

(No Model.)

2 Sheets—Sheet 1.

G. GROSSMAN.
STOCK CAR.

No. 337,323.

Patented Mar. 2, 1886.

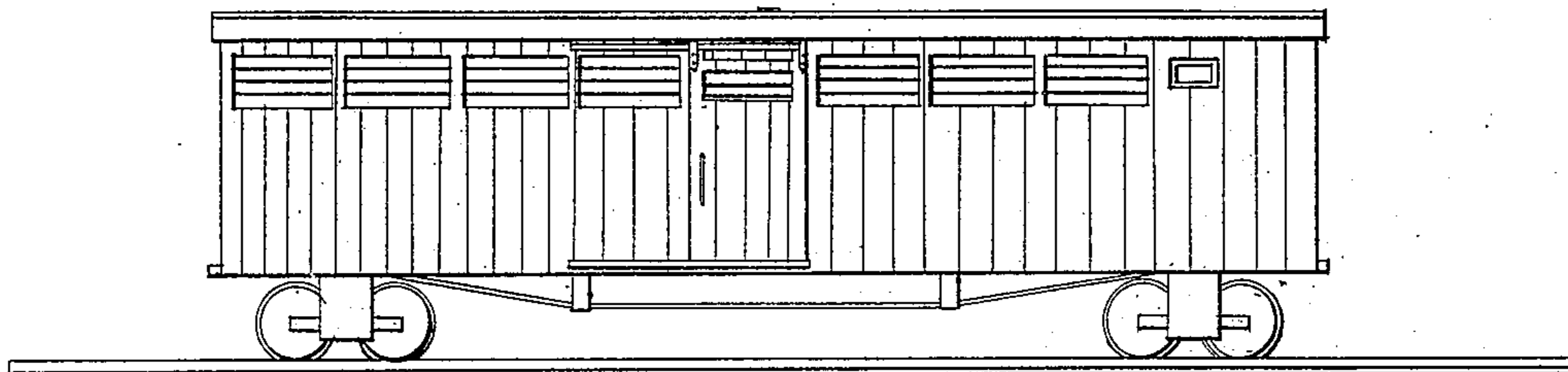


Fig. I.

