(No Model.)

C. HAGER.

STOCK CAR.

No. 388,671. Patented Aug. 28, 1888.

Fig. 1.

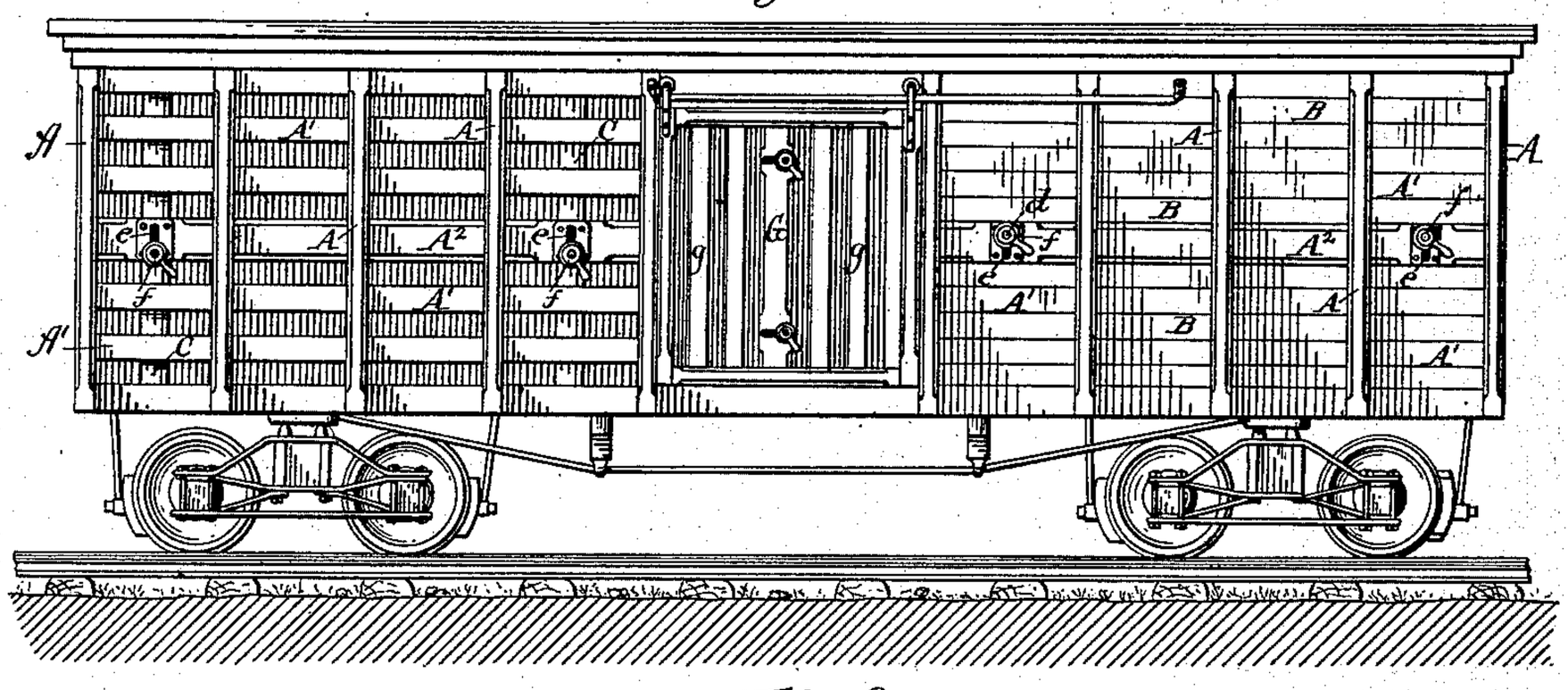


Fig. 2.

