

(No Model.)

2 Sheets—Sheet 1.

W. F. BROTHERS.
ELEVATED CARRIER.

No. 550,777.

Patented Dec. 3, 1895.

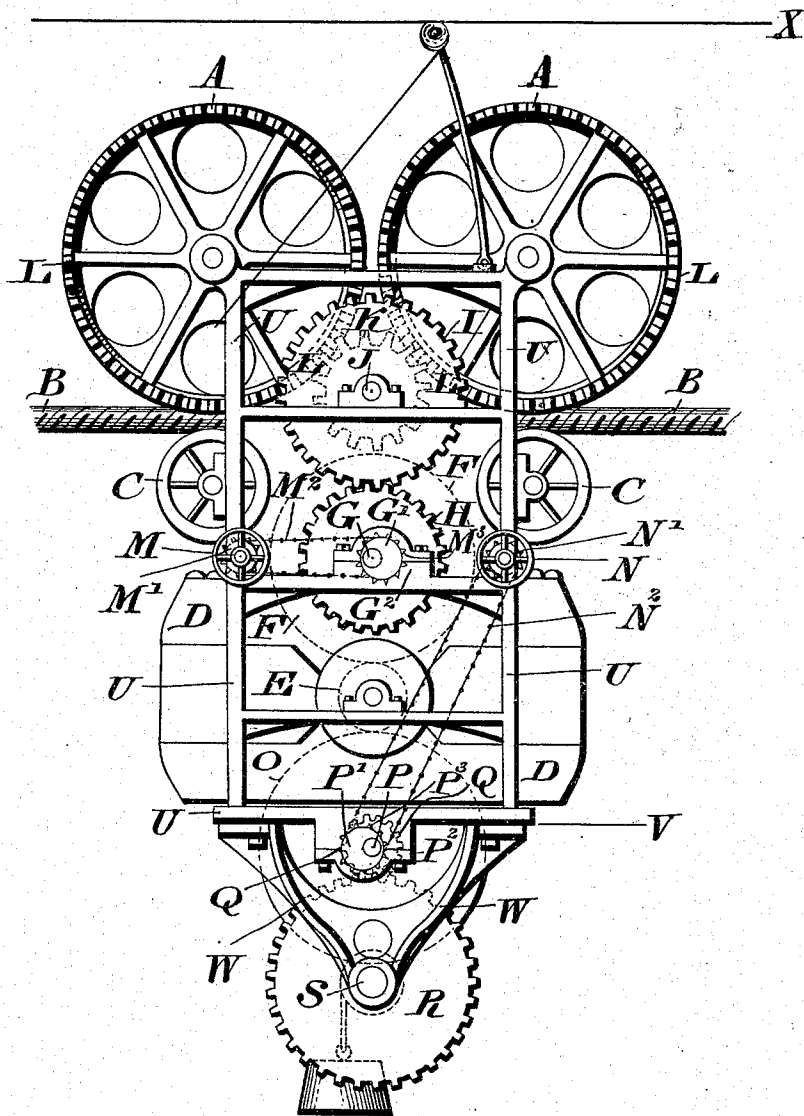


Fig. 1.

WITNESSES:

O. H. Hagler.
L. Douville.

INVENTOR

William F. Brothers
BY *John A. Dieckmann*
ATTORNEY.

(No Model.)