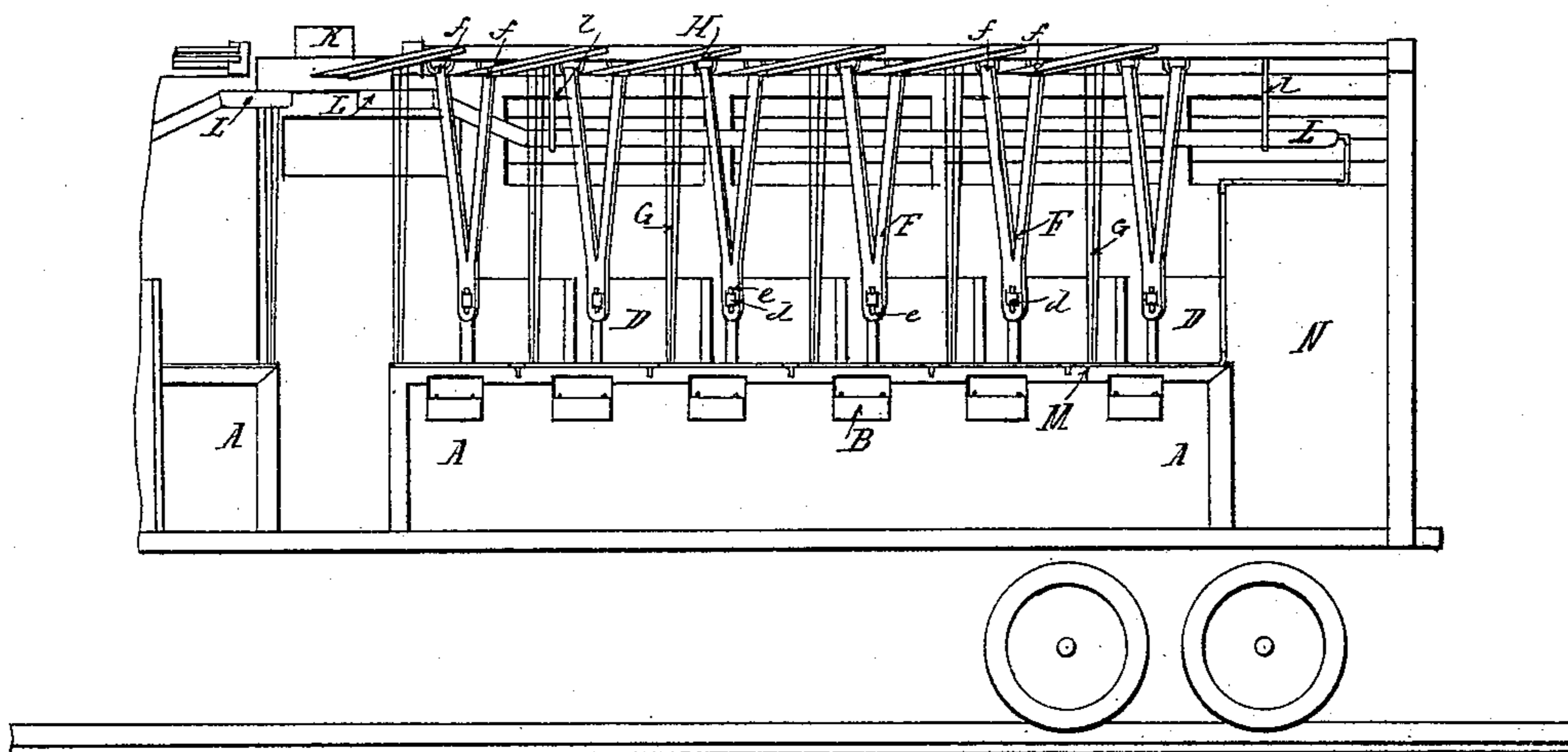


Fig II

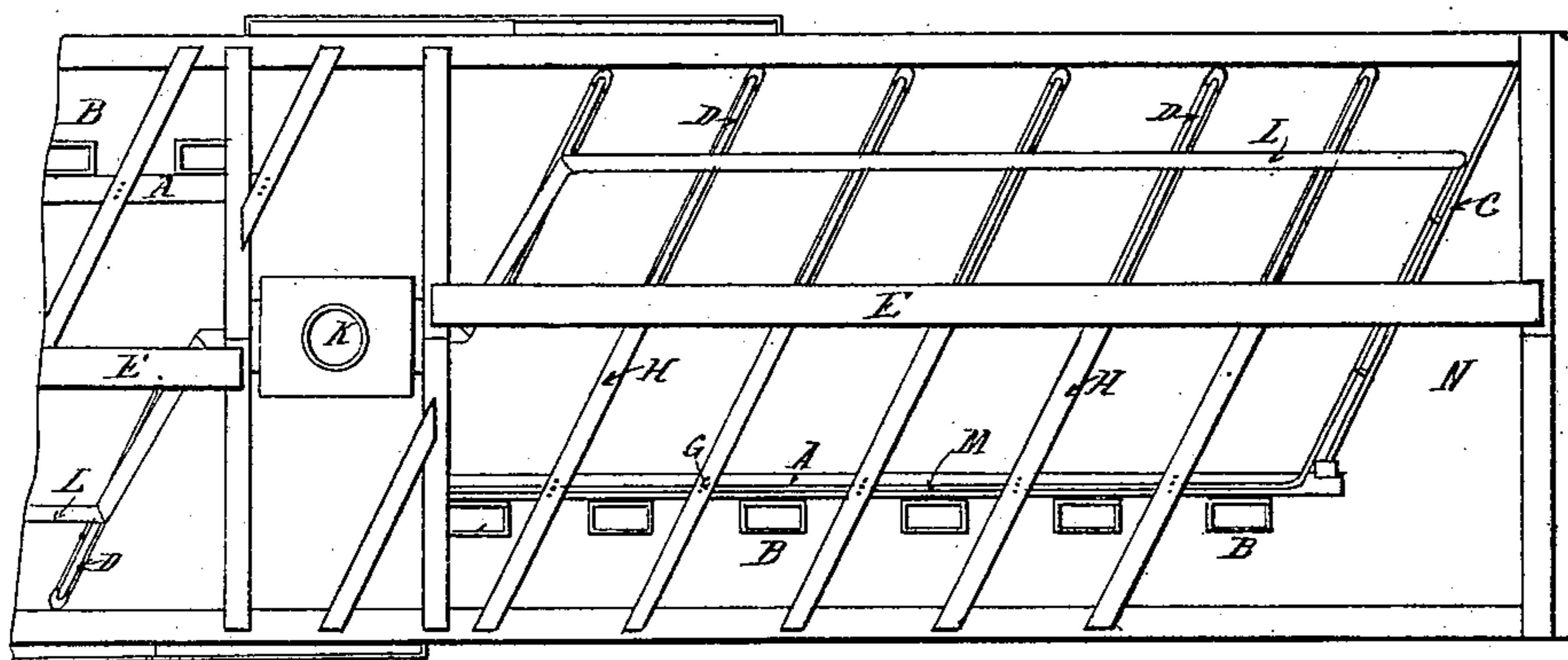


Fig III

WITNESSES:

Geo. A. Lane
Alexander Harris

INVENTOR

Geo. Grossman
BY
Wm. R. Gerhart
ATTORNEY

(No Model.)

2 Sheets—Sheet 2.

G. GROSSMAN.
STOCK CAR.

No. 337,323.

Patented Mar. 2, 1886.

