

S. W. REMER.
Stock-Cars.

No. 151,434.

Patented May 26, 1874.

Fig. 1.

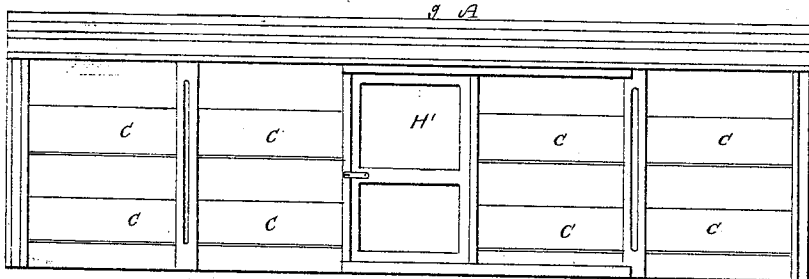


Fig. 2.

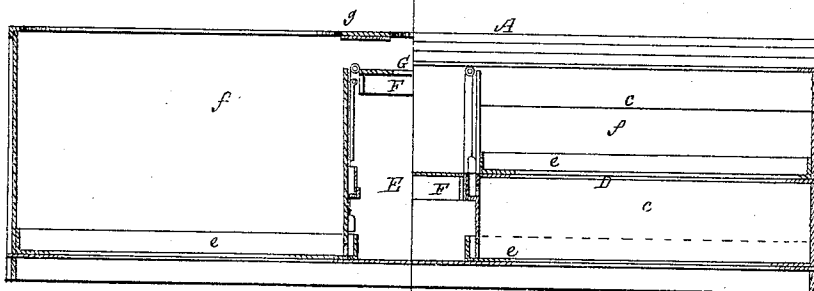


Fig. 3.

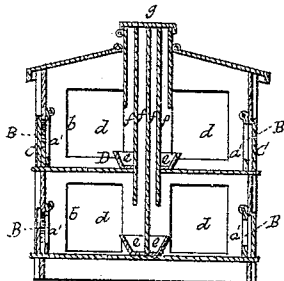


Fig. 4.

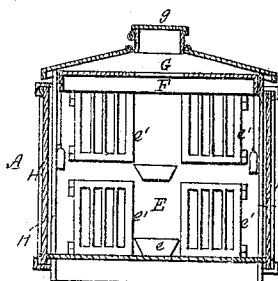


Fig. 5.

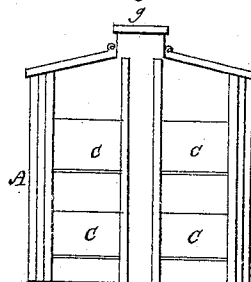
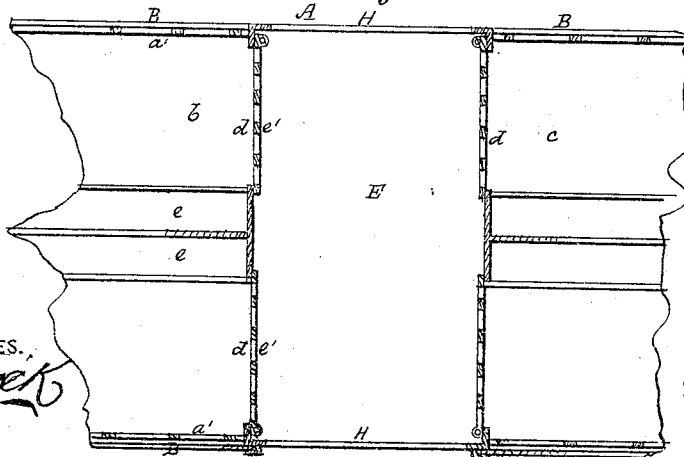


Fig. 6.



WITNESSES.
Ewell R. K.
S. S. Stout

S. W. Remer
J. Curtis Atty.

UNITED STATES PATENT OFFICE.

SAMUEL W. REMER, OF SALEM, MASSACHUSETTS.

IMPROVEMENT IN STOCK-CARS.

Specification forming part of Letters Patent No. **151,434**, dated May 26, 1874; application filed April 4, 1874.

To all whom it may concern:

Be it known that I, SAMUEL W. REMER, of Salem, Essex county, Massachusetts, have invented certain Improvements in Railway Stock-Cars, of which the following is a specification:

The drawings accompanying this specification represent, in Figure 1, side, Fig. 2 vertical and longitudinal section, Figs. 3 and 4 transverse section, Fig. 5 end elevation, Fig. 6 horizontal section of center, of car.

