No. 746,381. PATENTED DEC. 8, 1903.

F. C. ROBERTS.

TRANSFER STOCK CAR.

APPLICATION FILED JUNE 17, 1903.

NO MODEL. 3 SHEETS—SHEET 1.

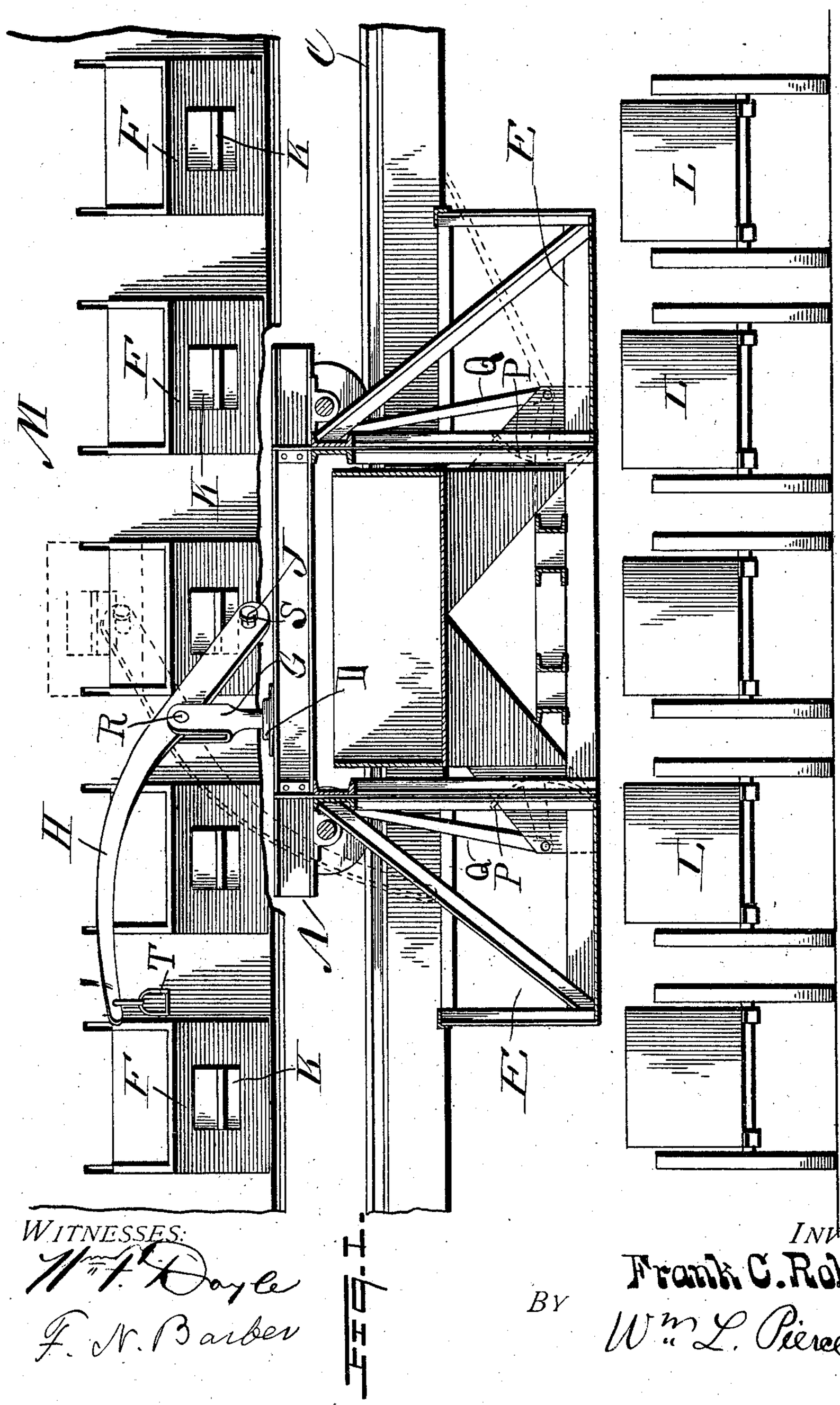


FIG. 1.

