

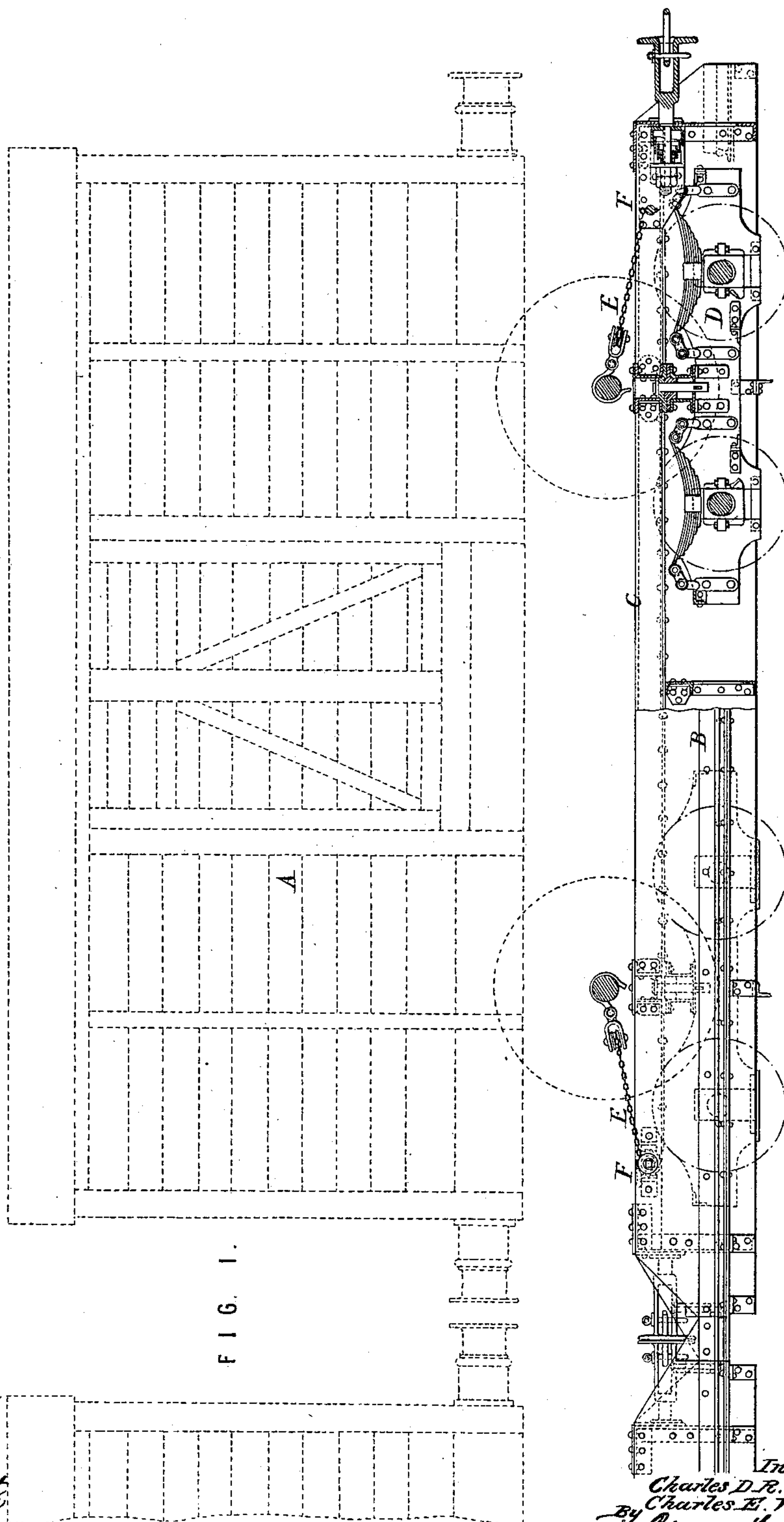
(No Model.)

3 Sheets—Sheet 1.

C. D. R. SUDELEY & C. E. WEBBER.
RAILWAY TRANSFER TRUCK.

No. 372,643.

