J. ANDERSON, Jr.

Grain-Car.

No. 197,307. Patented Nov. 20, 1877.

Fig. 1

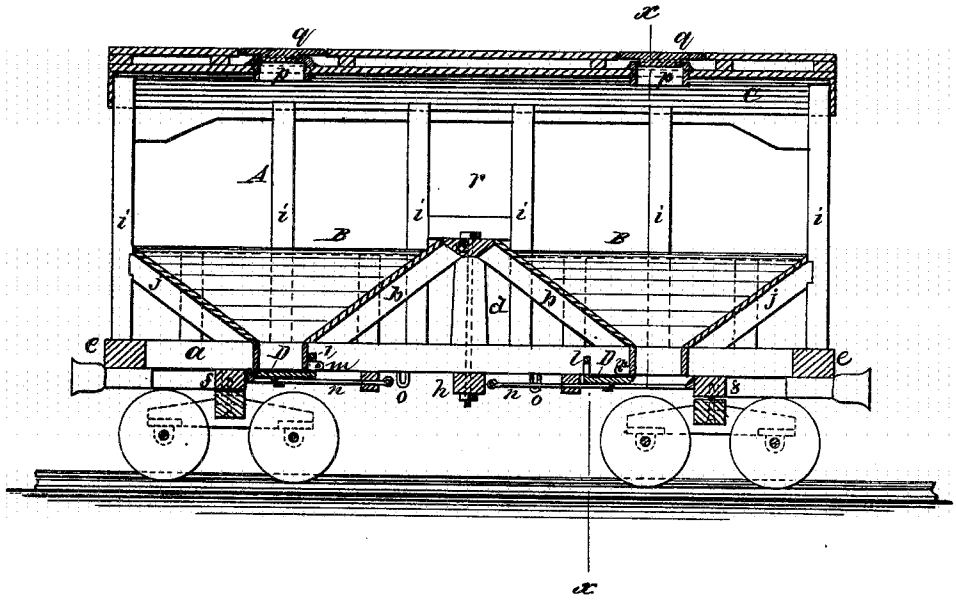
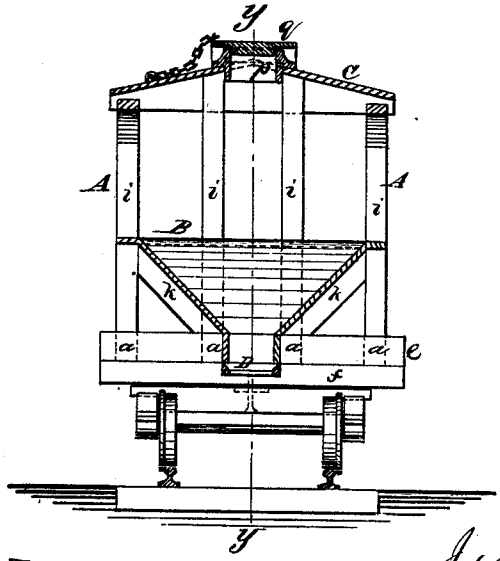


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES ANDERSON, JR., OF ANDERSON, OHIO, ASSIGNOR TO HIMSELF AND THOMAS L. ANDERSON, OF SAME PLACE.

IMPROVEMENT IN GRAIN-CARS.

Specification forming part of Letters Patent No. **197,307**, dated November 20, 1877; application filed March 24, 1877.

To all whom it may concern:

Be it known that I, JAMES ANDERSON, Jr., of Anderson, in the county of Ross and State of Ohio, have invented a new and Improved Grain-Car, of which the following is a specification:

Figure 1 is a longitudinal section on line *y y* in Fig. 2. Fig. 2 is a transverse section on line *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a grain-car that is strong in its construction and convenient to load and discharge.

In the drawing, A is the frame of the car, which consists of four similar trusses and posts or studs, that project upward for supporting the roof. The trusses consist of the beams *a*, which form the longitudinal timbers of the car, and struts *b*, whose feet are secured in notches in the beams *a*, and whose upper ends rest against the key-piece *c*, and are supported by a post, *d*, that rests on the timber *a*, and also supports the key-piece *c*. The trusses thus formed stiffen and strengthen the car-frame, so that it supports a heavy load without trembling, and they also form supports for one of the sides of each of the hoppers B, which form the bottom upon which the grain rests.

The beams *a* are secured together by the cross-timbers *e* at their ends, and by the cross-timbers *f*, that rest upon the truck-frames *g*. A central cross-timber, *h*, is secured to the beams by bolts, that run upward through the beams and through the key-piece *c*. Vertical posts *i* rest upon the timbers *a* at the side of the car, and also upon the cross-timbers *f*, for supporting the roof C. Diagonal braces *j* are secured to the timbers *a*, and also to the posts *i*, that rest upon the cross-timbers *f*, for bracing the said posts and supporting the sides of the hoppers B, that lie next to the ends of the car. Braces *k* are attached to the inside timbers *a*, and to the posts *i* at the side of the car, for bracing the posts and for supporting the sides of the hopper B.

A sliding door, D, is placed in guides at the mouth of the hopper, and is provided with a hasp, *l*, which, when the door is closed, slips over the staple *m*, that projects from the side of the mouth of the hopper, so that the door may be locked. The doors are provided with rods *n*, having eyes in their ends, through which levers for opening the doors are passed, which also pass into staples *o*, that are driven into the side beams *a*.

At the top of the car hatches *p* are made, directly over the center of the hoppers, and are provided with covers *q*, which form a part of the runway at the top of the car. These hatches are used for filling the car from the spout of an elevator. At the center of the car, on each side, a doorway, *r*, is formed, for entering the car, for cleaning or other purpose, and for filling the car from wagons.

The advantages claimed for my improved car are, that it is very strong and secure, and may be easily loaded and discharged.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the hopper-door, of sliding hasp *l*, staple *m*, rod *n*, and the staples *o*, substantially as and for the purpose specified.

2. The combination, in a grain-car with a double hopper, of beams *a*, struts *b*, key-piece *c*, and post *d*, all constructed and arranged as shown and described.

JAMES ANDERSON, JR.

Witnesses:

GEORGE WEIDMAN,

G. C. MARR.