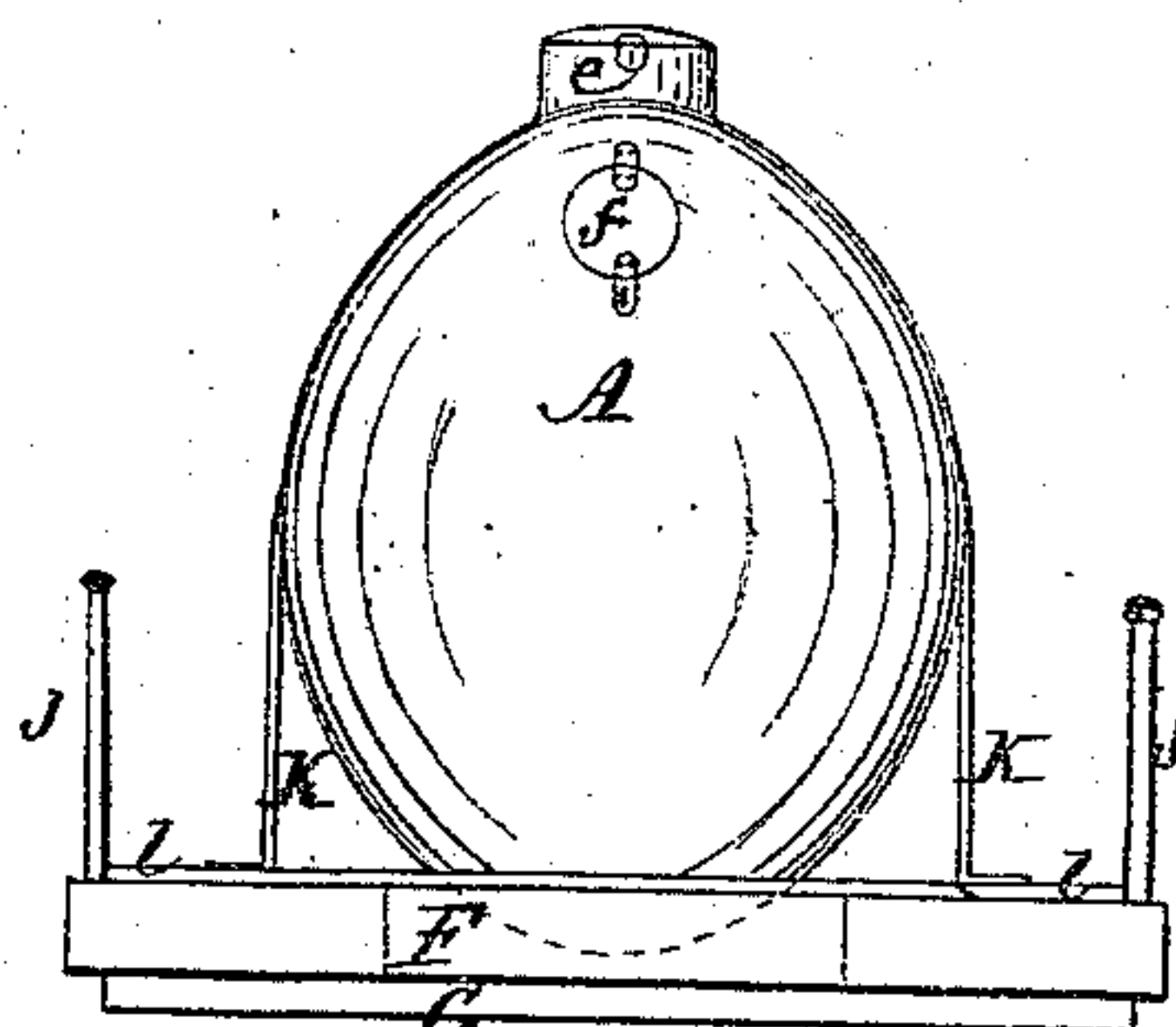