Patented Nov. 1, 1887.



Witnesses.

I. B. Hills

Robert Crutt

Inventors.
Charles D. R. Sudeley
Charles E. Webber.
By James L. Norris, Atty.

(No Model.)

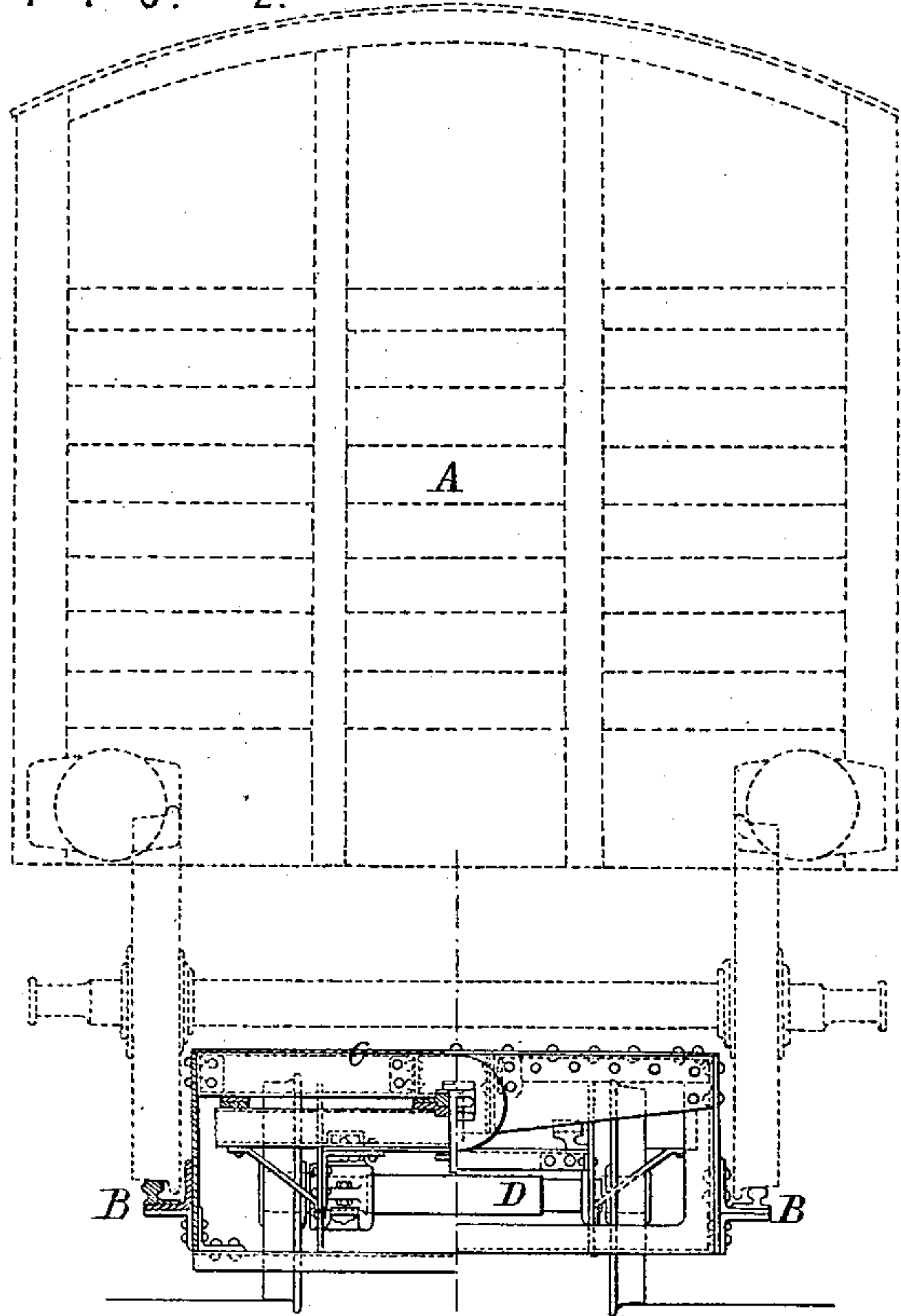
3 Sheets—Sheet 2.

