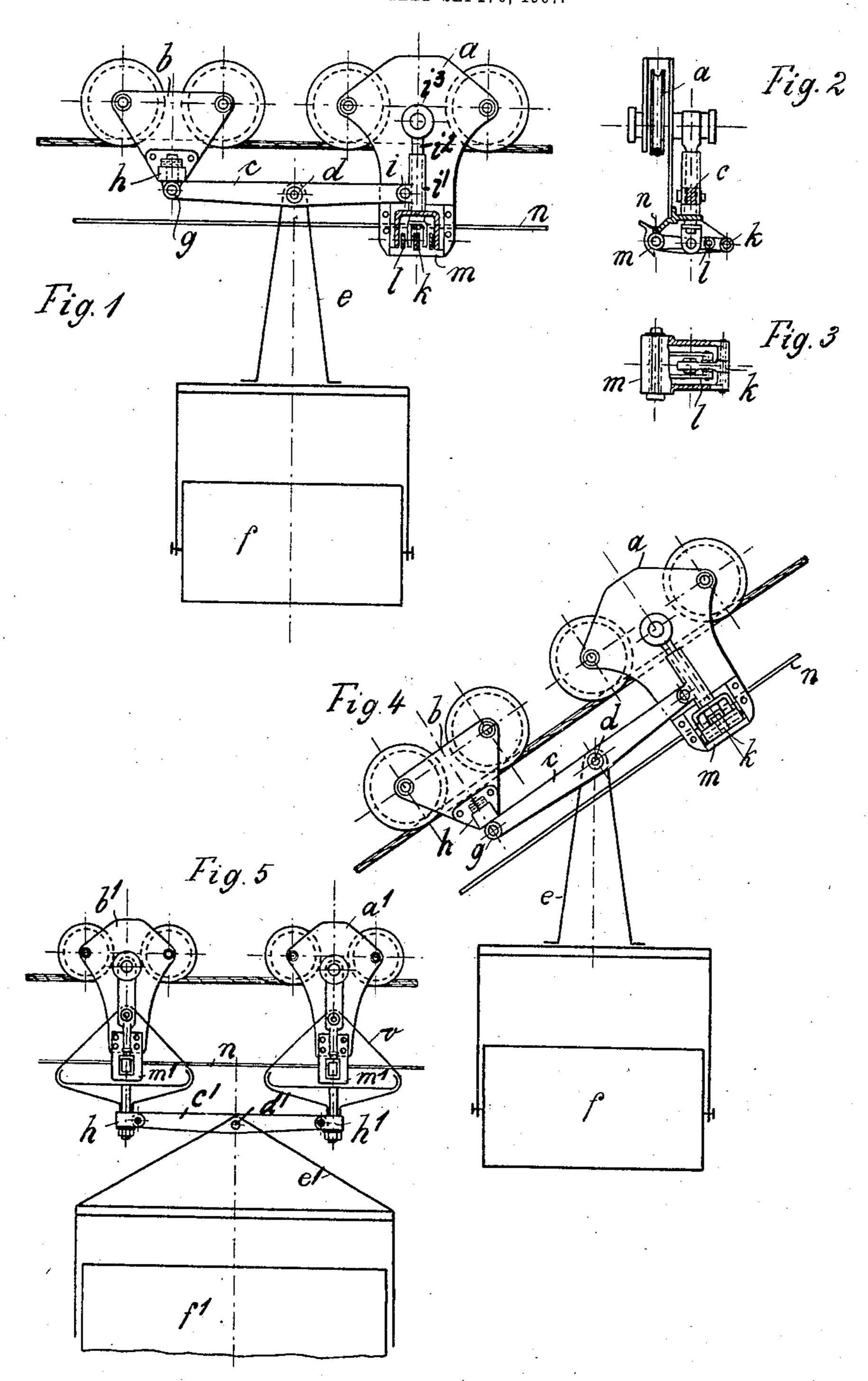
R. PFAFFENBACH.

