

F. L. ROBERTSON.

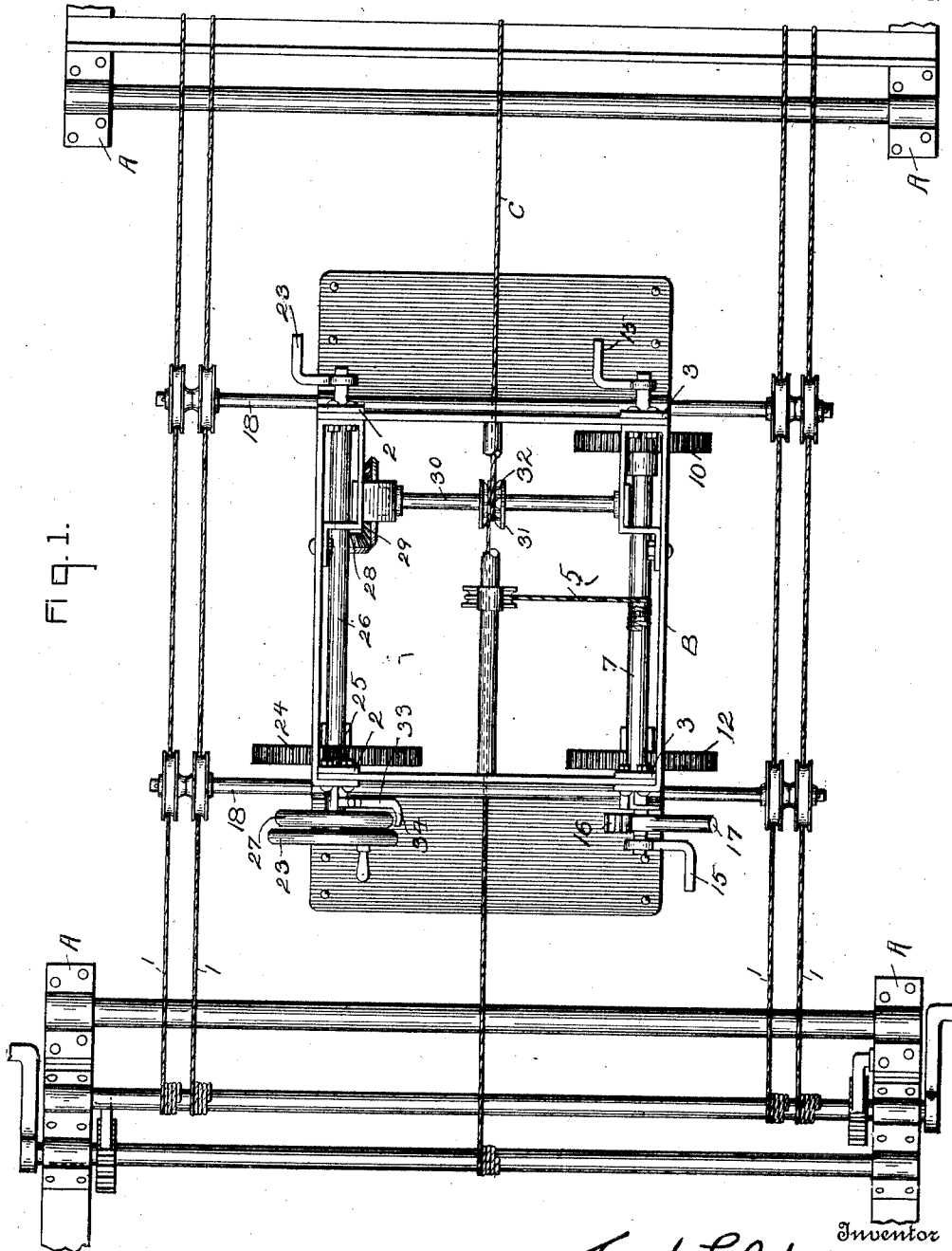
ELEVATED CARRIER.

APPLICATION FILED FEB. 9, 1911.

1,009,930.

Patented Nov. 28, 1911.

2 SHEETS-SHEET 1.



Witnesses
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Inventor

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2 SHEETS-SHEET 2.

Fig. 2.

