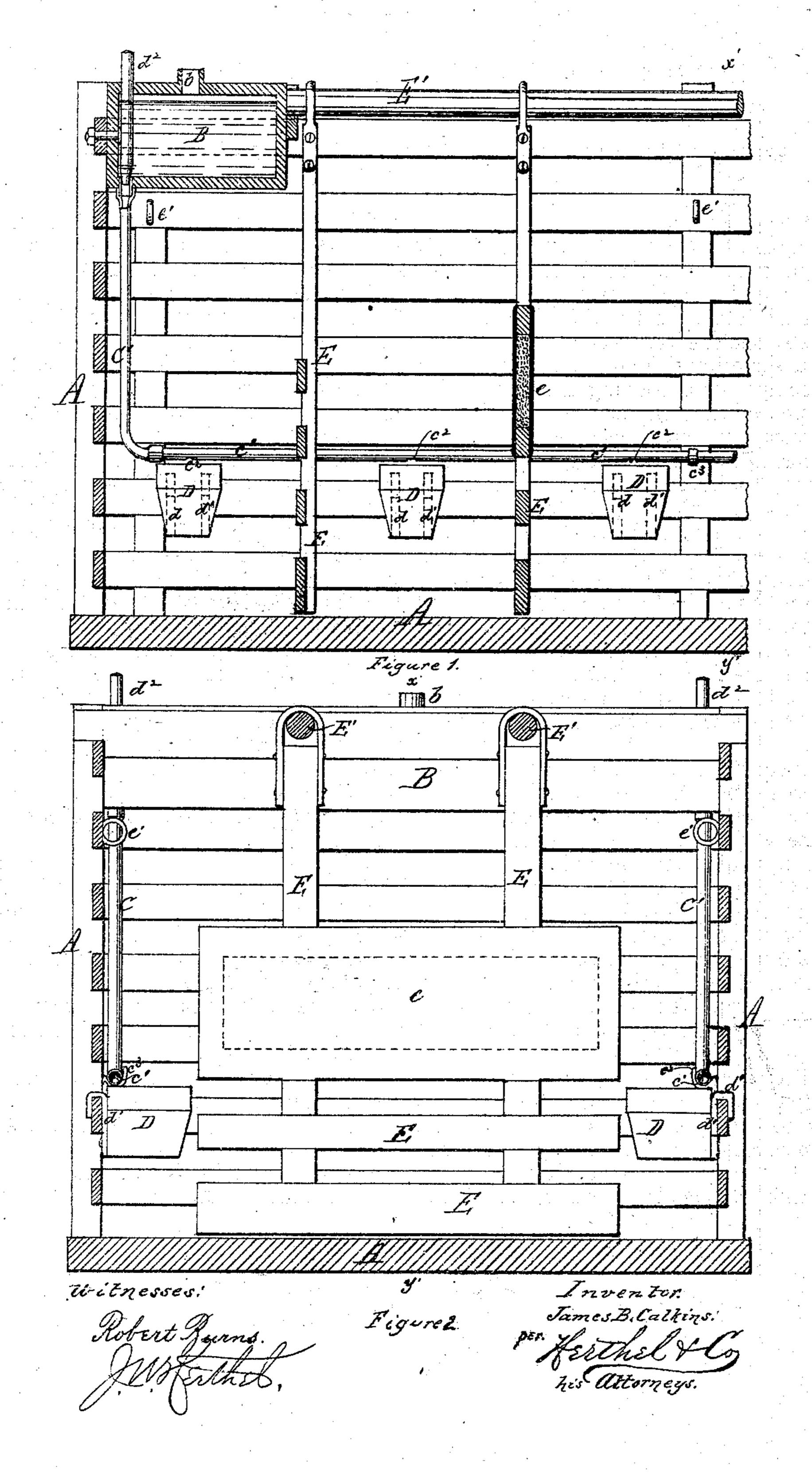
Improvement in Stock and Freight Cars.

No. 122,104.

Patented Dec. 26, 1871.



UNITED STATES PATENT OFFICE.

JAMES B. CALKINS, OF PACIFIC, ASSIGNOR TO HIMSELF AND JOSIAH GEIGER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN STOCK AND FREIGHT CARS.

Specification forming part of Letters Patent No. 122,104, dated December 26, 1871.

To all whom it may concern:

Be it known that I, James B. Calkins, of Pacific, in the county of Franklin and State of Missouri, have invented certain new and useful Improvements in Railroad Stock and Freight Cars; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The improvements here presented consist in providing stock railway cars with a reservoir or water-supply tank and a series of pipes to conduct feed-water to troughs or buckets hooked to the slats of the car; also, said invention consists in padding, bolstering, or otherwise cushioning the sliding partitions that form the stalls; and all of which will now more fully be described.

To enable those herein skilled to make and use my said improvements, I will now more fully describe the same, referring to the accompanying—

Figure 1 as a longitudinal end sectional elevation; to Fig. 2 as a transverse sectional elevation.

The car A is constructed as usual for stock and freight purposes. Secured properly to the top bars or slats, and at one end of said car, is arranged a water-supply tank, B. The said tank B can be of any suitable construction, formed water-tight. On top said tank is provided with an opening or influent pipe, b, to receive water from the railway water-supply stations. To the bottom of the tank B are properly secured hosepipes C C', to which the distributing-pipes $c c^1$ are coupled and arranged to pass at suitable elevation along the side slats of the car. (See Figs. 1 and 2.) The said distributing-pipes $c c^1$ have a series of discharge outlets, c2, and rest, supported in proper rests c^3 at ends of the car. The buckets or water-troughs D of any suitable material are constructed elongated in shape, (see Fig. 2,) so as to reach somewhat within the car to accommodate the heads of cattle, &c. The

said buckets are hooked to the slats of the car by iron bars bent to form hooks $d d^1$ attached to the sides, so that the operator can readily slide said buckets along the slats to required position. The supply of feed-water from the tank is shut off by suitable valves or plugs d^2 , Fig. 1. The stalls for the cattle or other live stock are formed by slatted partitions E hung to horizontal iron rods E' secured to the top of the car. The said partitions are padded, as at e, Fig. 1, with any suitable padding material to avoid the ill effects consequent from the undue bracing or crowding of the stock. The padding of said stalls can also be made by securing stout rubber pieces or strips to vertical slats, (united at their ends to a few bottom transverse slats,) thus dispensing with top slats, and in either case ameliorating the condition of live stock.

When not to be used the feed-pipes can be hung or placed in rings e' near the top of the car, the partitions slided to one end, and buckets placed thereon or hung out of the way. Thus the car is ready for the transportation of merchandise and similar freight.

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

1. The combination of adjustable partitions E, buckets D, also made adjustable by their hooks $d d^1$, distributing-pipes $c c^1$, hose-pipes C C', and water-tank B, all said parts being arranged in a stock and freight car, substantially as and for the purpose set forth.

2. Padding partitions E that form stalls with padding or rubber material, substantially as and for the purpose set forth.

In testimony of said invention I have hereunto set my hand.

JAMES B. CALKINS.

Witnesses:

WILLIAM W. HERTHEL, ROBERT BURNS.

(121)