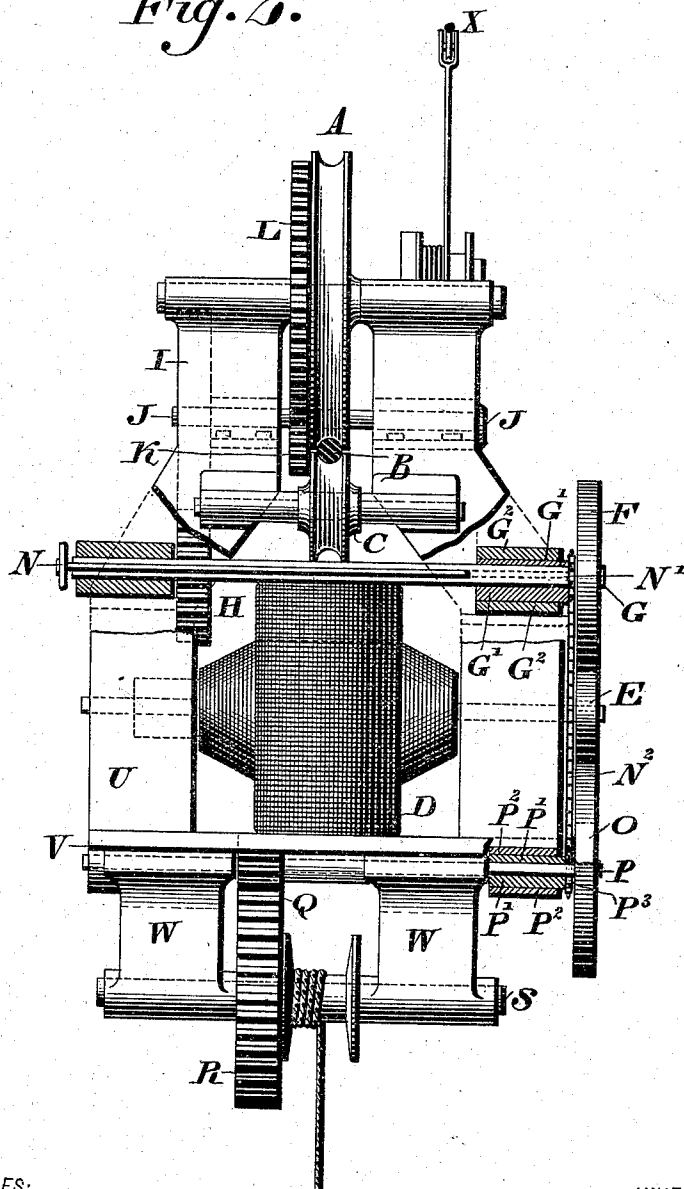
2 Sheets—Sheet 2.

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Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM F. BROTHERS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO MARIA A. BROWN, OF PLAINFIELD, NEW JERSEY, AND SARAH E. BROTHERS, OF BROOKLYN, NEW YORK.

ELEVATED CARRIER.

SPECIFICATION forming part of Letters Patent No. 550,777, dated December 3, 1895.

Application filed January 3, 1893. Renewed May 11, 1895. Serial No. 548,993. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. BROTHERS, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Elevated Carriers for Passengers, Loads, &c., which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an elevated carrier formed as hereinafter described and claimed.

Figure 1 represents a side elevation of a conveyer for passengers or loads embodying my invention. Fig. 2 represents an end view, partly sectional, of the conveyer shown in Fig. 1.

Referring to the drawings, A designates driving or running wheels, which are mounted on the frame U and run on the steel, iron, or other metallic overhead cables B, said frame depending from said cable, which latter is properly supported.

C designates sheaves, which are mounted on the frame U and run on the cable B below the driving-wheels A, whereby the conveyer is prevented from leaving said cable. Connected with the frame U is an electric motor D, which receives power through the medium of a trolley on the frame U and the feed-wire or conductor X. On one end of the shaft or arbor of the motor is a friction-pulley E, which contacts with a friction-wheel F, the latter being connected with a shaft G, which is loose in an eccentric G', freely mounted in the box G² on a cross-bar of the frame U. Secured to the shaft G is a spur-wheel H, which meshes with a spur-wheel I, whose shaft J, which is mounted on the frame U, carries the pinion K, which is geared to the spur-wheels L L, which latter are cast with or otherwise attached to drivers A, by which means power of the motor D may be transmitted to said drivers and motion accordingly imparted to the conveyer.