In these drawings, the body of the car is shown at A as framed in any suitable manner, the sides and ends, or one of each, being formed with two series of horizontal openings, B B, provided with sliding shutters C C, which are to be closed in cold or stormy weather and opened in fine weather, and provided also with swinging gratings *a'*, &c., to prevent escape of stock when the shutters are opened. The interior of the car is divided at about its center into two stories—an upper, *a*, and lower, *b*—by a horizontal shelf or floor, D, which extends its entire length, with the exception of a small area or apartment, E, at the center; and the car is also divided longitudinally by vertical walls, as hereinafter stated, by which means each floor is subdivided into two compartments, *b b* or *c c*. Each apartment *b b* or *c c* terminates at its inner end in doorway or passage *d*, which is closed by a suitable lattice-door, and between these two sets of doors I dispose an adjustable floor or platform, F, which is disposed within the central apartment E, and slides vertically therein, suitable weights, cords, and pulleys being combined with it, after the manner of window-sashes, by which its weight is equipoised, and it is raised or lowered with ease. This platform F is formed with a central orifice or man-hole, G, by means of which the attendant passes from one floor to the other while the platform is lowered, should he desire to do so. Slide-doorways H H are created in the car to coincide with the center apartment E, and these doorways are to be provided with suitable sliding doors. Each compartment *a a* or *b b* is provided with a trough, *e*, placed at inner side, as shown in the drawings, and extending, preferably, the entire length of each compartment, while a chute or feeding-passage, *f*, is combined with each trough, these chutes extending to and through

the top of the car, and serving a double purpose—that of enabling food to be precipitated to the trough below, if desirable, and of constituting ventilators to induce circulation of air upward from the compartments.

As a rule, the food for the swine, sheep, or other small stock which the car is designed to transport, is to be fed to the troughs by the attendant from bags stowed in the central apartment E; but, if desirable, corn on the cob, or other grain, may be thrown into the chutes, and thence into the troughs from the top of the car when the latter is in motion.

As each trough extends closely up to the apartment E the attendant is permitted to water the stock without entering the compartments containing them.

When it is desired to remove the offal, or otherwise clean the compartments, the shutters C C are opened and the gratings *a'* raised, which permits of the use of hose or other implements to effect such cleaning.

As before stated, the chutes or passages *f* are arranged at the center of the car, and extend through its top; and I arrange over them two covers, *g g*, one to each end or half of the car, each cover being hinged at one end to the top or roof of the car in such manner as to be turned over upon such roof into a horizontal position, and constitute a safe and convenient walk for the attendant or brakeman, which the slope or crown of the roof does not afford.

When ventilation or feeding through the chutes is desired, the covers *g g* are to be opened, and in stormy or very severe weather they are to be closed.

The central space or apartment E provides a safe and convenient place for the attendant, and from it the wants of the animals may be attended to without going among them. It also allows a quantity of grain or other food to be carried sufficient to support the stock on a long journey.

When loading of a car of this description is to be effected, the adjustable floor or platform F is lowered until it coincides with the central floor D, and the animals are then driven into the upper compartments and the end doors or lattices closed, when the platform F is raised to the roof of the car, and there remains until

the animals are to be let out. The upper compartments *a a* being filled in this manner, the animals are then driven into the lower compartments *b b*, and the end doors of the latter closed, when the loading of the car is completed.

The construction, arrangement, and organization of this car is such that the animals, whether hogs, sheep, or otherwise, remain in a clean, comfortable, and ventilated compartment during the entire journey.

The operation of feeding and watering them is effected in an easy and expeditious manner, and the cleaning of the quarters readily effected at any time without entering the car.

I claim—

1. The combination, with the feeding-troughs, of the chutes leading thereto from the top of the car, serving at once to ventilate the car, and to allow food to be supplied to the troughs from the roof, as shown and set forth.

2. In combination with the two tiers of compartments, and the central storage or feeding-chamber, the sliding platform *F* within said chamber, adapted to operate as shown and set forth.

3. The combination of the passages *B B*, shutters *C C*, and swinging gratings *a'*, substantially as and for purposes stated.

4. The combination of the compartments *a b*, troughs *e*, and central apartment *E*, whereby the water or food may be introduced into the troughs from the central apartment, substantially as and for purposes set forth.

5. The combination, with the roof of the car and the chutes *f* opening through it, of the covers *g g*, all substantially as and for purposes set forth.

SAMUEL W. REMER.

Witnesses:

F. CURTIS,

W. E. BOARDMAN.