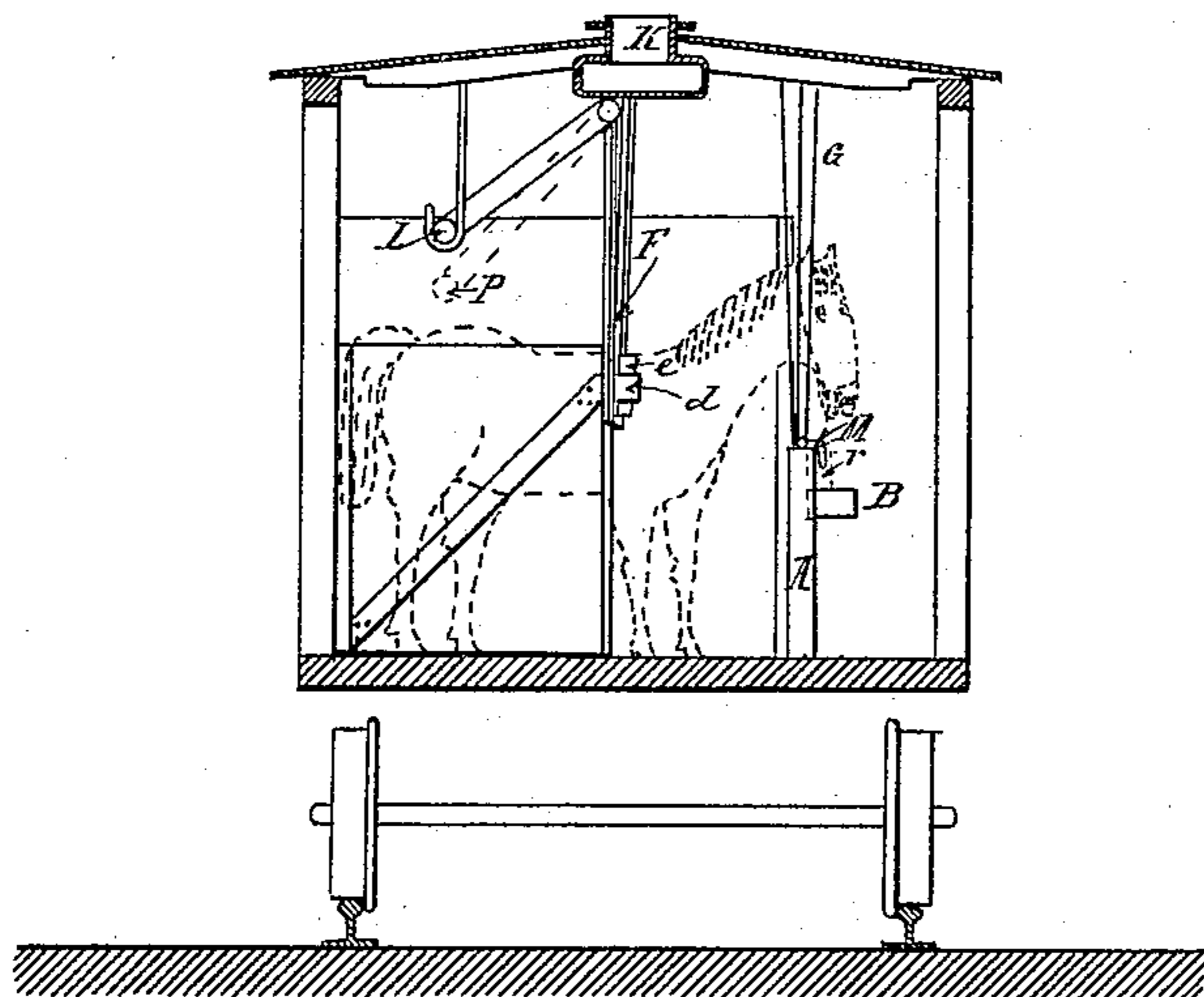


Fig. IV

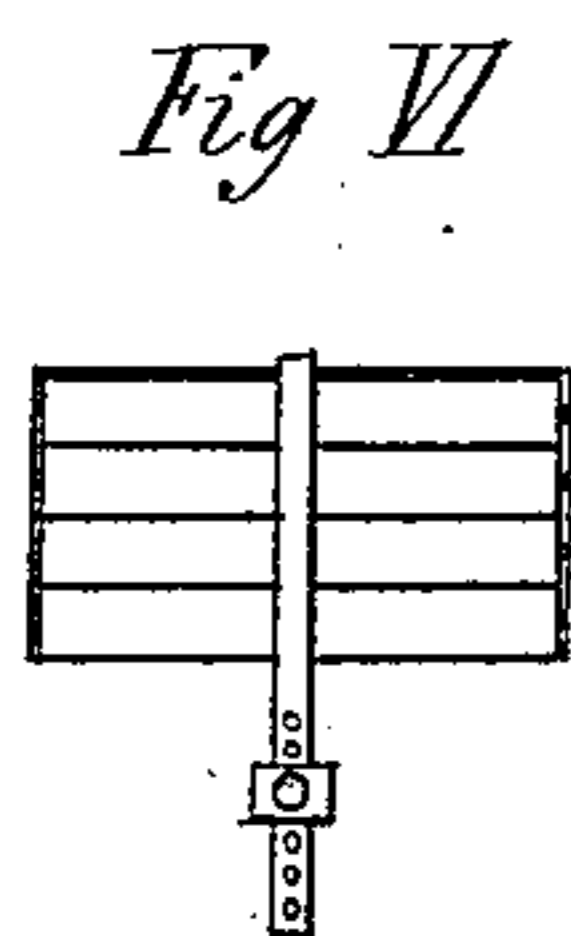


Fig. VI

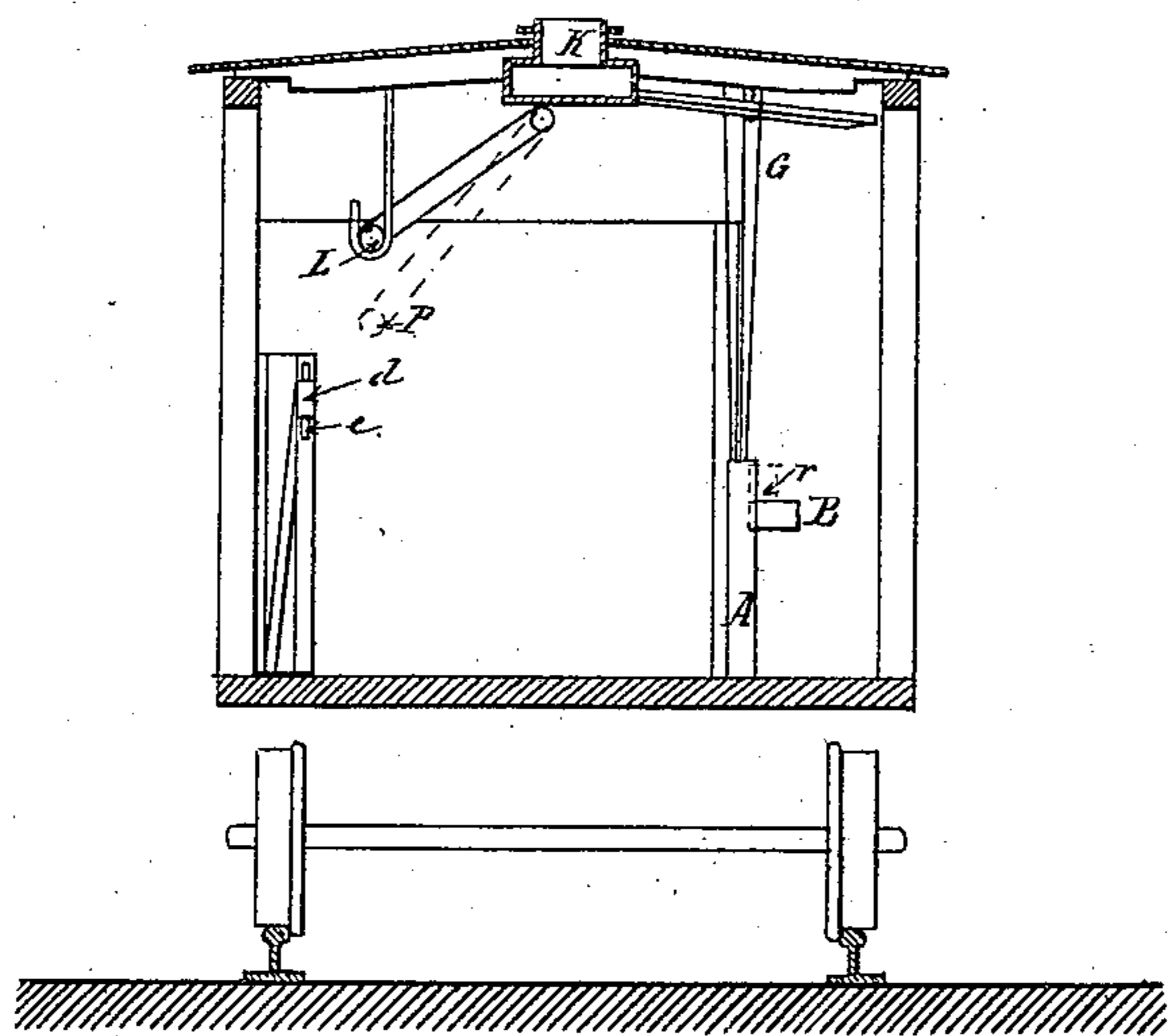


Fig. V

WITNESSES:

Geo. W. Law
Alexander Harris

INVENTOR

Geo. Grossman
BY

Wm. R. Gerhart
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE GROSSMAN, OF LANCASTER, PENNSYLVANIA.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 337,323, dated March 2, 1886.

Application filed September 7, 1885. Serial No. 176,391. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GROSSMAN, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Stock-Cars, of which the following is a specification.

My invention relates to improvements in cars for the transportation of stock; and the objects of my improvements are, first, to provide stalls which will separate the animals safely from each other, and at the same time permit such individual movement as will relieve them from the strain produced by standing in a fixed position while on the cars for any length of time; and, second, to feed and water the animals without unloading them from the car. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure I represents a side elevation of the car provided with my improvements; Fig. II, an enlarged elevation of one-half of the car with the side removed; Fig. III, a top view of part of the car with the roof removed; Fig. IV, an open end elevation showing a movable side of a stall in position after the animal has been loaded; Fig. V, an end view of the same, showing the movable side in position to receive the animal; and Fig. VI, an end view of the slats as used by me.

Similar letters refer to similar parts throughout the several views.

