

No. 724,203.

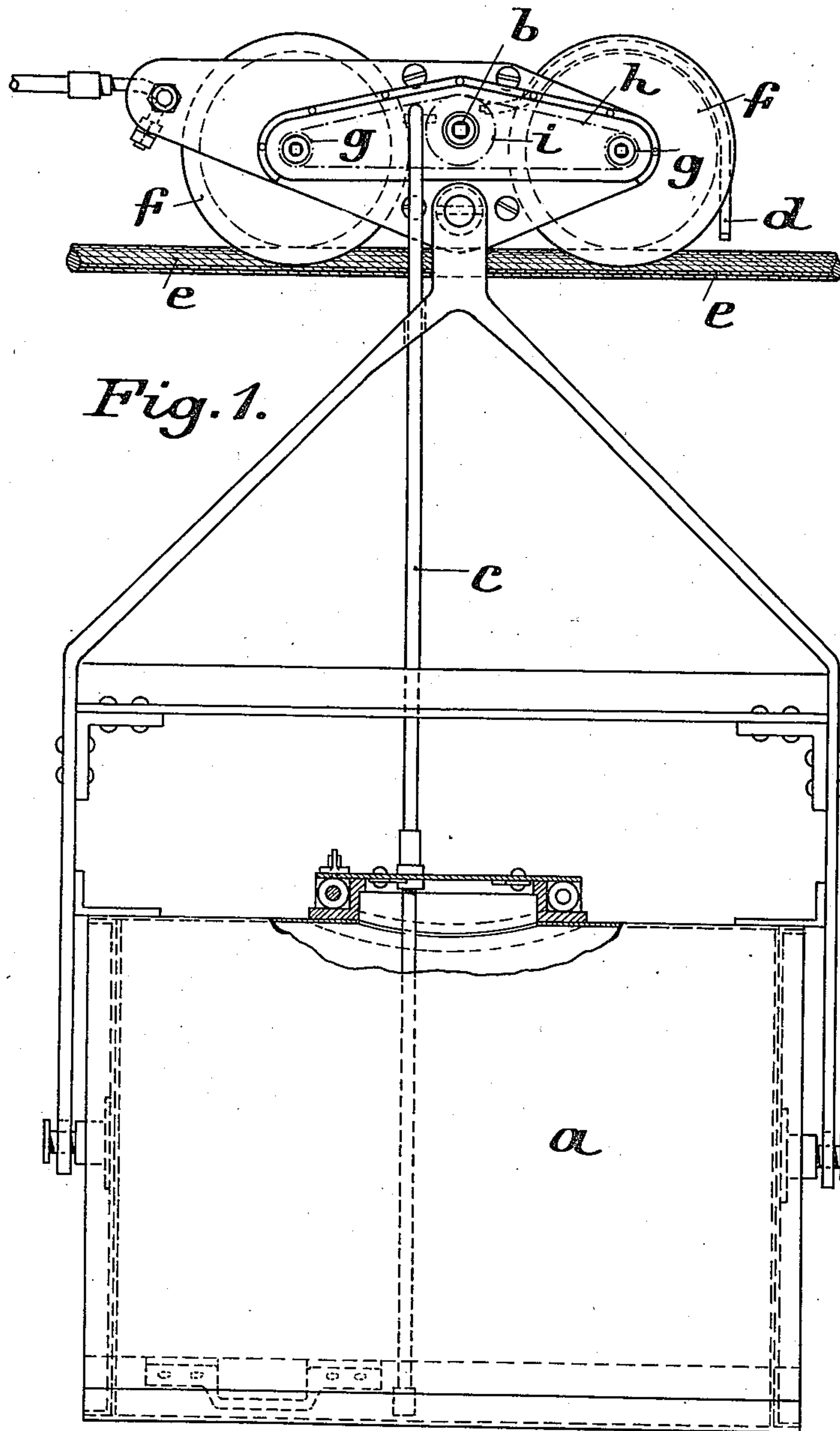
PATENTED MAR. 31, 1903.

