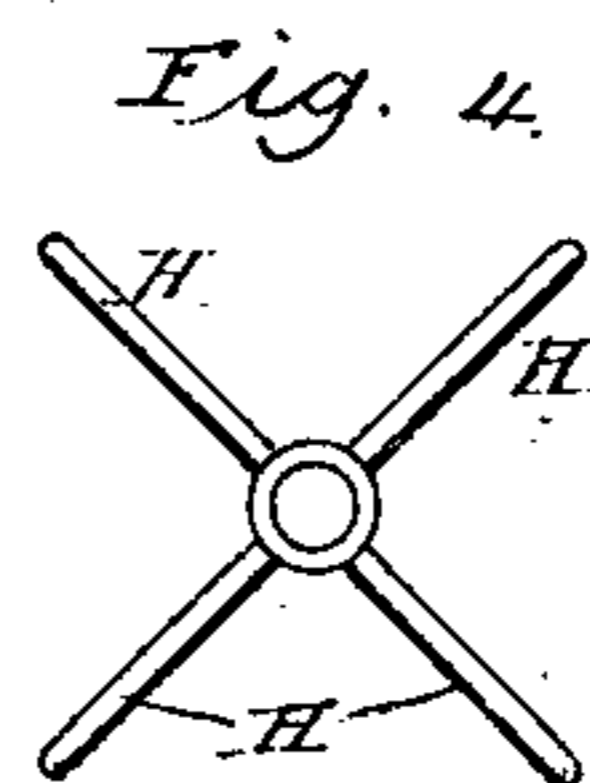
