(No Model.)

J. E. HUGHES.

RAILWAY LIVE STOCK CAR.

No. 454,822. Patented June 23, 1891.

Fig. 1.

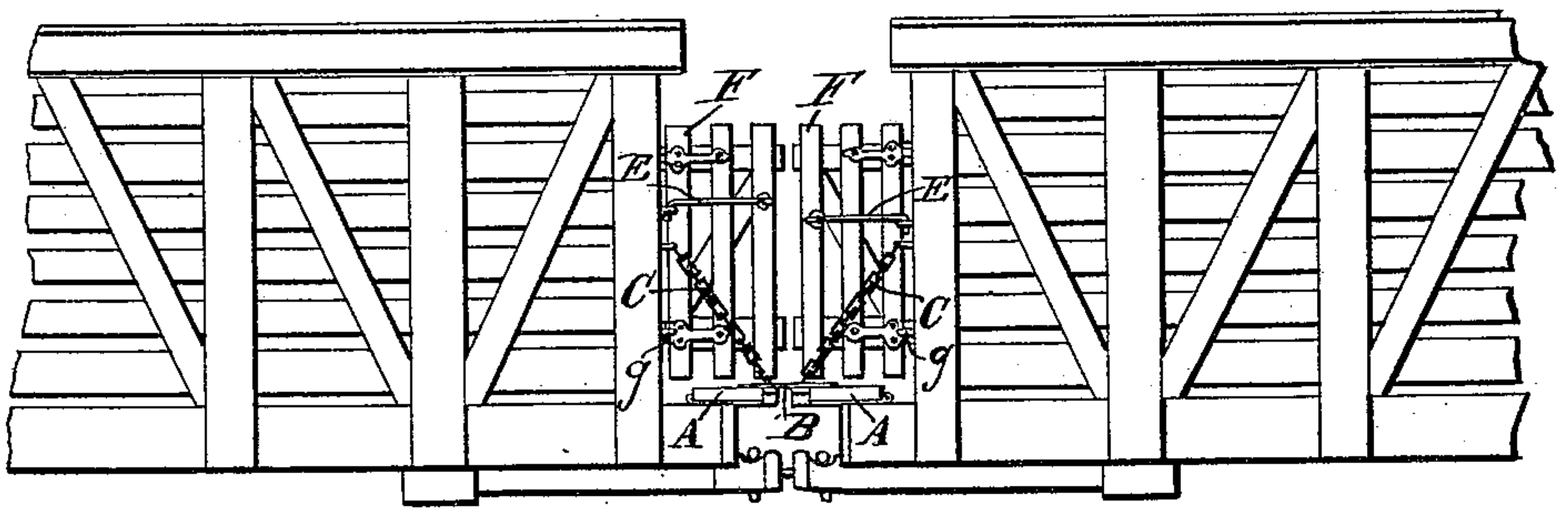


Fig. 2.

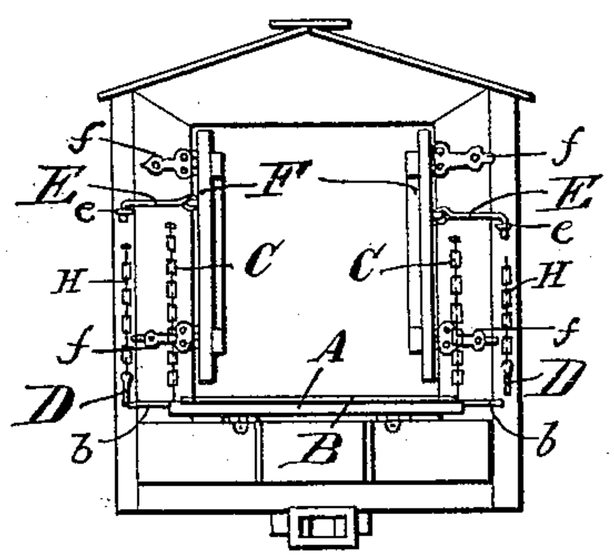


Fig. 3.