C. D. R. SUDELEY & C. E. WEBBER.
RAILWAY TRANSFER TRUCK.

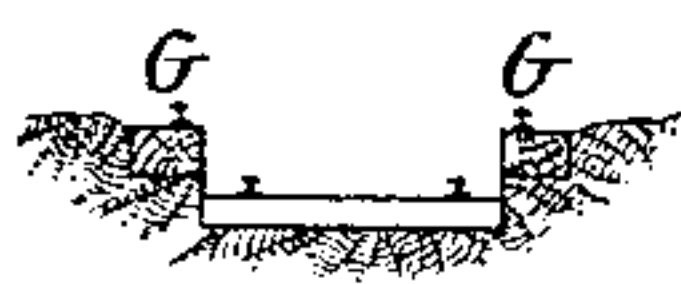
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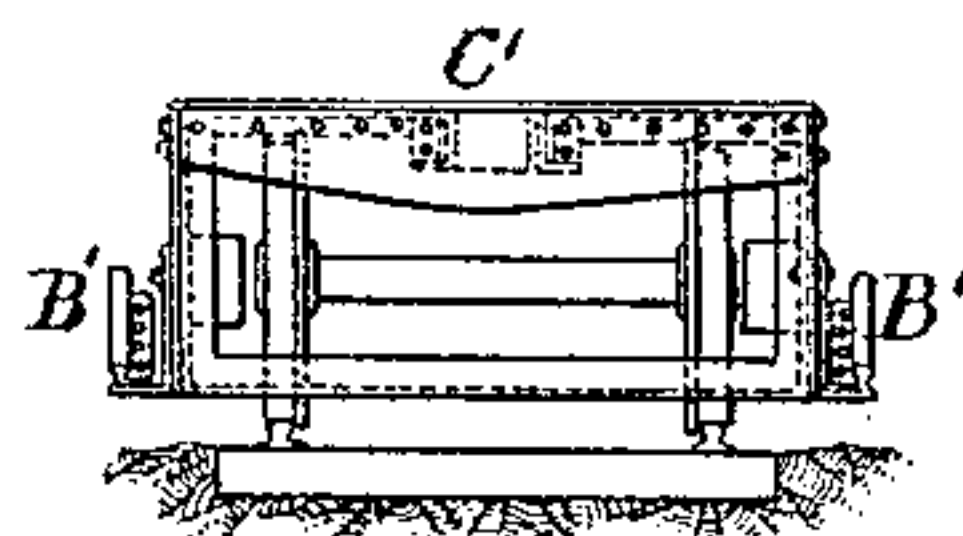
F I G. 2.



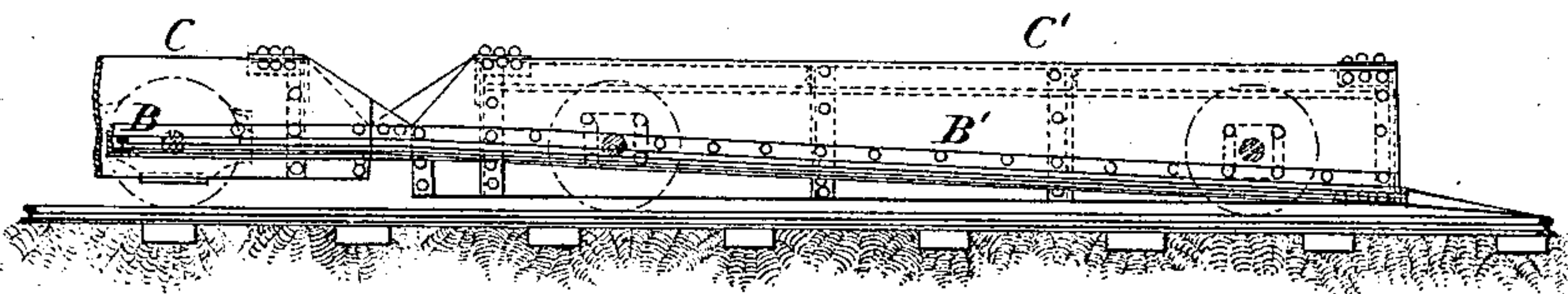
F I G. 5.