R. PFAFFENBACH.
LUBRICATING TROLLEY FOR WIRE-ROPE RAILWAYS.

APPLICATION FILED SEPT. 18, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES

Chas. H. Sem

Edwin C. Sample

INVENTOR
Rudolf Pfaffenbach
By *Proctor & Harby*
ATTORNEYS

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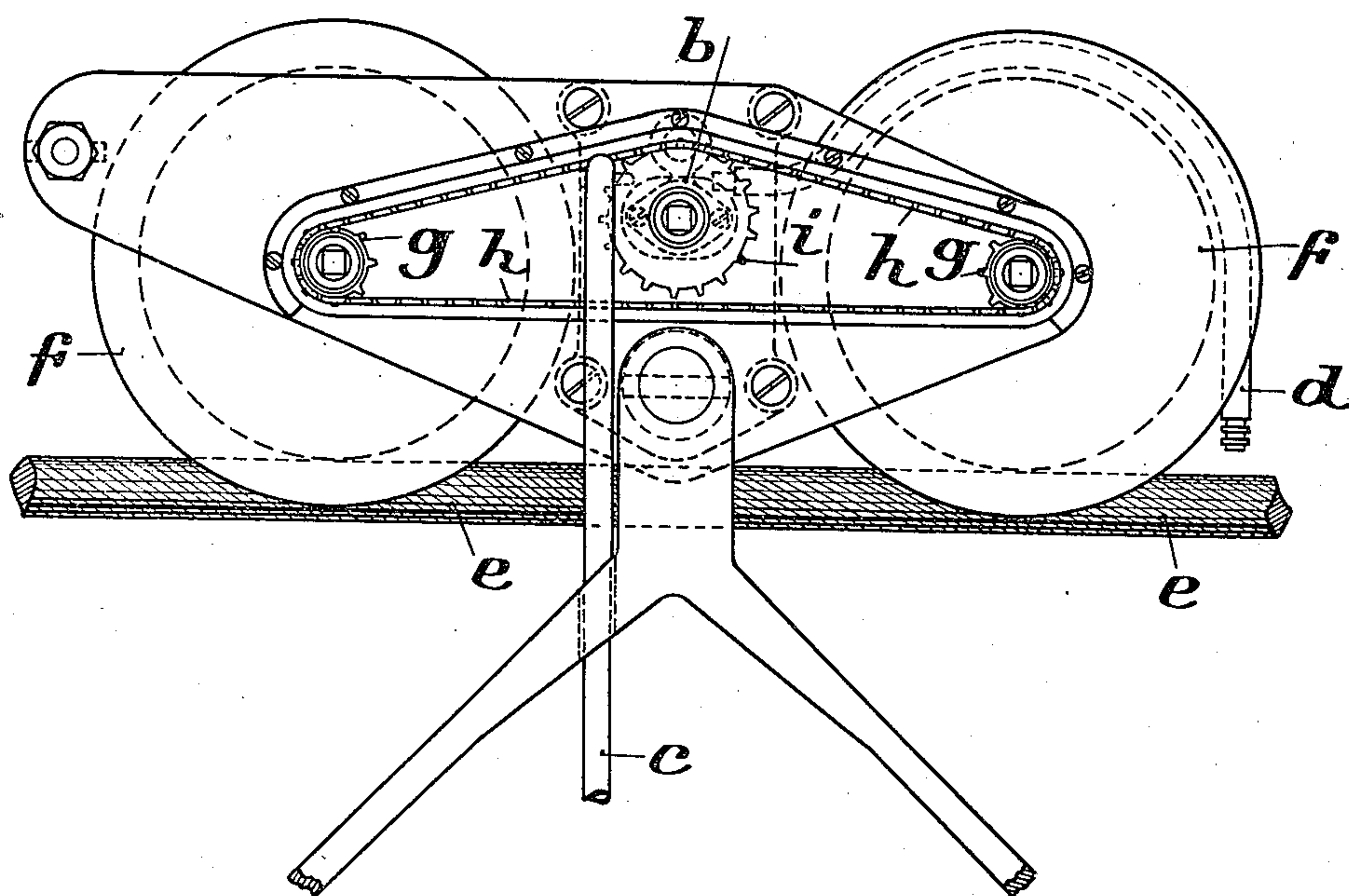
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NO MODEL.