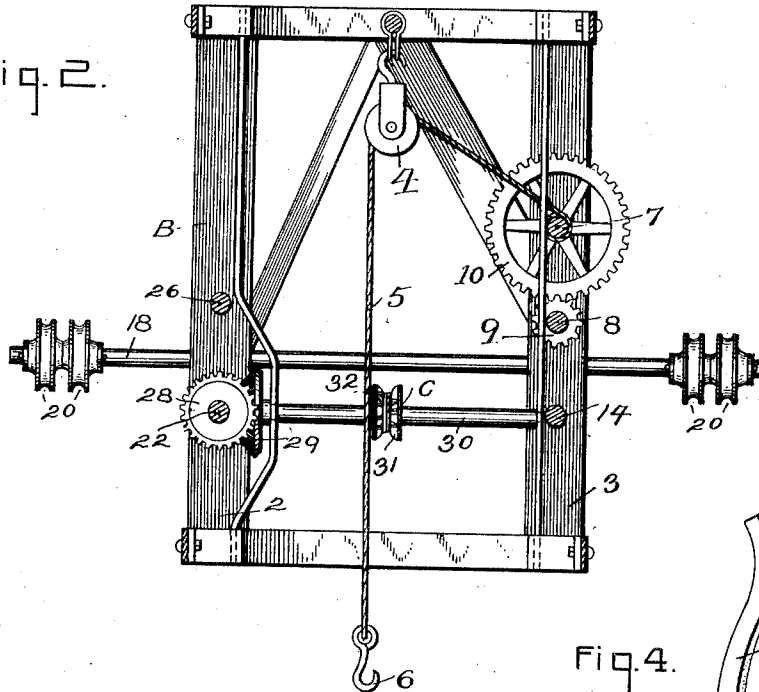


Fig. 4.

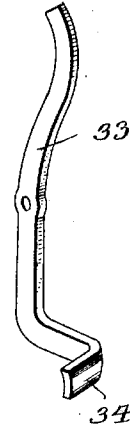
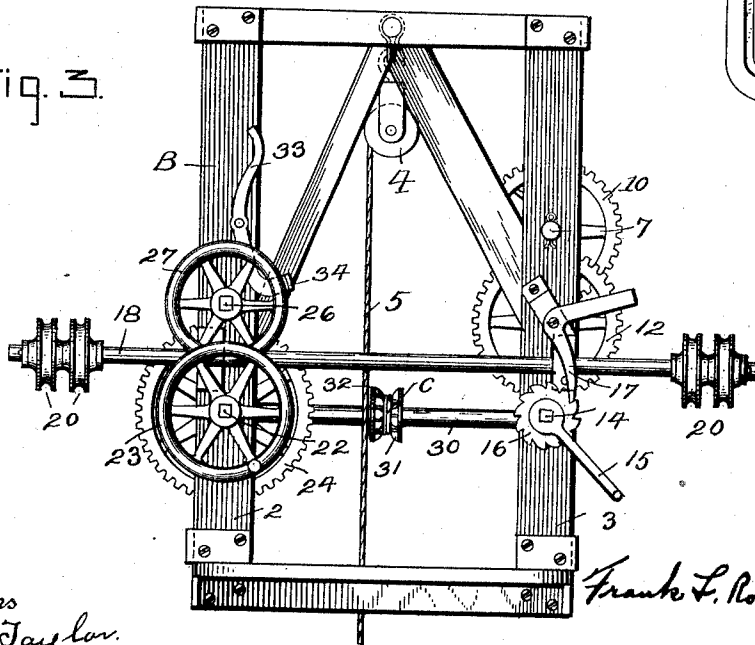


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRANK LEATH ROBERTSON, OF SUMMERFIELD, NORTH CAROLINA.

ELEVATED CARRIER.

1,009,930.

Specification of Letters Patent.

Patented Nov. 28, 1911.

Application filed February 9, 1911. Serial No. 607,634.

To all whom it may concern:

Be it known that I, FRANK LEATH ROBERTSON, a citizen of the United States, residing at Summerfield, in the county of Guilford and State of North Carolina, have invented certain new and useful Improvements in Elevated Carriers, of which the following is a specification.

My invention relates to an improvement in elevated carriers, and the object is to provide means for driving a carriage along elevated cables, and a further object is in the provision of means for raising and lowering the load carried by the carriage.

The invention consists in certain novel features of construction and combinations of parts which will be hereinafter fully described and pointed out in the claims.

In the accompanying drawings: Figure 1 is a top plan view; Fig. 2 is a horizontal sectional view of the carriage; Fig. 3 is an end view; and Fig. 4 is a detail view of the brake.

A represents the supports upon which the cables 1, 1, are stretched. I have shown two cables extending along each side of the carriage B and upon which the carriage is supported. The carriage B consists of uprights 2, 2, and 3, 3. A pulley block 4 is supported from the top of the carriage to which one end of the cable 5 is connected, the cable passing from a pulley carried by the block 4, and suspended by the cable is a hook 6. The cable, after passing over the pulley block 4, is connected to a shaft 7 which is journaled on the uprights 3. The shaft 8 is mounted upon the uprights 3, and is provided with a pinion 9 which meshes with a gear wheel 10 on the shaft 7. A gear wheel 12 on the shaft 8 meshes with a pinion 13 on the shaft 14. A crank 15 is connected to the shaft 14, whereby the gear wheel 12 is rotated by rotating the shaft 8. The rotation of the shaft 8 causes the gear wheel 10 to rotate through the pinion 9. This causes the cable 5 to be wound upon the shaft 7 for raising the load carried by the pulley block 6. A ratchet wheel 16 is mounted upon the shaft 14, which is engaged by a pawl 17 mounted upon one of the uprights 3 for holding the load at the desired elevation. Axles 18, 18, are connected to the sides of the carriage B, and are provided with grooved wheels 20, 20 at their ends, the grooved wheels being mounted upon the cables 1, whereby the carriage is supported. A drive shaft 22 is