F I G. 8.



F I G. 7.



Witnesses.

P. B. Hills.

Robert Emmett.

Inventors.

Charles D. R. Sudeley
Charles E. Webber.

By James L. Norris
Atty.

(No Model.)

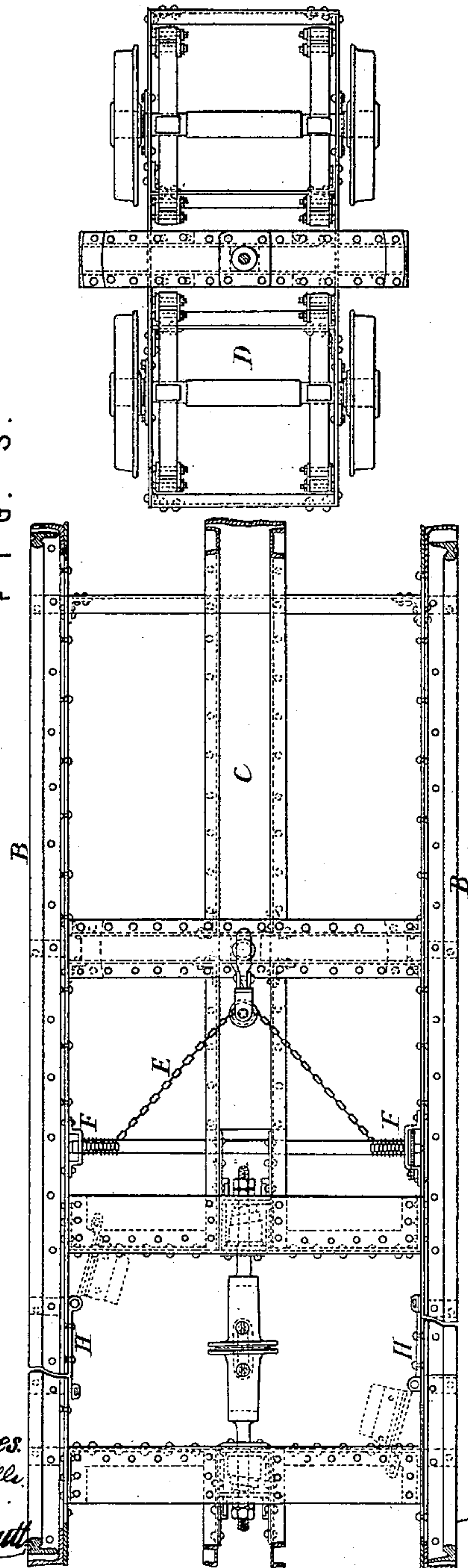
3 Sheets—Sheet 3.

C. D. R. SUDELEY & C. E. WEBBER.
RAILWAY TRANSFER TRUCK.

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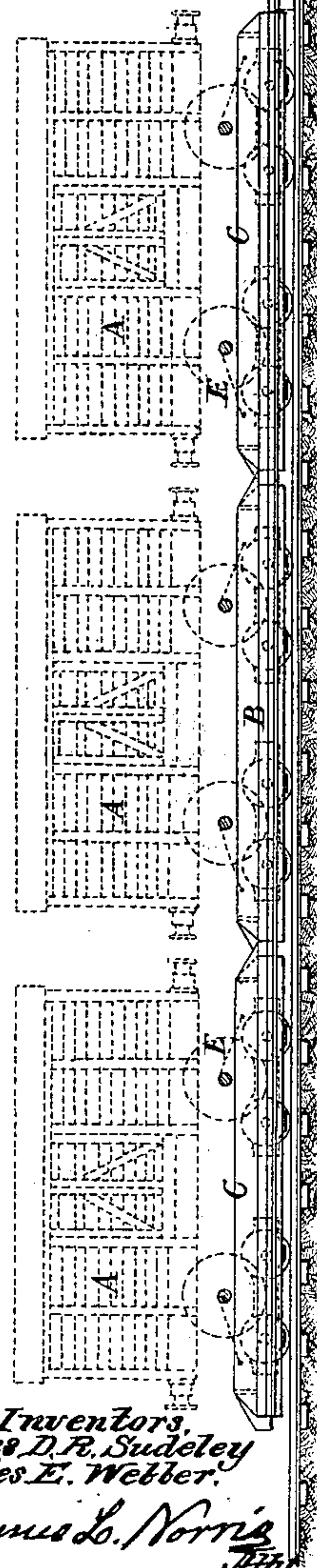
FIG. 3.



