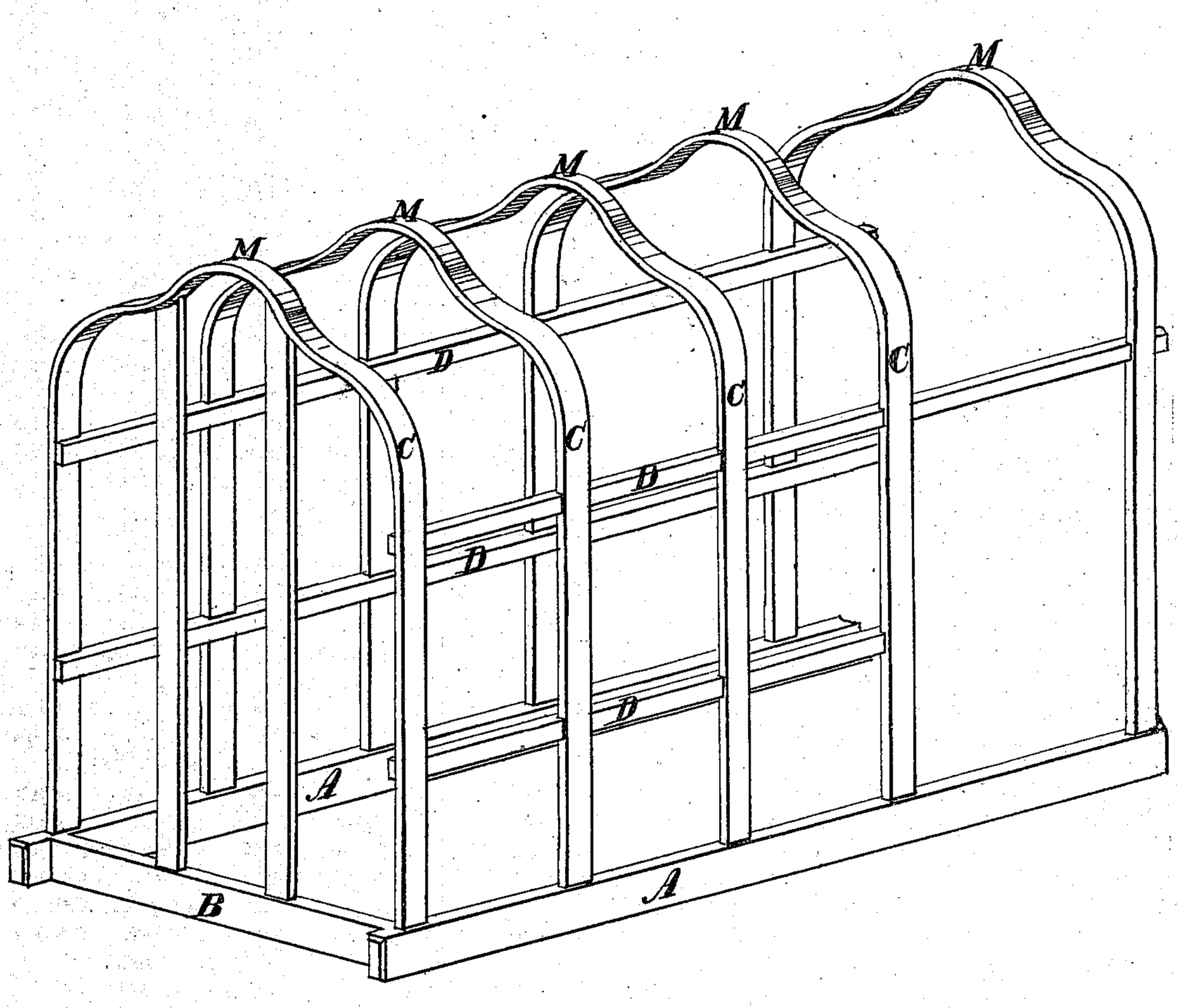
W. G. VON STADEN.

Improvement in the Construction of Railway Cars.

No. 131,725. Patented Sep. 24, 1872.



Witnesses

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UNITED STATES PATENT OFFICE.

WILHELM GABRIEL VON STADEN, OF STRATHROY, CANADA.

IMPROVEMENT IN THE CONSTRUCTION OF RAILWAY CARS.

Specification forming part of Letters Patent No. **131,725**, dated September 24, 1872.

To all whom it may concern:

Be it known that I, WILHELM GABRIEL VON STADEN, of the town of Strathroy, in the county of Middlesex, in the Province of Ontario and Dominion of Canada, wood-bender, have invented certain new and useful Improvements in the Construction of the Body-frame of Railway Cars; and I 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 accompanying drawing, in which—

The figure is a perspective view of the body-frame of a car embodying my invention.

This invention consists in certain improvements in the construction of car-frames, hereinafter more fully set forth.

A A are the ordinary string-beams of a car-frame, resting on the trucks and mortised to end pieces B, in the usual manner, to carry the body of the car. C are a series of any required number of my improved ribs, each constructed or formed of one piece of timber, steamed and bent to the required shape, to form the upright, side posts, and curved rafters of the roof, having also the bend M. These ribs are set upright transversely at the required distance apart, the foot of each leg of the rib being mortised into the string-beams A, or otherwise secured thereto. These ribs C are held connectedly by horizontal side pieces D framed and secured thereto. The construction of the car is then proceeded with in the ordinary manner. By the use and employment of ribs thus formed and arranged, it is believed by me that the body of a car can be built cheaper and be more durable than formerly, when the frame is constructed without such bent ribs.

A car constructed with my improved rib will also, it is thought by me, be stronger, of less weight, and less liable to splinter or fracture in case of collision, as the fiber of the ribs does not run transversely through at any part of the curve. These rafters are formed of a solid piece of timber, cut with the fiber, and steamed and bent to the desired shape. The ends of these bent rafters are framed to the top of the upright side posts now usually employed in the construction of car-body frames. As the fiber of the wood follows the curve of the rafter, these rafters are not liable to split or check, and will bear a greater external weight than if the rafter was sawn to the required shape in the usual manner.

What I claim as my invention is—

A car-frame, consisting of the string pieces A A, longitudinal braces D D, posts and bows C C, made in one continuous piece, when said bows are provided with the bends M, substantially as described.

WILHELM GABRIEL VON STADEN.

Witnesses:
J. C. FURALL,
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