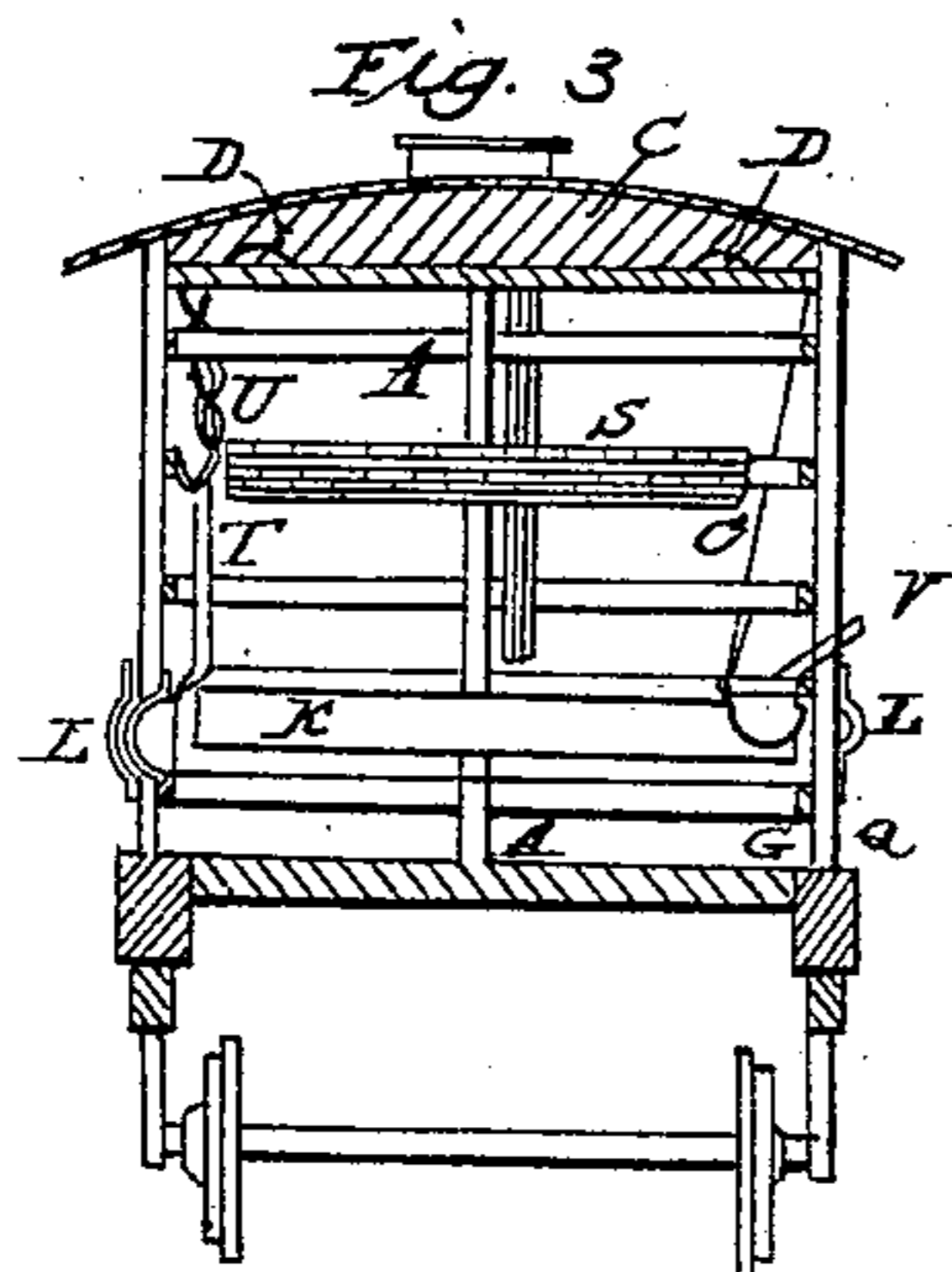
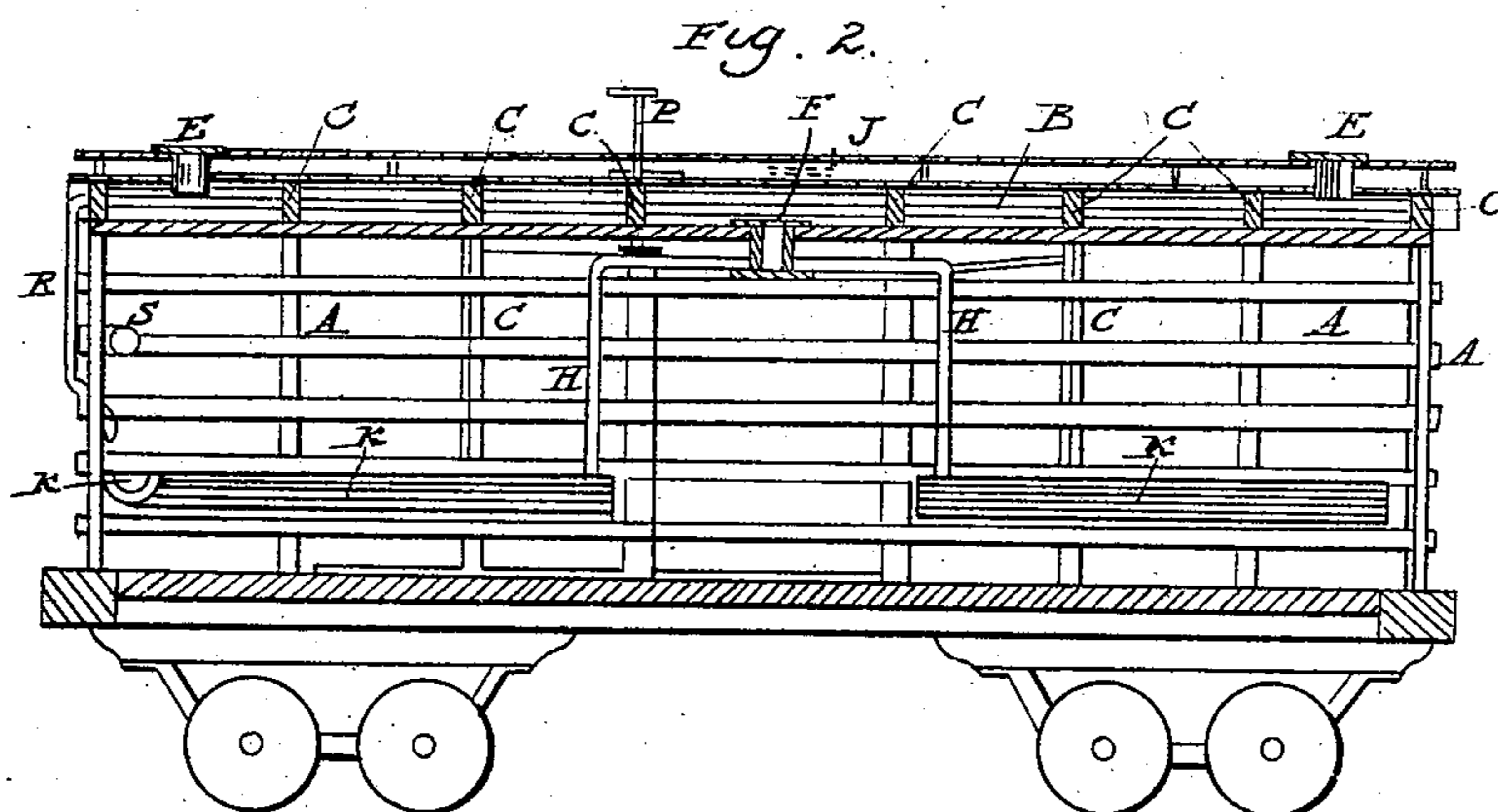