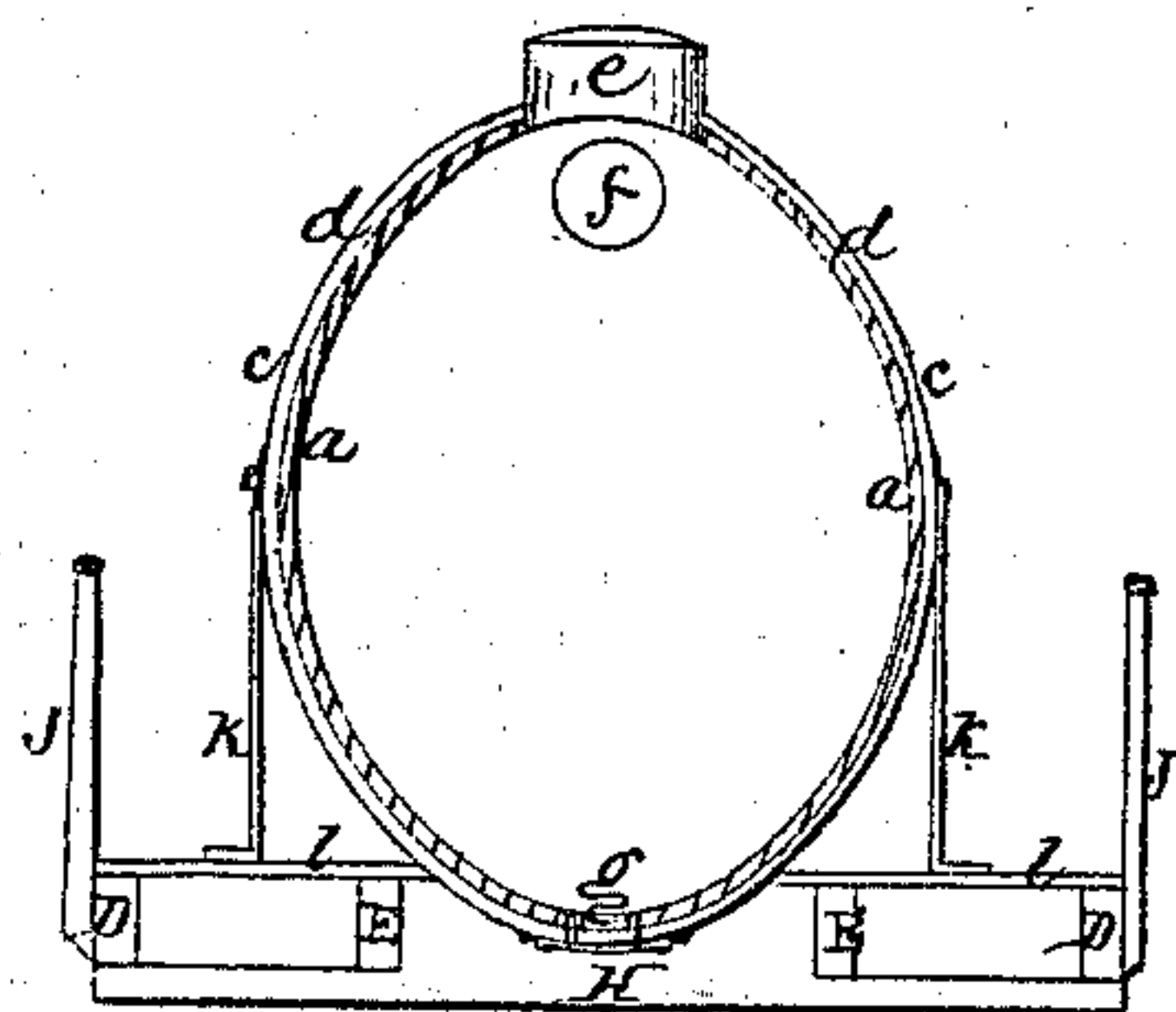
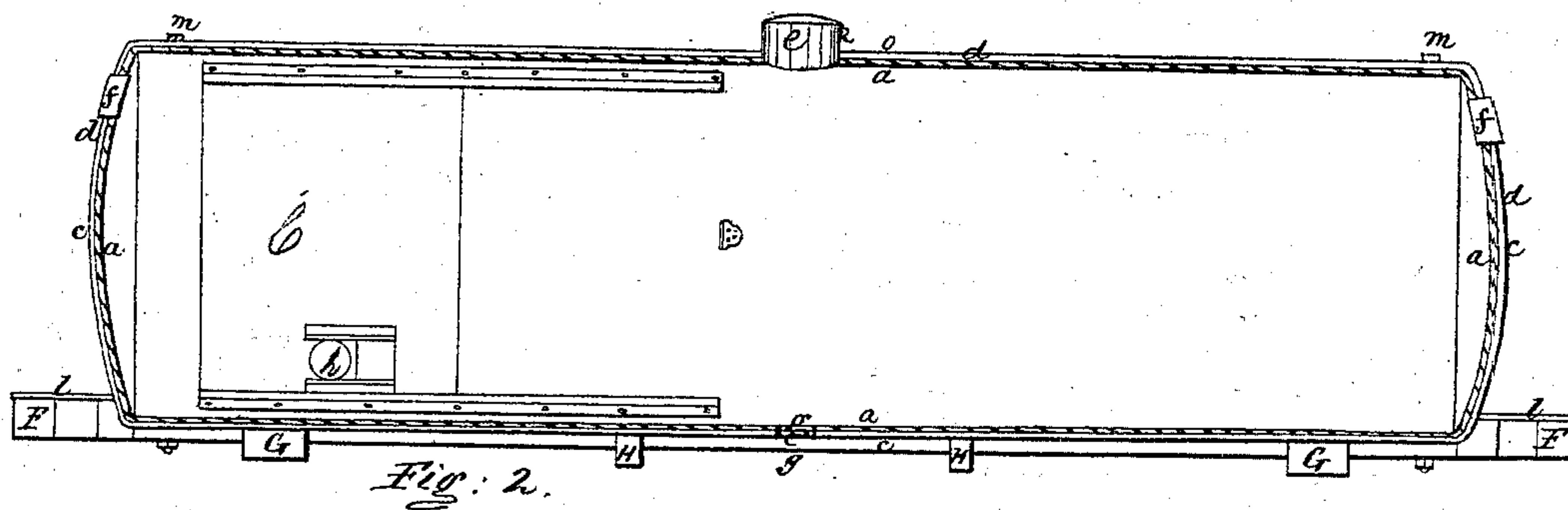