Contacting with the pulley E is a friction-wheel O, whose shaft P is freely fitted in an eccentric P' and carries the pinion Q, said eccentric being freely mounted on the box P² on the cross-bar of the frame U. The pinion Q meshes with a spur-wheel R, whose shaft

S is mounted on the bracket W, depending from the frame U below the line V and attached thereto by bolts, so that said bracket and parts thereon may be readily removed and a car or other appliance substituted therefor.

On the shaft S is a winding-drum, to which a steel cable or chain hoist may be secured, it being evident that the power of the motor D may be transmitted to said winding-drum owing to the intermediate gearing.

Mounted on the frame U is a hand-wheel M, whose shaft carries a sprocket-wheel M', around which passes the sprocket-chain M², which also passes around a sprocket-wheel M³, cast with or otherwise secured to the side of the eccentric G'.

Mounted on the frame U is a hand-wheel N, whose shaft carries a sprocket-wheel N', around which passes the sprocket-chain N², which also passes around a sprocket-wheel N³, cast with or otherwise secured to the side of the eccentric P'.

The operation is as follows: When the wheel M is rotated by the operator, who may be seated or supported on a proper portion of the frame U, the eccentric G' is turned, and the shaft G is lowered in such manner that the friction-wheel F is lowered and caused to contact with the pulley E, whereby the power of the motor is transmitted to the driving-wheels A, the effect of which is the propulsion of the conveyer, as is evident and as has been stated. When the wheel M is rotated in the reverse direction, the friction-wheel F is raised, so as to clear the friction-pulley E, and thus the propulsion of the conveyer ceases. When the wheel N is rotated, the chain N² turns the eccentric P', and the shaft P is raised in such manner that the friction-wheel O is placed in contact with the friction-pulley E, and thus the power of the motor is transmitted to the winding-drum on the shaft S, whereby a load may be readily raised. When the wheel M is again properly turned, the conveyer will be propelled and the load carried by the same after the manner of a traveling engine.

By having the eccentric P' as described the end of the shaft P is gradually raised or lowered instead of abruptly, a feature of opera-

tion which is of importance, especially when the device is running. When the hoisting attachment is no longer required, the gradual lowering of the shaft disengages its wheel without jarring or disturbing the running gearing.

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

10 1. A frame with running wheels mounted thereon, sheaves on said frame below said wheels, a trolley arm on said frame, a motor on said frame, a friction wheel on the shaft of said motor, a second shaft with a gear
15 wheel thereon, gearing meshing with said gear wheel and said driving wheels, and a friction wheel on said second shaft adapted to be placed in contact with said friction wheel on the motor shaft, said parts being
20 combined substantially as described.

2. A frame with running wheels mounted thereon, a trolley arm on said frame, an electric motor on said frame, a friction wheel on the shaft of said motor, a shaft having one
25 end journaled in an eccentric mounted in a box on said frame, a friction wheel on said last mentioned shaft adapted to contact with said first mentioned friction wheel, and means substantially as described for operating said
30 eccentric, said parts being combined substantially as described.

3. An apparatus for the purpose described,

consisting of a frame with running wheels thereon, a motor on said frame, a driving shaft on said motor with a friction wheel
35 thereon, a hoisting apparatus secured to said frame and having an operating shaft, a rotatable bearing in which one end of said shaft is eccentrically mounted, a box on which said bearing is mounted, a friction wheel on said
40 operating shaft adapted to contact with the friction wheel of the driving shaft, and means substantially as described for rotating said bearing, said parts being combined substantially as described.

4. A frame with running wheels thereon, and a trolley arm, a motor on said frame having a friction wheel on its shaft, the shaft G journaled at one end in an eccentric mounted
45 in a box on the said frame, a sprocket wheel secured to said eccentric, a hand wheel with a connected sprocket wheel, a sprocket chain connecting said sprocket wheels, and a friction wheel on said shaft G engaging the friction wheel on the motor shaft, said parts being
50 combined substantially as described.

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

WILLIAM F. BROTHERS.

Witnesses:

N. CURTIS LAMMOND,
WM. H. BATES.