mounted upon the uprights 2, an operating wheel 23 being provided for rotating the shaft. A gear wheel 24 is mounted upon the shaft 22, which meshes with a pinion 25 on the shaft 26, a fly wheel 27 being mounted upon the shaft 26. A pinion 28 on the shaft 22 meshes with a beveled gear 29 on the shaft 30, which shaft carries a drum 31. A cable C is connected to the supports A, and is wrapped once around the drum 31, the inner surface of the groove of the drum being provided with projections 32 for gripping the cable to prevent slipping.

Upon the rotation of the wheel 23, the shaft 22, which will be rotated, causes the rotation of the shaft 26 through the gear wheel 24 and pinion 25. The pinion 28 is also rotated upon the rotation of the shaft 22, which rotates the shaft 30 through the beveled gear 29, causing the rotation of the drum, which grips the cable C, causing the car or carriage to travel along the cables 1, the direction of travel being governed by the rotation of the operating wheel 23.

A brake lever 33 is pivotally mounted upon one of the uprights 2, and is provided with a flange 34 which engages the fly wheel 27 upon the operation of the lever, for holding the carriage against movement, and traveling down an incline, the brake can be used for controlling the speed of the car or carriage.

From the foregoing, it will be seen that I have provided simple means for drawing a load toward the carriage so that it can be carried to any point, and by a very simple train of mechanism, I am enabled to cause the car to travel along the cables to the desired destination.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In an elevated carrier, the combination with suspended cables, of a carriage frame having wheels thereon adapted to be received upon the suspended cables for supporting the carriage frame, a drive shaft mounted upon the frame, means for rotating the shaft, a pinion on the shaft, a drum shaft mounted upon the frame carrying a drum thereon, a beveled gear mounted upon the shaft meshing with the pinion, a cable wound around the drum whereby the carriage can be caused to travel in either direction upon the rotation of the drum shaft.

2. In an elevated carrier, the combination

with suspended cables, of a carriage frame having wheels thereon adapted to be received upon the suspended cables for supporting the carriage frame, a drive shaft
 5 mounted upon the frame, means for rotating the shaft, a pinion on the shaft, a drum shaft mounted upon the frame carrying a drum thereon, a beveled gear mounted upon the shaft meshing with the
 10 pinion, a cable wound around the drum whereby the carriage can be caused to travel in either direction upon the rotation of the drum shaft, and means for holding the carriage against movement and for controlling the speed of the carriage when
 15 traveling on a decline.

3. In an elevated carrier, the combination with suspended cables, of a carriage, wheels mounted on the carriage received upon the
 20 cables for supporting the carriage, a drive shaft mounted upon the carriage, means for driving the shaft, a fly-wheel shaft mounted upon the frame having a fly-wheel thereon, means for transmitting motion from the
 25 drive shaft to the fly-wheel shaft, a drum shaft mounted upon the frame, means for transmitting motion from the drive shaft to the drum shaft, a drum on the drum shaft, a cable passing around the drum whereby
 30 upon the operation of the drive shaft the carriage can be moved in either direction,

and a brake lever mounted upon the frame adapted to be thrown into engagement with the fly-wheel for controlling the speed of the carriage.

4. In an elevated carrier, the combination
 35 with suspended cables, of a carriage, wheels mounted on the carriage received upon the cables for supporting the carriage, a drive shaft mounted upon the carriage, means for
 40 driving the shaft, a fly-wheel shaft mounted upon the frame having a fly-wheel thereon, means for transmitting motion from the drive shaft to the fly-wheel shaft, a drum shaft mounted upon the frame, means for
 45 transmitting motion from the drive shaft to the drum shaft, a drum on the drum shaft, a cable passing around the drum whereby upon the operation of the drive shaft the carriage can be moved in either direction, a
 50 brake lever mounted upon the frame adapted to be thrown into engagement with the fly-wheel for controlling the speed of the carriage, and means on the carriage for raising the load to be carried by the carriage.

In testimony whereof I affix my signature,
 55 in the presence of two witnesses.

FRANK LEATH ROBERTSON.

Witnesses:

M. B. CATTRELL,
 L. P. STACK.