WITNESSES:

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F. N. Barber

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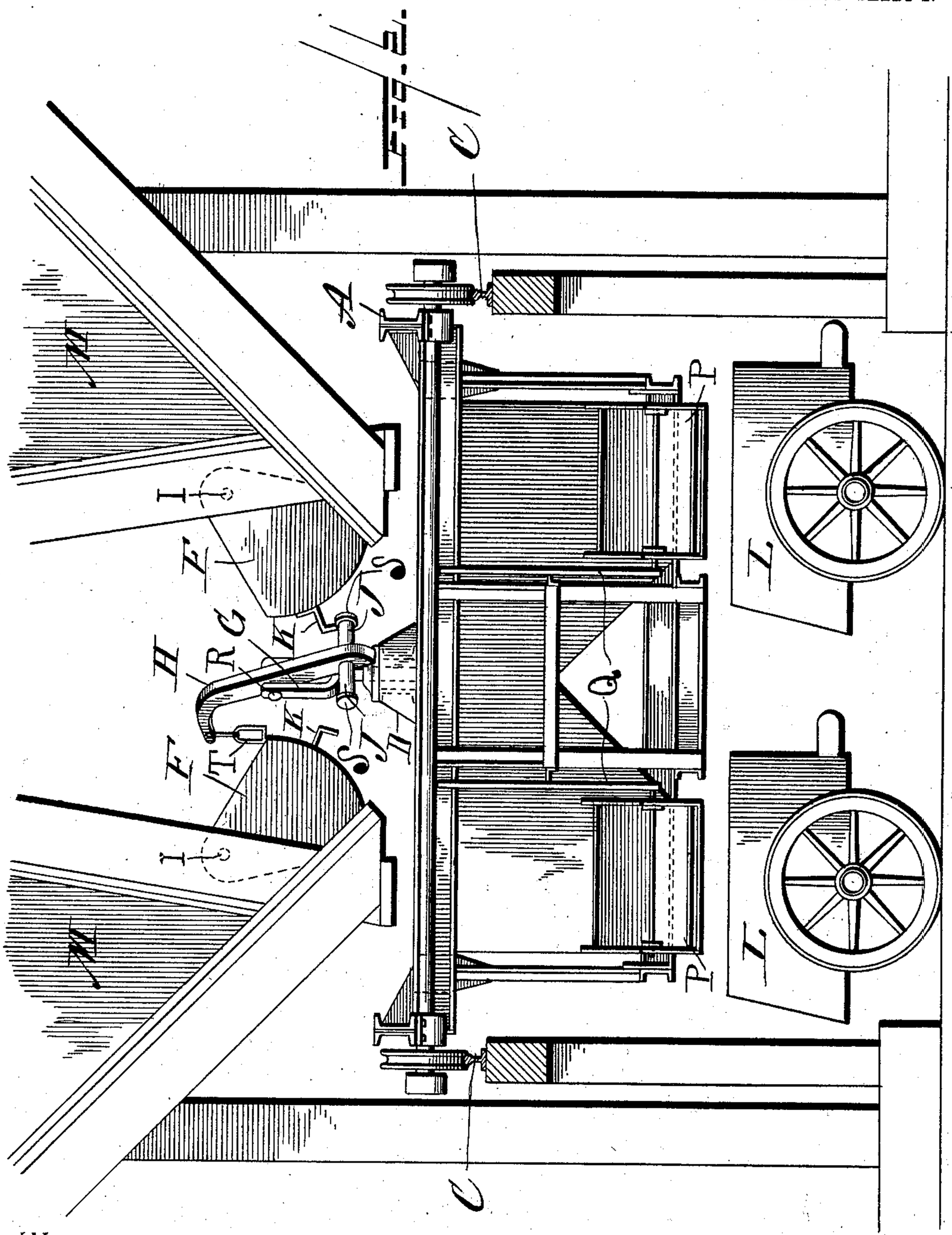


