G. PAUL & J. SIBLEY.
Freigt-Car.

No. 160,463 Patented March 2, 1875.

Fig. 1.

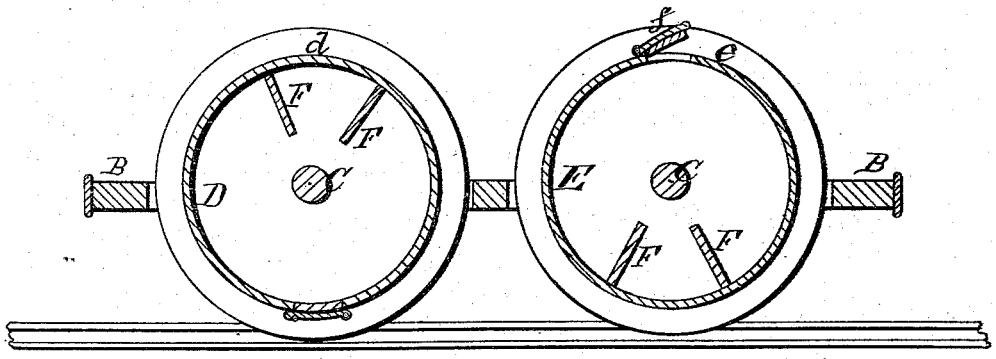


Fig. 2.

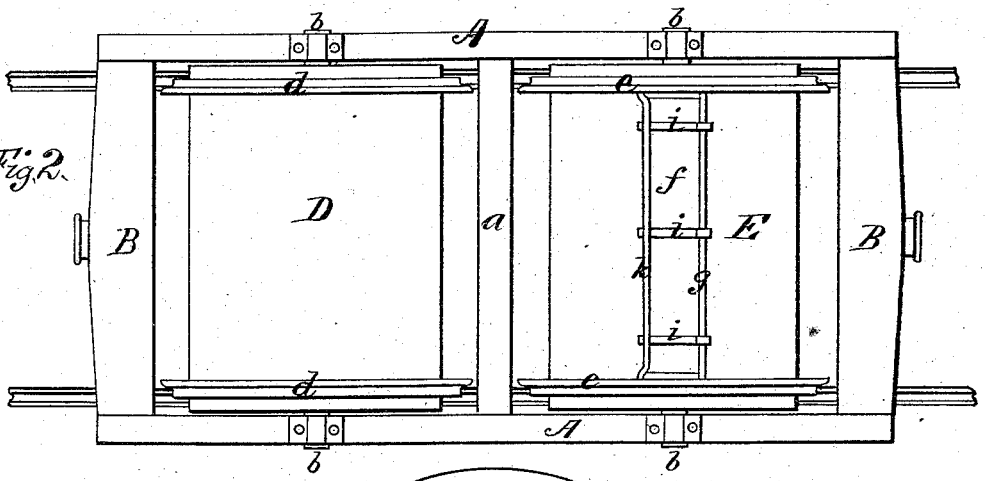
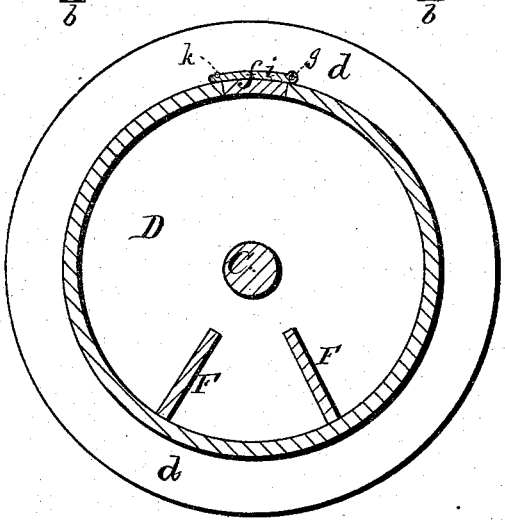


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE PAUL AND JOSIAH SIBLEY, OF KENTON, OHIO.

IMPROVEMENT IN FREIGHT-CARS.

Specification forming part of Letters Patent No. **160,463**, dated March 2, 1875; application filed January 2, 1875.

To all whom it may concern:

Be it known that we, GEORGE PAUL and JOSIAH SIBLEY, both of Kenton, in the county of Hardin and State of Ohio, have invented a new and valuable Improvement in Freight-Car; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical longitudinal section of our freight-car. Fig. 2 is a plan view of the same, and Fig. 3 is a sectional detail view.

This invention has relation to improvements in railroad-cars which are especially designed for the transportation of freight.

In the annexed drawings, A designates the lateral beams, and B the end beams, of a preferably rectangular frame, in connection with which I propose to show the construction of my improved freight-car. This frame, which may be of wood or of iron, is provided with suitable corner and end plates, and with a suitable draw-bar. It is also transversely braced at *a*, with a view to adding to and maintaining the requisite solidity of its parts. In this frame are journaled the ends *b* of the iron axles C of two hollow cylindrical receptacles for freight, D and E, which are provided with flanged tires *d* and *e*, rigidly secured thereon in any suitable manner. These cylinders may be of any suitable material, but are preferably of iron, and they are provided with doors *f*, hinged to a rod, *g*, extended across them from tire to tire; and the free ends of the hinges *i* extend beyond the lateral edges of the doors, and are notched for a purpose hereinafter explained. *k* designates locking-rods, having their bearings in the inner surfaces of the tires *d e*, and adapted to vibrate in the said bearings over the ends of the hinges *i* of doors *f*, for the purpose of holding the same rigidly closed; and when the said rods are engaged in the notches, above-mentioned notches being in the nature of a spring, any casual disengagement thereof from the ends of the said hinges is effectually prevented. F designate radially-arranged blades, extending from end to end of the said cylinders, within the same, and rigidly secured in position in any suitable manner. These blades are designed to prevent the load within the cylinders from shifting during transportation, in consequence of their rotation on their axes. If a direct draft be applied to the frame A B, the cylinders will be rotated, causing them to proceed upon the track as if they were ordinary cars; and they may be run at the same speed with less motive power.

What we claim as new, and desire to secure by Letters Patent, is—

The combination, with the door *f*, having hinges *i*, of the locking-bar *k*, substantially as and for the purpose set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

GEORGE PAUL.
JOSIAH SIBLEY.

Witnesses:
L. M. STRONG,
JAMES BAIN.