Witnesses.
P. B. Hill.

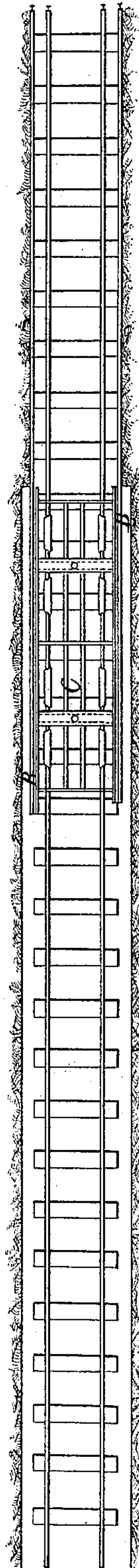
Albert Smith.

FIG. 4.



Inventors.
Charles D. R. Sudeley
Charles E. Webber.
By James L. Norris

FIG. 6.



UNITED STATES PATENT OFFICE.

CHARLES DOUGLAS RICHARD, SUDELEY, OF TODDINGTON, COUNTY OF GLOUCESTER, AND CHARLES E. WEBBER, OF SOUTH EATON PLACE, COUNTY OF MIDDLESEX, ENGLAND.

RAILWAY TRANSFER-TRUCK.

SPECIFICATION forming part of Letters Patent No. 372,643, dated November 1, 1887.

Application filed April 7, 1887. Serial No. 234,004. (No model.) Patented in England June 7, 1886, No. 7,624, and in Belgium March 10, 1887, No. 76,640.

To all whom it may concern:

Be it known that we, CHARLES DOUGLAS RICHARD, LORD SUDELEY, and CHARLES EDMUND WEBBER, major-general, C. B., citizens of England, residing, respectively, at Toddington, county of Gloucester, England, and at South Eaton Place, county of Middlesex, England, have invented a new and useful apparatus for enabling railway vehicles to be transferred to and transported along a railway, the gage of which is narrower than that of the said vehicles, (for which we have obtained patents in Great Britain, dated June 7, 1886, No. 7,624, and in Belgium dated March 10, 1887, No. 76,640,) of which the following is a specification.

The object of this invention is to enable loaded or unloaded railway-vehicles to be transferred to and transported upon a railway the gage of which is narrower than that of the railway upon which the vehicles to be so transported are constructed to run.

To accomplish the above object special wagons are constructed, by preference mounted on bogie-trucks to suit the narrower-gage railway, which wagons are provided at their outer sides with rails set to the gage of the vehicles to be transported. These special wagons may be built of timber, iron, or steel, or of any combination of the above materials, and may be made of any length to suit the length of the vehicles they are to carry. They are mounted in two or more bogie-trucks of ordinary construction, and with or without bearing-springs. The buffer and draw apparatus is preferably of the central and combined pattern. The coupling together of the wagons is effected by a horizontal link and pin, by a vertical self-acting hook, or by other suitable known means.

The sides of the special wagons may be constructed of metal plates, to which are attached angle-bars carrying flat-footed rails, the said rails being fixed to the same gage as that of the vehicles to be transported, and at such a height that the axles, brake, and other gear of the said vehicles can pass freely and without hinderance over the tops of the special wagons. A portion of these side or carrying

rails, at one corner at each end of the special wagon, is hinged in such a manner that when the buffers of two wagons are in contact this hinged part can be turned outward and made to fill up the gap between the carrying-rails of the two contiguous wagons, and so render the rails contiguous from end to end of the train of special wagons.