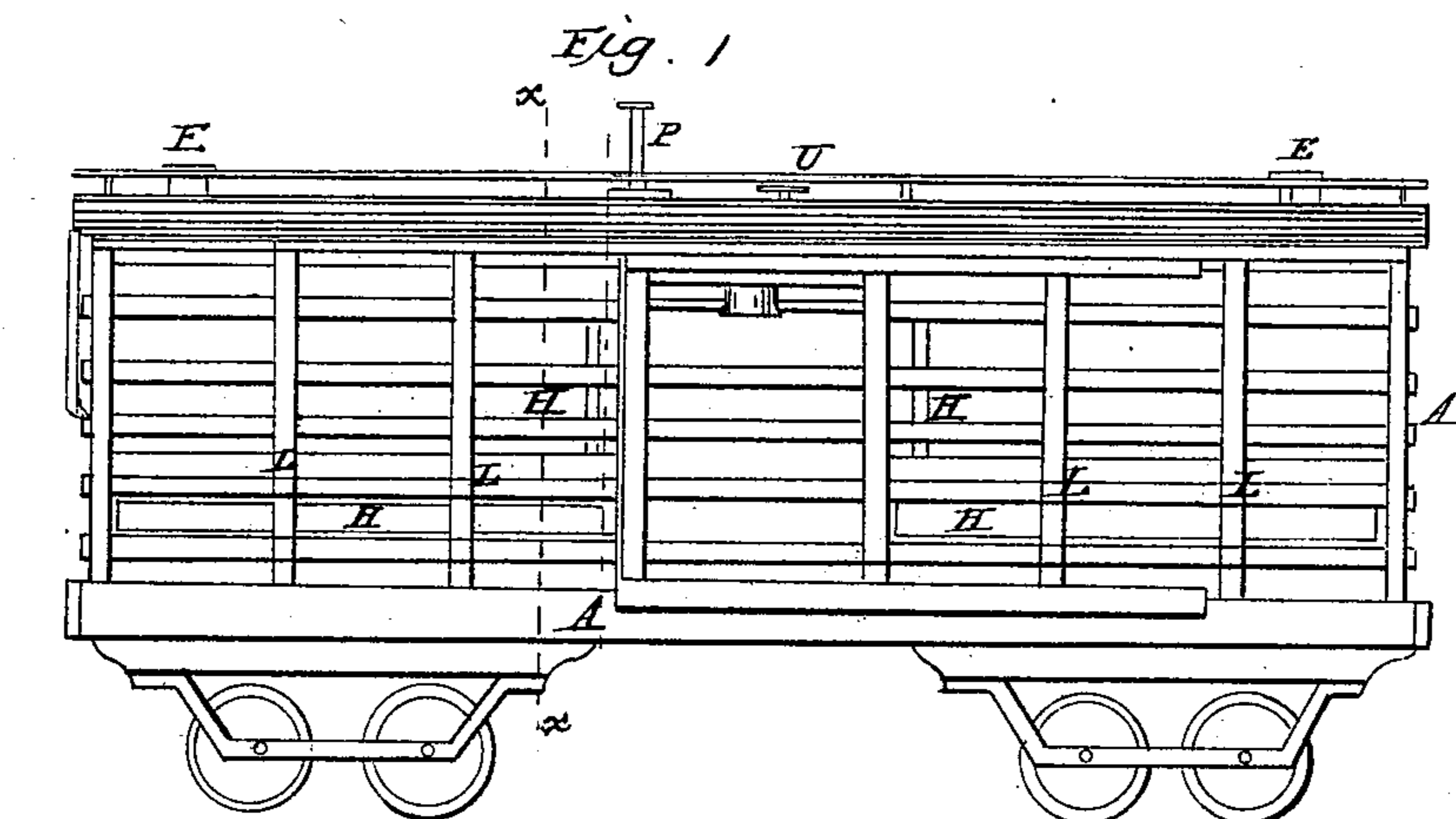