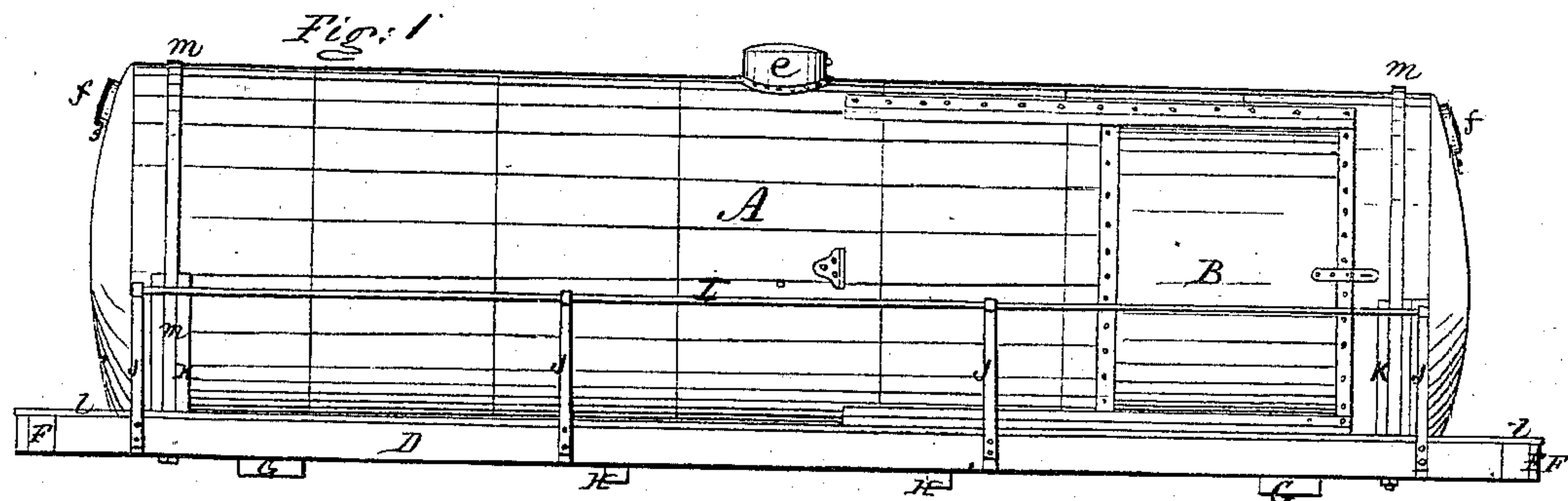