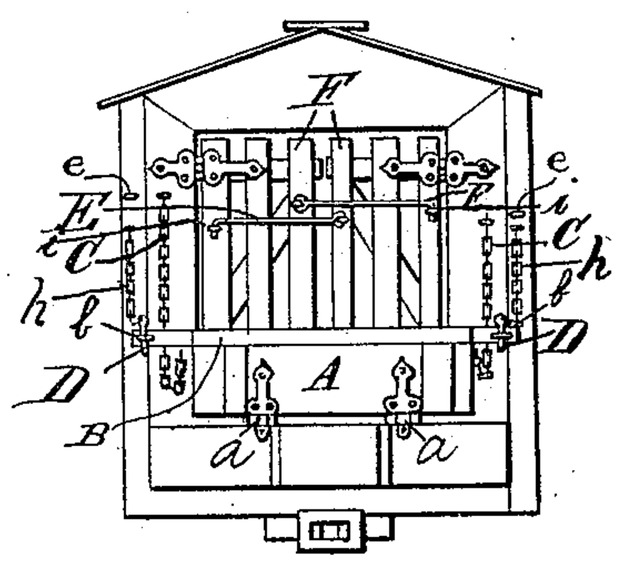
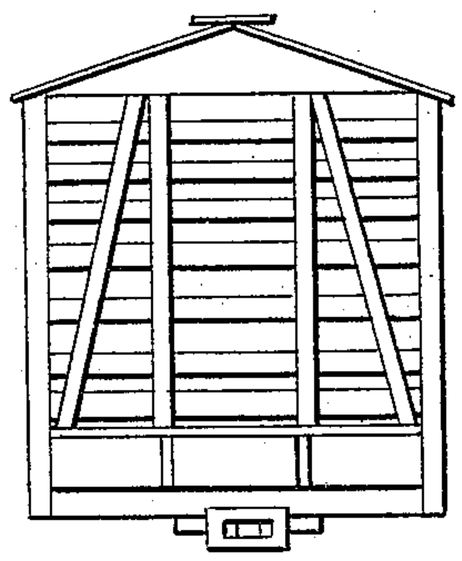


Fig. 4.



Witnesses:

Edwond Morris

Charles E. Armstrong

Inventor.

John E. Hughes.

UNITED STATES PATENT OFFICE.

JOHN E. HUGHES, OF PINE BLUFF, ARKANSAS, ASSIGNOR OF THREE-FOURTHS TO SPENCER W. KENWARD, SEMEN A. WILLIAMSON, AND ROBERT F. ESTES, OF SAME PLACE.

RAILWAY LIVE-STOCK CAR.

SPECIFICATION forming part of Letters Patent No. 454,822, dated June 23, 1891.

Application filed September 13, 1890. Serial No. 364,927. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. HUGHES, a citizen of the United States, residing at Pine Bluff, in the county of Jefferson and State of Arkansas, have invented an Improvement in Railway Live-Stock Cars, of which the following is a specification.

My invention relates to a new and useful improvement in railway live-stock cars; and the object of the improvement is to facilitate the loading and unloading of live stock from either end or an intermediate point of a train of cars. With my improvement, wishing to load a train with live stock, all the ends of the cars are opened and adjusted, except the outer ends of the last cars, making a complete passage throughout. As fast as the most distant cars from chute are loaded the ends are closed until every car is loaded; the reverse in unloading. The car set at the chute will be the last car loaded and the first car unloaded. I accomplish these objects by the appliances illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the abutting ends of two cars coupled together, with adjustable ends opened preparatory to loading or unloading. Fig. 2 is an end view of car with adjustable end open, and shows the use of supporting-chains C C and rod-hooks E E, hereinafter described. Fig. 3 is an end view of car ready for motion, with adjustable end closed and secured by drop A, which is fastened by pins D D and rod-hooks E E, hereinafter described. Fig. 4 is an end view of a common stock-car without my improvement.

Similar letters refer to the same parts throughout the several views.

A (the drop) is the lower fastening for doors, hereinafter referred to, when closed and forms the floor of the passage-way between the cars when open.

a a are the hinges of drop A.

b b are lateral extensions at the ends of the drop to fit over staples *g g*, hereinafter referred to.

D D are two pins which pass through staples *g g* and secure drop A, when closed by means of fastenings *b b*.

H H are two chains which attach the pins D D to car.

F F (two slatted doors) form the greater part of end of car when closed, and the sides of the chute or passage-way between cars when open.

f f f f represent hinges of doors F F.

E E (two rod-hooks) form the top fastenings for doors F F when closed and braces for same when open.

e e are two staples near corner of car to place rod-hooks E E in to brace and hold firm the doors F F when open.

i i are two staples, one in each door F F, to place rod-hooks E E in to fasten doors when closed.

B is an iron apron attached to drop A to meet or lap according to distance or slack between the cars.

C C are two chains attached to car and drop A to support the drop when down or open, when it forms the floor of passage-way between cars when loading or unloading.

The doors and parts are made so that they may meet or lap and be secured by the fastenings aforesaid.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a live-stock car having an open end, the combination of the doors F F, the hooked rods E E, staples *i i* and *e e*, the drop A, adapted to overlap and fasten the doors when closed, the apron B, and the fastening *b*, *g*, and D for the said drop, substantially as described.

JOHN E. HUGHES.

Witnesses:
J. W. WILKINS,
JAS. N. SCULL.