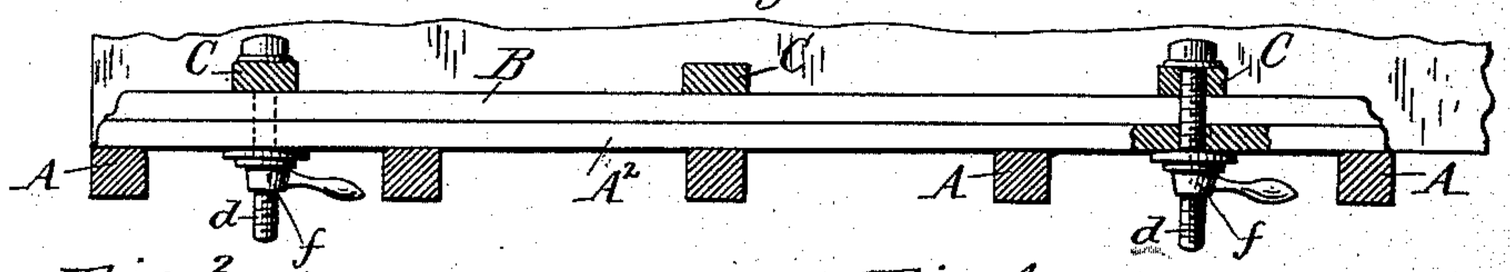
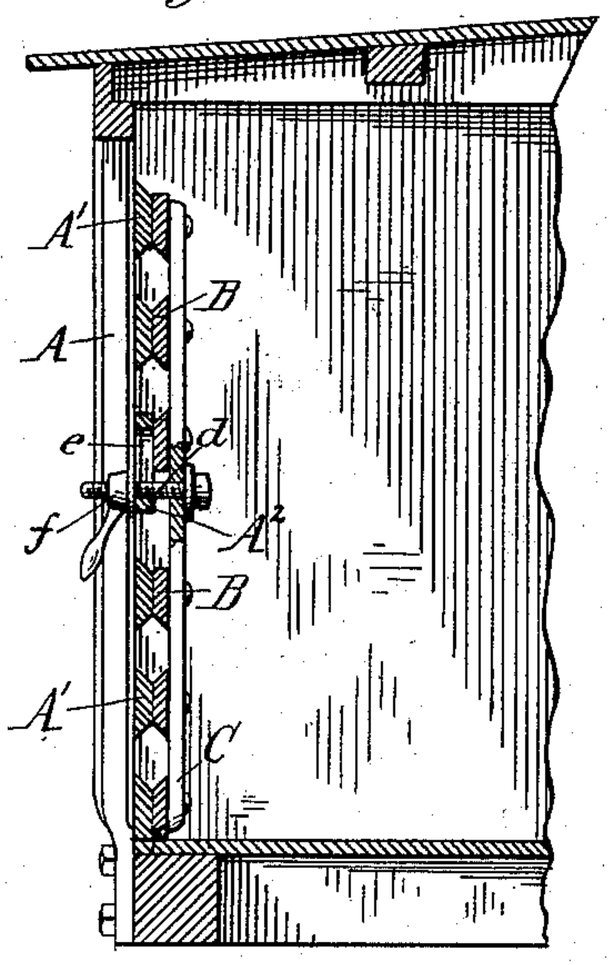


Fig. 3.

Fig. 4.



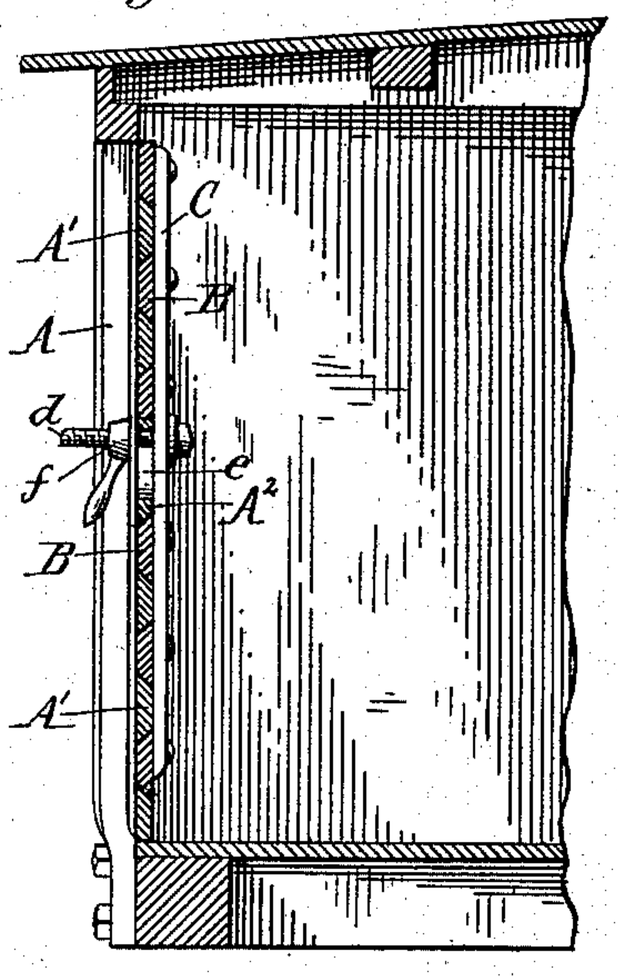
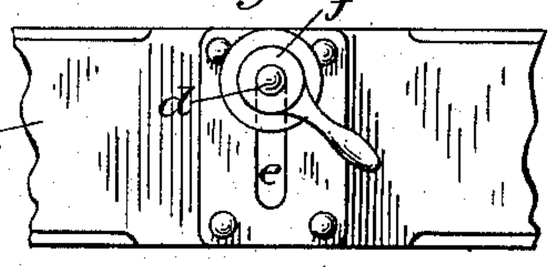


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES HAGER, OF BUFFALO, NEW YORK, ASSIGNOR OF TWO-THIRDS TO HENRY BAETHIG AND LEONARD B. CROCKER, BOTH OF SAME PLACE.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 388,671, dated August 28, 1888.