B. P. LAMASON.
Railway Freight-Cars.

No. 135,717.

Patented Feb. 11, 1873.



Witnesses
Sydney C. Smith,
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UNITED STATES PATENT OFFICE.

BENJAMIN P. LAMASON, OF MILTON, ASSIGNOR OF ONE-HALF HIS RIGHT
TO W. J. BRUNDRED, OF OIL CITY, PENNSYLVANIA.

IMPROVEMENT IN RAILWAY FREIGHT-CARS.

Specification forming part of Letters Patent No. 135,717, dated February 11, 1873.

To all whom it may concern:

Be it known that I, BENJAMIN P. LAMASON, of Milton, in the county of Northumberland, in the State of Pennsylvania, have invented a new and Improved Mode of Constructing Steam Railroad Cars for Transporting Grain and Merchandise; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, in which—

Figure 1 is a side elevation; Fig. 2, a longitudinal sectional elevation; Fig. 3, a transverse sectional elevation; and Fig. 4, an end elevation.

My invention relates to an improved freight-car, composed of an outer shell of plate-iron, of oval form, and lined inside with wood, a space being left between the two for absorption of heat, and provided with suitable doors and apertures for loading and unloading, the body thus made being secured upon a frame or truck composed of bolsters, sills, transoms, and stringers, by metal straps, all constructed and arranged as hereinafter shown and specified.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct a tube of iron, of the desired capacity and oval in form, as seen at A A, Figs. 1 and 4. This tube I line throughout the inside with wood or its equivalent, (seen at *a a*, Figs. 2 and 3.) Between the iron shell *c* of the frame and the wooden lining *a a* a space, *d*, is provided. This space is designed to absorb heat, and may be filled with a suitable packing or allowed to remain open. The wooden lining *a* inside of the frame is secured by means of wooden rings fitted to the inside of the same. The body is provided with two outside doors, B, one at either end and on opposite sides. There are also two inside or grain doors, C, in the rear of the outside doors. These inner doors are designed for closing up the apertures when cars are laden with bulk grain. All these doors are made of iron, and in practice will be provided with friction-rollers running in properly-constructed guides secured to the body. The body is also provided with a man-hole, *e*, and apertures *f f*, one at

either end, and with a vent, *g*, for purposes hereinafter specified.

The cylinder, being constructed as herein described, is placed upon and secured to a wooden or iron frame constructed as follows: The sills D and stringers E extend the full length of the frame, and are mortised into the end sills F. These end sills F extend the full width of the frame, as seen at F, Fig. 4. The body-bolsters G and transoms H extend full width of frame and up between the two stringers E equal to their height. That portion of the transoms and bolsters extending up between the stringers is shaped to conform to the lower part of body A, as shown in Fig. 3, and in which said cylinder rests when placed on the frame.

To avoid accidents the frame is provided with a railing, I, supported by posts J secured to the sills D. That portion of the railing in front of the doors B is movable, and can be removed, when desired, to admit lading into the car. Iron stays *k* are firmly secured to the frame, and are of sufficient length to bear upon the car-floor *l*; at the same time the frame rests in the cradle formed in the transoms. The stays *k* are designed to aid in keeping the cylinder in position, while the iron straps *m*, which pass over and around the body down through the frame, secure the body firmly to it.

The outside doors B answer the ordinary purpose of car-doors, and are operated forward or backward by the hand, as desired. When closed they are secured by a hasp and staple.

The inside doors C are designed exclusively for grain or freight of like nature when transported in bulk, and are operated in like manner as the outside doors.

The wickets *h* are designed to facilitate the discharge of grain. By means of these wickets the difficulty and necessity of opening the large inside door are entirely obviated.

The vent *g* immediately in the center on the under side of the cylinder is designed also for the discharge of grain. The man-hole *e* is an opening through which the body is filled.

The port-holes *f* in the ends of the cylinder are designed for the accommodation of long material that cannot enter through the side doors.

Having thus described the construction and

operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

An oval-shaped freight-car, composed of an iron shell, *c*, and inner wooden lining *a*, with heat-absorbing space *d* between the shell and lining, provided with doors B C, port-holes *f*, man-hole *e*, discharge-vent *g*, with or without

wickets *h*, when constructed and arranged as described, and combined with a truck, in the manner and for the purpose set forth.

BENJAMIN P. LAMASON.

Witnesses:

C. C. McCORMICK,
R. M. LONGMORE.