My peculiar arrangement permits me to carry out my purpose and at the same time use the ordinary-sized car. The animals in one-half of the car all have their heads pointed in one direction, and those in the other half in the opposite direction. Along and at sufficient distance from the side of the car to permit the passage of an attendant extends a water-trough, A, having feed-boxes B attached to the outer side opposite the position occupied by each animal. At the end of the car a diagonal stationary partition, C, extends from the corner of the car on the side on which the animals stand to the trough, while along the same side are placed a number of partitions, D, hinged to the side of the car and adapted to form sides of stalls.

Attached to a beam, E, running along the top of the car there are hinged triangular hang-

ers F, fastened to the said beam at two points, *ff*, so as to prevent any swinging with the length of the car, but allowing motion diagonally across it. The lower ends of the hangers are arranged so as to permit their being secured to the outer or swinging ends of the partitions D by means of a staple, *d*, secured to the partition and the locking-pin *e*. The points at which the hangers are located are so arranged that when secured to the partitions the latter are parallel with the stationary partition C, thus forming stalls in which the animals stand not only diagonally across the car, but also diagonally with the direction in which it travels. This disposition of the stalls has two great advantages: First, the animals can be carried in more narrow cars; and, second, the animals can brace themselves better or stand more firmly than when traveling sidewise. The partitions are in length only about two-thirds the width of the car, thus permitting greater freedom to the rising of the animal in case it should get down. This shortening of stall-partitions permits of any animal being taken out separately by loosening those between it and the door at the head and passing it out in front of them. The stall-spaces are divided off at the head and the animals prevented from injuring each other by groups G of three rods each extending from the top of the trough to diagonal beams H, connecting the longitudinal beam E to the side of the car. In the top of the center of the car there is a receptacle, K, into which water is fed, from where it is conducted by adjustable pipes L, (shown by dotted lines in Figs. IV and V,) supported from the roof by hangers *l* to the end of the car, whence, by means of small pipes M, it is carried down to and along the trough A, into which it is fed through small openings in the said pipes M, thus not only avoiding the labor and inconvenience of carrying the water by hand from animal to animal, but compelling an almost simultaneous delivery of fresh water to each animal.

Additional advantages in thus fixing the main water-pipe L, as shown by dotted lines in Figs. IV and V, are that it prevents the animals from kicking, so as to get over the stall-partitions, and in cold weather the heat from their bodies keeps the water in the pipes from freezing, the height of the pipe L be-

ing made to conform as nearly as possible with the height of the animals under it.

The windows of the car are composed of horizontal slats P, connected by means of a rod 5 which can be moved and held in any required position, so as to regulate the openings between said slats.

The feed-boxes are arranged to be folded upward when not in use, as shown by the dotted lines r in Figs. IV and V.

The triangular space N between each end of the car and the partitions C can be utilized for the use of attendants and storage of feed and other articles.

5 The animals in the two divisions of the car are headed in different directions for the purpose of balancing the weight, and are loaded as follows: The partitions D and hangers F are all disconnected, the former being swung 10 back against the side of the car, as shown in Fig. V. The animals are taken in at the center one by one, and as each is successively placed in its stall the partition D, next the entrance, is opened out and rigidly secured in 15 that position by attaching it to its respective hanger.

Having thus fully described my invention, what I desire to claim, and secure by Letters Patent, is—

1. In a stock-car, the combination, with the 30 car-body, of partitions hinged to the side of the car, which when opened to form stalls extend but partially across said car in order to permit the passage of animals in front of those occupying stalls, and hangers so secured 35 above as to prevent any motion with the length of the car, substantially as specified.

2. The combination, in a stock-car, of a longitudinal pipe depending from the roof of the car, extending over and near the backs of the 40 animals, and constructed to be raised or lowered and secured at the desired height to utilize the heat from the bodies of said animals to prevent the freezing of water therein and at the same time serve as a kicking-beam, sub- 45 stantially as specified.

3. The combination, with a stock-car, of a main water-pipe depending from the top of the car over the animals and feeding a distributing-pipe, the said distributing-pipe ex- 50 tending along the water-trough, and the trough, substantially as specified.

GEO. GROSSMAN.

Witnesses:

H. R. McCONOMY,
WM. R. GERHART.