2 SHEETS—SHEET 2.

Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

RUDOLF PFAFFENBACH, OF LEIPZIG, GERMANY, ASSIGNOR TO ADOLF BLEICHERT & CO., OF LEIPZIG, GERMANY, A FIRM.

LUBRICATING-TROLLEY FOR WIRE-ROPE RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 724,203, dated March 31, 1903.

Application filed September 18, 1902. Serial No. 123,876. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF PFAFFENBACH, manager, a subject of the King of Prussia, German Emperor, residing at 34 Pfaffendorf-
5 erstrasse, Leipzig, Prussia, Germany, have invented a new and useful Improvement in Lubricating-Trolleys for Wire-Rope Railways; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the
10 art to which it appertains to make and use the same.

This invention relates to a trolley for lubricating wire-rope railways, in which the oil is
15 drawn up by means of a pump from a receptacle suspended below the rope and is distributed upon the latter, the pump being worked by means of the trolley-wheels in such manner that the discharge of oil upon the
20 rope takes place in proportion to the speed at which the trolley travels.

Wire-rope railways usually have two lines of rope, of which the one is made stronger than the other and serves for the conveyance
25 of the loaded trucks, while the second serves for the return journey of the empty carriages. A lubricating-trolley must therefore be arranged to run upon both lines of rope, and in order to serve for the oiling of the light rope
30 it must consequently be constructed as light as possible. With this arrangement, however, it has been found that, in particular when the oil-receptacle is no longer full, the frictional contact between the trolley-wheels
35 and the ropeway is so slight that the one wheel which works the pump frequently skids upon the rope instead of turning, in consequence of which the pump does not work at all.

40 The present invention has for its object to obviate this defect without requiring to increase the weight of the trolley for increasing the frictional adhesion of the wheels; and it consists in so arranging the trolley that the
45 pump receives its motion from both the trolley-wheels, whereby each wheel only requires to supply half the power for working the pump.

A construction of the trolley for carrying out the said invention is shown on the accompanying drawings, in which—

Figure 1 shows a side view of the complete lubricating-trolley with its oil-receptacle, while Fig. 2 shows a side view of the trolley to an enlarged scale.

To the suspension-frame of the lubricating-trolley is connected the oil-tank *a*, from which a rotary pump *b*, arranged between the side cheeks of the trolley, raises the oil through the suction-pipe *c* in order to discharge it
60 through the delivery-pipe *d* onto the ropeway *e*. The pump is driven from both the trolley-wheels *f*, whose axes carry chain-wheels *g*, over which passes a pitch-chain *h*, gearing with a chain-wheel *i*, fixed on the
65 pump-shaft, by which means the rotation of both trolley-wheels *f* is imparted to the pump. Experiments have shown that with this arrangement for driving the pump no skidding of the trolley-wheels takes place when the
70 trolley is constructed of the requisite degree of lightness for the weaker ropeway.

It is obvious that in place of chain and chain-wheel gear any other suitable gear may be used for transmitting the motion of both
75 trolley-wheels to the pump.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In a lubricating-trolley for wire-rope railways the combination of a suspended receptacle, a pump for raising the lubricating-oil therefrom, two trolley-wheels, and a transmission-gear connecting both the trolley-
85 wheels with the said pump, substantially as described and for the purpose set forth.

In witness whereof I hereunto set my hand in presence of two witnesses.

RUDOLF PFAFFENBACH.

Witnesses:

RUDOLPH FRICKE,
FREDERICK J. DIETZMAN.