Application filed March 20, 1888. Serial No. 267,829. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HAGER, of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Stock-Cars, of which the following is a specification.

This invention relates to that class of stock-cars in which the walls are composed of longitudinal slats separated by air-spaces, and which are provided with movable slats for closing these spaces in cold and severe weather, so as to protect the live stock confined in the car.

The object of my invention is to improve the construction of these movable slats, and to provide the same with a simple fastening, whereby they can be readily secured in position.

The invention consists of the improvements which will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved car, showing a portion of the car open and another portion closed. Fig. 2 is a fragmentary horizontal section of the car on an enlarged scale. Fig. 3 is a fragmentary vertical cross-section of the car with the spaces thereof open. Fig. 4 is a similar view of the car with its openings closed. Fig. 5 is a fragmentary side elevation of the central slat of the car-wall and one of the clamping-nuts on an enlarged scale.

Like letters of reference refer to like parts in the several figures.

A represents the uprights of the car-body, and A′ are the longitudinal slats secured to said uprights and arranged at a suitable distance apart to form air-spaces between the slats, in the usual manner.

B represents a series of movable slats arranged on the inner sides of the car and adapted to close the spaces between the fixed slats A′ of the car-body when it is desired to form a tight or closed car. The movable slats B are made of the same width as the spaces between the slats A′, so as to fit snugly in these spaces, and are rigidly connected together by upright bars C. The inner longitudinal edges of the fixed slats A′ are beveled, and the adjacent outer edges of the movable slats B are correspondingly beveled, as represented in Figs. 3 and 4, to facilitate the entrance of the movable slats into the spaces between the fixed slats A′. This construction also permits the movable slats to enter between the slats A′ in case any of the slats become covered with ice.

d represents screw-shanks secured to the upright bars C and projecting through vertical slots *e*, formed in one of the slats A′, preferably in the central slat, A^2.

f represents clamping-nuts applied to the outer ends of the screw-shanks *d* and bearing against the outer side of the slat A^2.

When the air-spaces of the car are open, the movable slats B rest against the inner sides of the fixed slats A′, and the openings between the slats B coincide with the spaces between the slats A′, as represented in Fig. 3. When it is desired to close the air-spaces in the car-body, the movable slats B are raised by means of the screw-shanks *d* until they stand opposite the spaces between the slats A′, when they are drawn outwardly, so as to enter these spaces, as represented in Fig. 4. The slats are then secured in place by tightening the clamping-nuts *f*. The latter are provided with handles for turning the same, as shown. In this position of the movable slats the spaces in the car-wall are closed and the car is practically tight. When it is desired to open the air-spaces of the car, the clamping-nuts *f* are loosened sufficiently to permit the slats B to be moved out of the spaces, and the slats are then allowed to descend, so as to stand in line with the slats A′ of the car-body. The clamping-nuts are then again tightened, so as to secure the slats in this position.

Each side wall of the car is provided with two sets of movable slats, B, one set being arranged on opposite sides of the car-door G.

The car-door is preferably composed of a series of vertical slats, *g*, and provided with a series of movable slats for closing the spaces between the slats of the door when required. The movable slats are provided with screw-shanks and clamping-nuts, in a manner similar to the slats B of the car-walls.

The movable slats of the car and door are tightly held in place in both their positions, and are free from projecting or loose parts, which would enable the animals to disarrange

the movable slats or tear the same from their connecting-frames.

I claim as my invention—

1. The combination, with the walls of a stock-car provided with longitudinal slats A′, separated by open spaces between each slat, of a series of movable slats, B, connected together and separated by open spaces between each slat, the slats B being adapted to fit into the open spaces between the slats A′ and close said openings, screw-shanks *d*, secured to the movable slats and extending through vertical slots *e*, formed in one of the stationary slats A′, and clamping-nuts *f*, engaging with said screw-shanks, whereby the movable slats B are tightly clamped in rear of the stationary slats A′, or into the spaces between the slats A′, as desired, substantially as set forth.

2. The combination, with the car-walls composed of a series of longitudinal slats, A′, separated by open spaces and having inner beveled edges, of a series of movable slats, B, connected together and having outer beveled edges and adapted to fit into the open spaces between the slats A′, screw-shanks *d*, attached to the movable slats and passing through slots *e*, formed in the slats A′, and clamping-nuts *f*, applied to said screw-shanks and bearing against the slats A′, substantially as set forth.

Witness my hand this 14th day of March, 1888.

CHARLES HAGER.

Witnesses:
JNO. J. BONNER,
FRED. C. GEYER.