At convenient points for the receipt and dispatch of the vehicles to be transported loading-sidings are provided, one portion of the length of each of these sidings being laid with rails to the gage of vehicles to be transported and the other portion to that of the narrower-gage railway upon which they are to be carried, the rails of this last-named portion being placed at such a level that when the special wagons are standing upon them the outer carrying-rails of these wagons shall be at the same level as that of the rails of the siding of the same gage. The vehicles to be transported can there be run onto the special narrower-gage wagons, and after being properly secured therein can be transported by the narrower-gage railway to their destination. The broader-gage vehicles are secured to the special narrower-gage wagons by means of chains attached to a transverse shaft placed in the frame of the latter and hooked over the axles of the former, the said chains being tightened by revolving the transverse shaft, which is provided with a removable handle for turning it and a ratchet and pawl for holding it.

According to another arrangement for cases where the special loading-siding cannot conveniently be provided, we construct a transfer-wagon with outer rails of the same gage as the carrying-rails of the above-described transportation-wagon, but arranged at an inclination from the line of railway upon which the vehicle to be transported stands, so that the vehicle is run up the inclined rails onto the transportation-wagon.

Figures 1 and 2 of the accompanying drawings are respectively side and end elevations, partly in section, of transfer-wagons according to our invention for transporting railway-vehicles on lines of gage narrower than that for which these vehicles are suited. Fig. 3 is

a plan with part of the upper framing of the wagon removed to show the bogie-truck below. Figs. 4, 5, and 6 represent to a smaller scale, respectively a side elevation, a transverse section, and a plan showing the mode of transferring the railway-vehicles to or from the transfer-wagons when the main rails can be made with a slope for that purpose. Figs. 7 and 8 are respectively a side and an end view of a transfer-wagon having the necessary slope of rails formed upon it.

The railway vehicles A (indicated by dotted lines in Figs. 1, 2, and 4) rest by their wheels on rails B, fixed to the sides of the transfer-wagons C, which are mounted on bogie-trucks D, having wheels suited to the narrower gage. Each of the vehicles A, when it is lodged on one of the wagons, is held in position by chains E, which have hooks engaging the axles, and are tightened up by winding them on barrels which are mounted on the wagons C and are provided with ratchets and pawls F.

For the purpose of transferring the vehicles A to or from the wagons C, the railway is made with a slope, G, leading up to the level of the rails B on the wagons C. For situations where this arrangement is inconvenient, a special transfer-wagon, C', Figs. 7 and 8, is provided, having sloping rails B', along which a vehicle can be run from the main railway to the rails B on the other transfer-wagons, C.

In the operation of running the vehicles A onto the transfer-wagons C or off from them these wagons are brought close up together and a portion, H, of the rail B of each is turned outward to meet the rail of the next wagon, so as to render the lines of rails B continuous

throughout the train of wagons. After the vehicles are run on, the portions H are turned in again, so as to allow the wagons to accommodate themselves to curves and inequalities of the narrow-gage line on which they run.

Having thus described the nature of our invention and the best means we know of carrying the same out in practice, we claim—

1. As an appliance for transporting railway-vehicles along rails of narrow gage, a transfer-wagon having its wheels suited to the narrow gage and having fixed on its sides rails suited to receive the wheels of the wider-gage vehicles, substantially as herein described.

2. As an appliance for transporting railway-vehicles to narrow-gage wagons, a transfer-wagon having its wheels suited to the narrow gage, and having fixed on its sides rails suited to receive the wheels of the wider-gage vehicles, these rails being sloped upward from the one end of the wagon to the other, substantially as herein described.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 25th day of March, A. D. 1887.

CHARLES DOUGLAS RICHARD, SUDELEY.
C. E. WEBBER.

Witnesses:

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Clerk to Messrs Abel & Imray, Consulting Engineers and Patent Agents, 28 Southampton Buildings, London, W. C.