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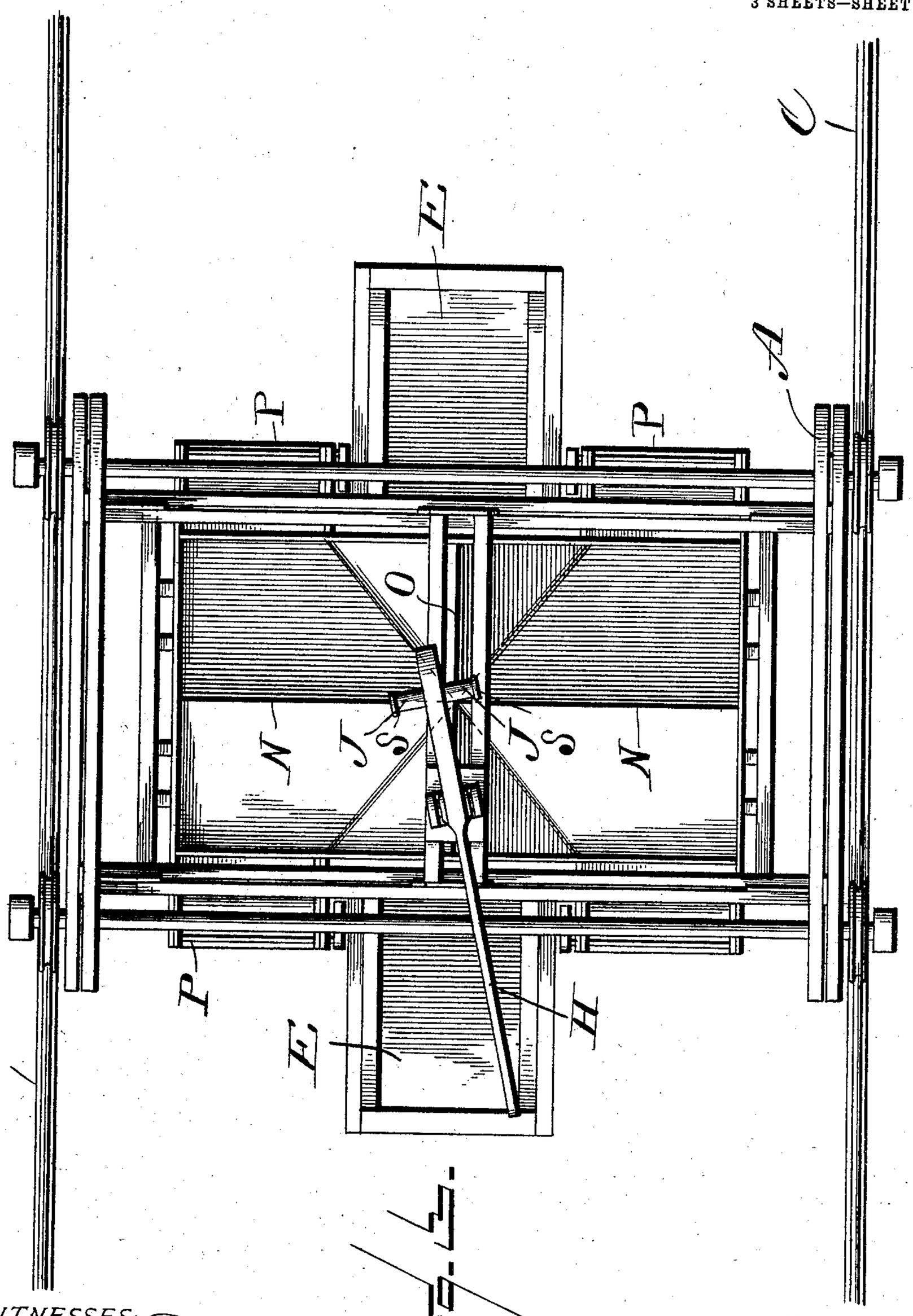


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# UNITED STATES PATENT OFFICE.

FRANK CALVIN ROBERTS, OF PHILADELPHIA, PENNSYLVANIA.