J. S. KENDALL.
Railway Stock Car.

No. 90,851.

Patented June 1, 1869.



Attest
Lewis L. Coburn
J. L. Coburn

Inventor
Jno S Kendall

UNITED STATES PATENT OFFICE.

JOHN S. KENDALL, OF NORTHFIELD, MINNESOTA, ASSIGNOR TO HIMSELF,
RALPH EMERSON, AND WILLIAM A. TALCOTT, OF ROCKFORD, ILL.

IMPROVED RAILWAY STOCK-CAR.

Specification forming part of Letters Patent No. 90,851, dated June 1, 1869.

To all whom it may concern:

Be it known that I, JOHN S. KENDALL, of Northfield, in the county of Rice and State of Minnesota, have invented a new and useful Improvement in Railway Stock-Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form a part of this specification, and in which—

Figure 1 represents a side elevation of my improved car; Fig. 2, a longitudinal vertical section; Fig. 3, a transverse vertical section of the same, and Fig. 4 a detached view of the water-pipes.

To enable those skilled in the art to understand how to manufacture and use my invention, I will proceed to describe the same with particularity.

The same letters of reference refer to the corresponding parts in the different figures.

In the annexed drawing, A represents any ordinary railway stock-car, made of any known shape or size.

The roof of said car is made double, in such a way as to make water-tight space B in the top of the car, and the cross-pieces C serve both to bind the car together, and also to divide the water-space into compartments, there being only small openings D from one compartment to another. By this arrangement the water runs freely from one compartment to another, so that it can all be drawn out at one place; but at the same time the water is kept sufficiently confined in each compartment to prevent its being dashed from one part of the car to another by the motion of the car.

So far as simply accomplishing the object of transporting water with the car, so that the stock in the car can be watered or sprinkled while being transported, the water tank or reservoir might be located in the bottom of the car, and be arranged so that the weight of the stock or car would force the water from the reservoir when desired. It would, however, be more difficult to keep the water pure in that part of the car; and by placing it in the top of the car, it serves the purpose of keeping the car cool in summer by making a

thick double roof for the heat of the sun to penetrate.

The reservoir could also be located in any other part of the car, as at the end or side, and it might constitute a water-space in the car itself, as shown in the drawing hereto attached; or it might be a tank attached to the car, so as to be transported with it, and water drawn therefrom for the purposes above described; but for the reasons already specified, as well as for other reasons, I prefer to construct a water-space in the top of the car, as shown.

E are openings into each end of the water-space, and I locate them at the ends of the car, so that by placing two nozzles on one hose two tanks can be filled at the same time.

F is a valve-outlet for drawing water from the tank, and H are water-pipes extending from said outlet to the troughs K, located in different parts of the car. The valve F is operated from the top of the car by the crank J, being connected therewith, so as to open and close the same. Troughs K are arranged in the car, at any suitable place, so as to be accessible to the stock in the car; but I deem the most convenient place for said troughs to be at the sides or ends of the car, as shown in the drawings hereto annexed; and for the purpose of adjusting the troughs for use and removing them readily when not in use, I hinge them to the side of the car in such a way that they can be swung out into the proper position for holding water, or back into a recess in the side of the car, and fastened therein out of the way when not in use.

I find it is much better to arrange them so that they can be swung down out of the way when not in use, instead of swung up out of the way. For in the latter position, when the cattle become thirsty or hungry, they are constantly trying with their noses or horns to turn the troughs down, and so injure the troughs or their attachments.

The recesses in the sides of the car are formed by making the standards of the car-box in pieces connected firmly together by the bent metallic straps or pieces L.

The troughs are swung up for use by the chains O, which are attached to the troughs,

and extend to a winding shaft or roller, P, that is conveniently operated to wind up said chains from the outside of the car, the top of the car, where the brakeman can operate it, being the best place for said device. The trough is fastened back in the recess by a latch which is attached thereto falling into the catch Q.

The water-pipes H may be connected with the water-reservoir at any suitable place, and may be conducted, either inside or outside of the car, to the troughs. They are less liable to be injured or destroyed by the stock in the car when arranged outside of the car, as shown at R.

For the purpose of sprinkling the stock in the car I attach a sprinkler, S, either to the water-pipe or directly to the water-reservoir, the whole object being to so arrange said sprinkler that water can be taken from the water tank or reservoir and sprinkled upon the stock in the car. The sprinkler may be arranged at the side or end, or even across the top of the car.

T is a staple attached to the side of the car, to which are attached a ring and chain, U, for fastening the stock. The said staple is so constructed and attached to the car that the animal which is fastened can raise and lower its head by slipping the ring in the staple; but at the same time the staple is so constructed and attached that the animal cannot lie down in

the car, nor raise its head sufficiently high to mount other animals by its side, both of which conditions are essential to the successful transportation of stock. I also place an inclined feeding-board, V, in the side or end of the car above the trough, in a suitable position for conducting meal or other food from the outside of the car into the troughs for the stock to eat.

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

1. The pipe R, arranged outside of the car, so as to conduct the water from the reservoir to the troughs, substantially as and for the purposes herein specified.

2. Hinging said trough to the side or end of the car, so that it can be turned down out of the way when not in use, substantially as herein described.

3. The combination of the feed-board V with the car and troughs, arranged substantially as and for the purposes specified.

4. In a railway stock-car, an elongated staple, T, with chain U, when constructed and arranged in such a manner as to prevent the cattle either from lying down or from rearing, substantially as set forth.

JNO. S. KENDALL.

Witnesses:

LEWIS L. COBURN,
J. L. COBURN.