S. S. WEBBER.

CABLEWAY.

APPLICATION FILED JUNE 3, 1910.

1,085,649.

Patented Feb. 3, 1914.

Fig. 4.

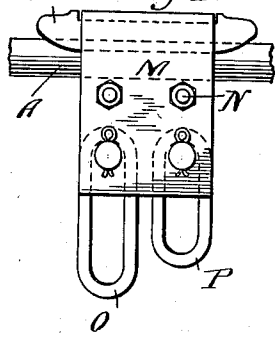


Fig. 5.

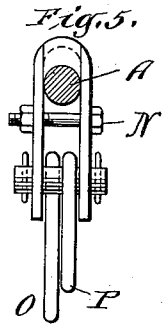


Fig. 1.

Fig. 2.

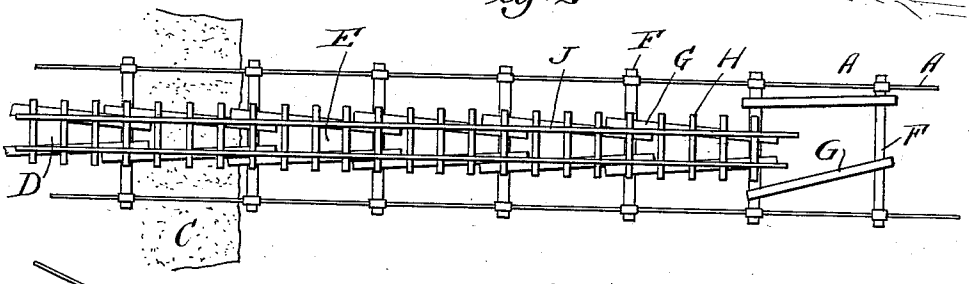
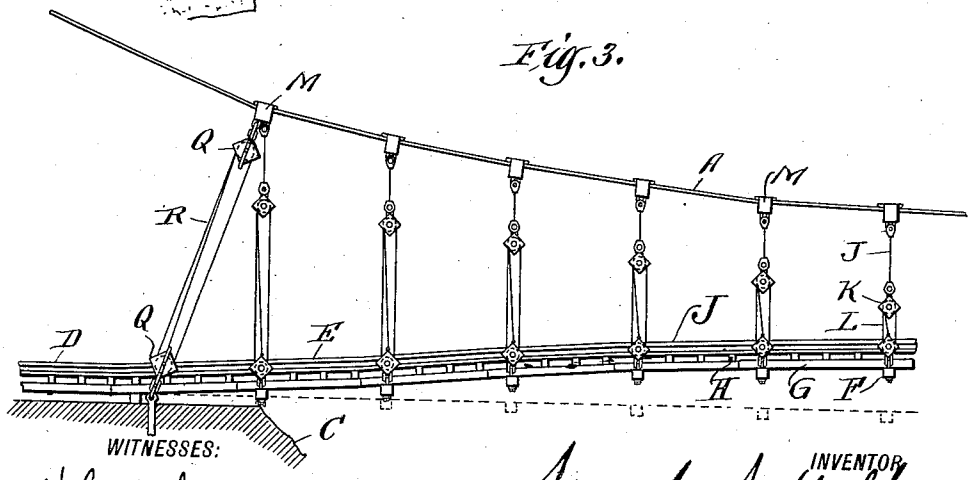


Fig. 3.



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UNITED STATES PATENT OFFICE.

SAMUEL S. WEBBER, OF TRENTON, NEW JERSEY, ASSIGNOR TO THE TRENTON IRON COMPANY, OF TRENTON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

CABLEWAY.

1,085,649. Specification of Letters Patent. Patented Feb. 3, 1914.

Application filed June 3, 1910. Serial No. 564,841.

To all whom it may concern:

Be it known that I, SAMUEL S. WEBBER, a citizen of the United States, residing in Trenton, New Jersey, have invented new and useful Improvements in Cableways, of which the following is a specification.

This invention aims to provide certain improvements in cableways especially adapted to making deep fills with earth or rock for railway embankments and the like.

The earth, rock or similar filling material is dumped from cars carried on a track suspended over the point to be filled and connected with a track which runs back over the completed portion of the fill. The extended track is carried upon a cradle or cage which is connected by suspenders with supporting cables overhead extending between towers at opposite ends of the fill, with or without intermediate towers according to the total length of the fill and the desired span of the cable.