## TRANSFER STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 746,381, dated December 8, 1903.

Application filed June 17, 1903. Serial No. 161,764. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK CALVIN ROBERTS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented or discovered new and useful Improvements in Transfer Stock-Cars, of which the following is a specification.

In the accompanying drawings, which make part of this specification, Figure 1 is a longitudinal section of one form of a car constructed in accordance with my invention, one row of bins and buggies being shown in elevation; Fig. 2, an elevation of said car and two rows of bins and buggies, and Fig. 3 a plan view of said car.

My invention relates to bins for the storage of ore, coke, coal, limestone, or other material and cars for the transfer of the same to other cars, buggies, furnaces, or other depositaries.

I provide one or more rows of bins which contain the stock of material to be transferred and one or more cars which run alongside the row or rows of bins and have means thereon capable of engagement at will with the bin doors or gates of either row of bins. I also provide the cars with platforms on which operators stand who actuate the bin doors and the gates for the discharge of stock from the cars. In apparatus for this class of work it is common to provide a separate lever or other device attached to each bin or section and operating only a single door. With a large number of bin-doors the cost of such levers or devices is quite a large item. In my invention the car is provided with the gate-operating device, which is capable of opening any bin-door on both sides of the same.

Referring to the drawings, A designates the transfer-car as a whole. This car is provided with wheels which run on the rails C and may be of any construction desired. I have shown the car with the longitudinal ridge N, which causes the stock to run to the sides of the car, and with a transverse ridge O, which causes the stock to run toward the ends of the car. The inclines from these ridges direct the stock toward the four corners of the car, where there are gates P, operated by levers Q, attached thereto and within reach of men standing on the platform E on the sides of the car.

On the top of the car is a post G, vertically swiveled in the block D. The upper end of the post G carries a lever H of the first class, pivoted on the horizontal pin or pivot R. One arm of the lever is provided with horizontal pins or lugs J, having heads S at their outer ends. These pins or lugs may be a single pin passed through the lever H.

Above the car A are two rows of bins M, spaced apart, between which rows the post G and lever H extend. The bins are provided with gates or doors F, pivoted at I and carrying lugs or ears K, having downwardly-bent ends, behind which the heads S of the pins J engage.

The end of the lever H opposite that carrying the pins J has a stirrup T, which is within the reach of a man on one of the platforms E or other part of the car or to which a cord or chain may be attached, so that the lever may be operated from any desired location.

The bin-doors F and the car doors or gates P may be of any other type, if preferred.

The car may when filled be discharged into buggies L, located on each side of the car, so that four can be filled at a time, or the car may transfer the stock to buggies or other devices or apparatus located at a distance from the bins.

Having described my invention, what I claim is—

1. A traveling conveyer, a receptacle on each side thereof, a discharge-gate for each receptacle, and a device on said conveyer so constructed as to engage with and open either one of said gates.

2. A traveling conveyer, a receptacle on each side thereof, a discharge-gate for each receptacle, and a lever on the said conveyer so constructed as to engage with and open either gate.

3. A traveling conveyer, a receptacle on each side thereof, a discharge-gate for each receptacle, and a lever swiveled on the conveyer and so constructed as to engage with and open either gate.

4. A traveling conveyer, a receptacle on each side thereof, a discharge-gate for each receptacle, a vertical post on said conveyer capable of axial rotation, a lever on said post so constructed as to engage and open either gate.

5. A traveling conveyer having a platform, one or more discharge-gates, and means for operating said gate or gates within reach of an operator on said platform, a receptacle above said car provided with a discharge-door, and means on said conveyer for opening the said door to discharge material in said receptacle into said conveyer.

6. Means for storing material, said means having discharge-gates spaced apart, and means into which said stored material may be discharged, said named means having thereon a device capable of opening a gate on one side or the other of said space.

Signed at Philadelphia, Pennsylvania, this 15th day of June, 1903.

FRANK CALVIN ROBERTS.

Witnesses:

L. KRYDER LOCHMAN,

RANDOLPH H. MILLER.