TROLLEY CAR FOR WIRE ROPE OR SUSPENSION RAILWAYS.

APPLICATION FILED SEPT. 6, 1907.



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Rudolf Pfaffenbach by his Attorney Hthadsan

## UNITED STATES PATENT OFFICE.

RUDOLF PFAFFENBACH, OF LEIPZIG, GERMANY, ASSIGNOR TO THE FIRM OF ADOLF BLEICHERT & COMPANY, OF LEIPZIG-GOHLIS, GERMANY.

## TROLLEY-CAR FOR WIRE-ROPE OR SUSPENSION RAILWAYS.

No. 876,486.

Specification of Letters Patent.

Patented Jan. 14, 1908.

Application filed September 6, 1907. Serial No. 391,643.

To all whom it may concern:

Be it known that I, Rudolf Pfaffen-Bach, a subject of the German Emperor, residing at Leipzig, in the Empire of Germany, 5 have invented certain new and useful Improvements in Trolley-Cars for Wire-Rope or Suspension Railways, of which the following is a specification.

This invention relates to improvements in trolley cars for wire rope or suspension railways.

The improved car has two travelers either or both of which are provided with rope gripping devices actuated by the weight of the load. The connecting member of the two travelers from which the load is suspended is not directly fixed to the body of the travelers on which grippers are fitted, but is joined to the movable gripping members of the grippers.

The invention is illustrated in the annexed

drawing in which

Figure 1 is a side elevation of the car traveling on a horizontal rope the connecting memping on a horizontal rope the connecting memping device for the hauling rope of one traveler and joined at its other end to the second traveler, Fig. 2 is a vertical section through the traveler provided with the gripper. Fig. 30 3 is a plan of the under side of the gripper. Fig. 4 is a side elevation of a car of the same construction as Fig. 1 and shows same traveling on an inclined rope. Fig. 5 is a side elevation of a second form of construction in which the connecting member is connected at each end to the hauling rope grippers which are provided on both travelers.

The car has two travelers a and b, which are connected together by means of the mem40 ber c. The member c is pivotally connected at a point d between the two travelers to a frame e carrying the load-receiving-box f. The one end g of the member c is connected by means of a universal joint h to the traveler b, (Figs. 1 and 2), so that the member c can have free movement in both the vertical

and horizontal planes. The other end of the member c, is, in order to be also able to execute both movements, connected in a similar manner with the body of the traveler a for 50 example by being connected by a horizontal pivot i to the sleeve i sliding and rotating upon the rod  $i^2$  pivoted at  $i^3$  to the carriage a. This end of member c acts preferably with the aid of levers k, l (Figs. 2 and 3) on the mova- 55 ble gripping member m of the hauling rope gripper which is arranged on the traveler a The hauling rope n is thus gripped with the aid of the pressure, transferred by the carload f on the suspension frame e and the 60 member c. The gripping devices may be of any known construction and can engage an upper or lower rope.

In the form of construction shown in Fig. 5 both travelers  $a^1$  and  $b^1$  are each provided 65 with a gripper  $m^1$ . The member  $c^1$ , connecting the two travelers is connected to the travelers  $a^1$  and  $b^1$  by means of universal joints  $h^1$  and governs by means of the intermediate connecting straps o the action of the 70 grippers  $m^1$  of the hauling rope, said grippers

being provided on both travelers.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

Improved trolley car for rope or suspension railways comprising in combination two vehicular travelers, a supporting member, universal joints connecting said member to the two travelers, a hauling rope gripper 80 comprising a movable member, and connection between the connecting member and movable gripper member whereby the load carried operates upon the movable gripping member.

In witness whereof I have signed this specification in the presence of two witnesses.

## RUDOLF PFAFFENBACH.

Witnesses:

FRITZ. V. KELLER, RUDOLPH FRICKE.