cars are connected with the cable where the same is in a straight line between the guide wheel N and the curved portion B of the track, so that the cable carries the cars away

from the straight portion of the track around the curve and off to the place where the cars are loaded and brought back to the curve C. The tightener L is advantageously suspended
 5 from the rails O upon the framework F, and the weight P is connected by a rope or cable R over suitable wheels S T to the axis of the tightener wheel or sheave L, so that the slack of the rope is taken up and expansion and con-
 10 traction compensated for. By this improvement the movements of the cars and the discharge of the contents are easily controlled by the men that are near the motive power, and hence the operations are very much facili-
 15 tated and the cost of handling coal, ore, or other materials by the cars is lessened.

In Fig. 3 I have represented an upper platform U over the cars with a hopper-shaped chute by which materials could be supplied
 20 into the cars from above the platform E to indicate that the arrangements hereinbefore described are available at the place of reception by the cars of their load, and the cars can be delivered or discharged of their contents au-
 25 tomatically or in any desired manner while traveling around upon the circuit of the track, or they may be stopped at any desired places for receiving or discharging their contents.

I claim as my invention—

30 1. The combination with the cable, the track for the cars and the driving mechanism for the cable, of sheaves or wheels around which the cable passes and which are located so that portions of the cable are parallel to each other
 35 along a straight or nearly straight portion of the track from the respective ends of which straight portion of the track, the cable descends and is acted upon by the driving drum whereby the cars can be disconnected from
 40 the cable at any part of the straight portion of the track, and then reconnected to the adjacent parallel portion of such cable to be car-

ried around the circuit of the track, substantially as set forth.

2. The combination with the elevated plat- 45 form, of a straight track upon such platform, and curved approaches thereto, a cable passing along one of the curved approaches to the distant end of the straight portion of the track, a drum around which the cable passes 50 downwardly, a motor below the platform with a drum for the cable, a wheel at the opposite end of the straight portion of the track over which the cable passes upwardly and thence along the straight portion of the track and 55 adjacent to the other straight part of the cable, and thence passes off around the curved approach and along the circuit of the track, substantially as set forth.

3. The combination with the elevated plat- 60 form, of a straight track upon such platform, and curved approaches thereto, a cable passing along one of the curved approaches to the end of the straight portion of the track, where the cable descends a drum around which the 65 cable passes, a motor below the platform with a drum for the cable, a wheel at the opposite end of the straight portion of the track over which the cable passes and thence along the straight portion of the track and adjacent to 70 the other straight part of the cable, and thence passes off around the curved approach and along the circuit of the track, a weight and tightener wheel around which the cable passes between the drum of the motor and 75 the guide wheel at the end of the straight part of the track, substantially as set forth.

Signed by me this 15th day of February, 1894.

CHARLES W. HUNT.

Witnesses:

DANIEL J. AUGUSTINE,
 LEMUEL W. SERRELL.