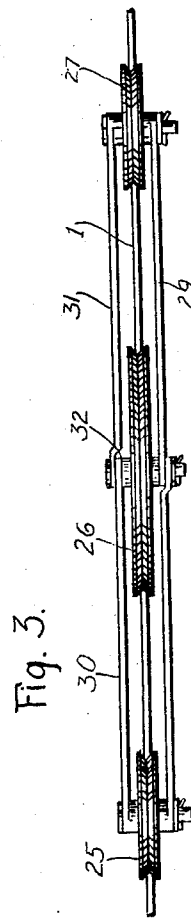
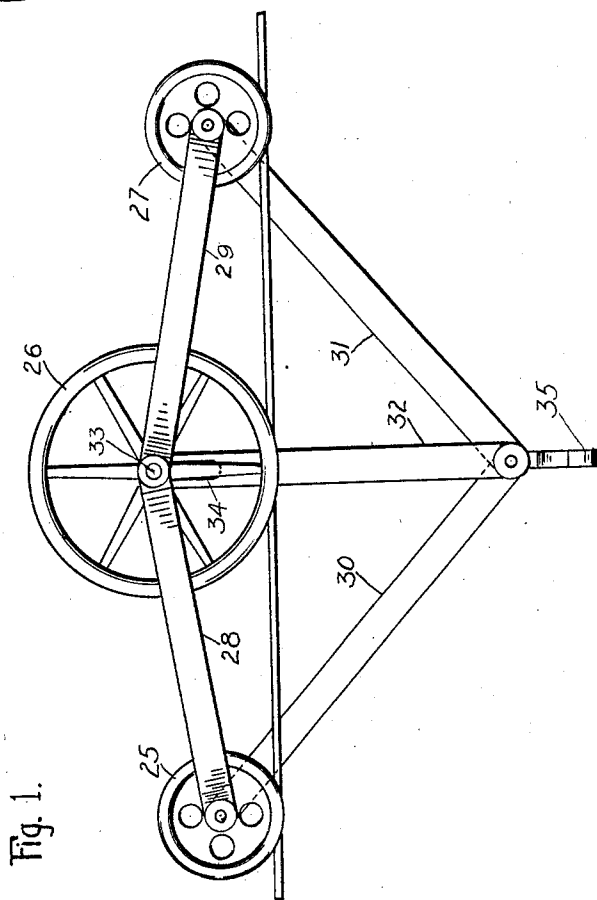
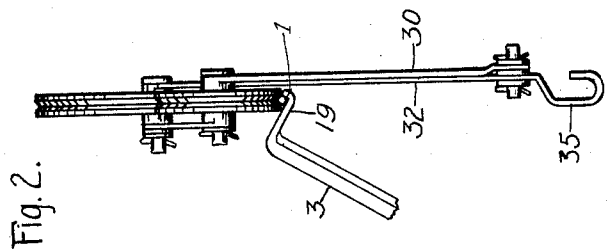


H. DE C. RICHARDS.
BOGIE OR TROLLEY.
APPLICATION FILED DEC. 24, 1919.

1,385,754.

Patented July 26, 1921.



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HARRY DE COURCY RICHARDS, OF SAN FRANCISCO, CALIFORNIA.

BOGIE OR TROLLEY.

1,385,754.

Specification of Letters Patent.

Patented July 26, 1921.

Application filed December 24, 1919. Serial No. 347,059.

To all whom it may concern:

Be it known that I, HARRY DE COURCY RICHARDS, citizen of the United States, and resident of San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Bogies or Trolleys, of which the following is a specification.

This invention relates to bogies or trolleys adapted to be used with cableways for transportation of materials and goods and has for its object to provide a flexible bogie or trolley adapted to compensate for the "sway" or sag in the cable between the supports therefor so as to lessen the drag or resistance offered to the movement of the bogie and the load supported thereby.

In order that the said invention may be clearly understood and readily carried into effect, the same will now be described more fully with reference to the preferred embodiment illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of the bogie or trolley for use with a cableway.

Figs. 2 and 3 are respectively end and plan views of said trolley.

Referring to Fig. 1, the bogie or trolley 4 is adapted to traverse the cable 1 which may be supported intermediate its ends by means of one or more stanchions, as shown at 3. The bogie comprises three or more alined wheels, 25, 26 and 27 which are connected together by means of a suitable link-structure. The three wheels are connected together at one side by means of pivotal links 28, 29 and at the other side the wheels 25 and 27 are provided with two depending links 30, 31 which extend downwardly and are pivotally connected to a link or member 32 depending from the axle 33 of the central wheel 26. The connection between the link 32 and the axle of the wheel 26 is adapted to permit of vertical displacement of said link and with this object in view the axle 33 enters a slot 34 formed in the upper part of the link. The lower end of the link is provided with a hook or other general device 35 for attaching load, which may be bent inwardly directly under the cable so that any weight supported thereby will not tend to displace the trolley or throw the same out of the vertical position on a cable with supports on one side only. When the central wheel 26 passes over a sagged portion of the cable, it will be lowered with respect to the outer

wheels 25, 27. This movement of the wheel 26 will cause the angle between the upper links 28, 29 to be increased and consequently will force apart the two outer wheels 25 and 27. The separation of the wheels 25 and 27 will cause the depending links 30, 31 and the link 32 which is attached thereto to be raised so that the downward movement due to the falling of the middle wheel 26 will be compensated for by this upward movement of the frame. It will be seen, therefore, that the weight carried by the hook portion 35 will have no appreciable vertical movement as the trolley is passing over sagged portions of the cable. The improved trolley will, moreover, tend to reduce sagging of the cable owing to the better distribution of the weight thereon.

It is evident that two or more units may be connected to accommodate extended loads or abnormal loads.

Although the invention has been described in connection with a special type of conveying cable, it is to be understood that the invention is not to be limited except as indicated in the appended claims.

What I claim is:

1. For use with an aerial cableway, a trolley comprising three wheels, axles for said wheels, pivoted links for connecting the axles of two of said wheels with the axle of the third wheel, a link depending from the axle of said third wheel and formed with a slot therein for engagement with said axle, load supporting means connected with the depending link, and links pivoted to said depending link and extending to the axles of the two first mentioned wheels.

2. In a traveling trolley, the combination with three alined wheels having axles, of a linked structure connecting the axles of said wheels, a load supporting member depending from the axle of the middle wheel and connected to the linked structure diagonally thereof, said linked structure being adapted to be deformed to separate the end wheels to compensate for any downward movement of the middle wheel and load supporting member depending therefrom.

3. A trolley of the kind described having two end wheels and a larger middle wheel, all three wheels being in alinement and having axles, a link connecting the axle of one of the end wheels to the axle of the middle wheel, another link connecting the axle of the other end wheel with the axle of the

middle wheel, a link depending vertically from the middle wheel and formed with a slot therein for engagement with the axle of said middle wheel, a load hook on the last
5 named link, and two upwardly and outwardly extending links both pivoted at their lower ends to the lower part of the vertically

depending link, and pivoted at their upper ends to the axles of the end wheels.

Signed at city and county of San Fran- 10
cisco and State of California this 15th day
of December, A. D. 1919.

HARRY DE COURCY RICHARDS.