The accompanying drawings illustrate an embodiment of the invention.

Figure 1 is a perspective view of the apparatus in operation. Fig. 2 is a plan of the cradle and the cables above it showing a new panel in the course of construction at the end. Fig. 3 is a side elevation of Fig. 2. Figs. 4 and 5 are respectively a side elevation and an end elevation of a clamp.

Referring now to the embodiment illustrated, the cables A, which may be used in any desired number, but are preferably two, extend between towers B. The completed portion C of the fill carries a railway track D which connects directly with the track E upon the cradle. The train of cars is pushed out on the cradle, each car preferably being dumped as it comes to the edge of the completed fill and only the empty cars being pushed out to the end of the cradle.

The cradle is practically a flexible bridge supported at intervals from the overhead cables, and comprises cross beams F upon which are laid stringers G each slightly longer than the panel between two cross beams, the ends of stringers of adjacent panels being over-lapped as shown in Fig. 2 so as to constitute practically a longitudinal support for the cross ties H upon which are carried the rails J. This construction facilitates the extension of the cradle as the fill progresses. New panels are continually built at the end, as shown at the right of Fig. 2, by suspending a new cross beam F in approximate position, laying stringers G across the new panel and extending the cross ties and rails upon the new stringers: the rear portion of the cradle being from time to time replaced by permanent track upon the embankment, and the materials of this rear portion of the cradle being used to extend the outer end as described.

The cradle is supported by means of suspenders J connecting the cross beams F with the cables A, and providing means for vertical adjustment such as the blocks K and tackle L. By these means the cradle can be kept approximately horizontal. Preferably the cradle is adjusted as shown in Fig. 3, so that the outer end of the cradle is slightly elevated above the horizontal when the cradle is not loaded. When the cars are run out on the cradle the cables will yield sufficiently to bring the cradle to approximately a horizontal position.

The suspenders J are attached to the cables A by means of clamps M, each of which comprises a saddle N on the top of the cable, a strap passing over the saddle and cable and clamped together by means of bolts N, and a link O to which the outer end of the suspender J is attached; preferably a second, shorter, link P being used for the attachment of a tackle block for shifting the saddle whenever it may become necessary to slide it along the cable; thus providing means for moving the suspending means, either independently of the cradle or bridge or in moving or extending said bridge. The cables are held down at points in the rear of the forward edge of the fill and preferably near the end of the fill, to approximately the position which they would assume with a loaded car on the abutting end of the cradle. This serves to render the portion of the cable carrying the clamps more nearly horizontal than it would naturally be and reduces the tendency of the clamps to slip along the cable, which is a serious matter where the cable departs considerably from the horizontal. This holding down means serves also to prevent an extreme movement of the inner end of the cradle relatively to the fixed track. For this purpose a pair of blocks Q and tackle R may be used, connected to the cable

through the rearmost of the clamps M or, preferably, a slight distance to the rear of the cradle as shown in Fig. 1.

Certain of the improvements herein referred to are capable of use with any desired number of supporting cables, one or more. Preferably, however, a pair of cables is used, providing a very convenient support for the opposite sides of the cradle, with a clear passageway between for the train and also providing considerable lateral stiffness against wind pressures. The cradle may be supported at intervals of any desired length, or in fact at its outer end only, though the knockdown construction described requires supports at intervals, corresponding with the lengths of the stringers G. I prefer to extend the support of the cradle from the cables substantially to the inner end of the cradle as this end ordinarily carries the greatest load, and in order to prevent too great a weight upon the very edge of the fill.

What I claim is:

1. An apparatus of the character described, including supporting cables, a cradle supported therefrom and means for holding down the portion of the cable in the rear of the cradle to approximately the position it would assume with a loaded car on the abutting end of the cradle.

2. An apparatus of the character described, including supporting cables, a cradle, suspending means for said cradle, and a separate friction clamp connecting each suspending means to one of said cables.

3. An apparatus of the character described, including supporting cables, a cradle, suspending means for said cradle, and a separate friction clamp connecting each suspending means to one of said cables, said clamps comprising a saddle and adapted to rest on the cable, a strap embracing said saddle and cable, and means for gripping said strap upon said cable.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

SAMUEL S. WEBBER.

Witnesses:

D. ANTHONY USINA,

KENNETH B. HALSTEAD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."