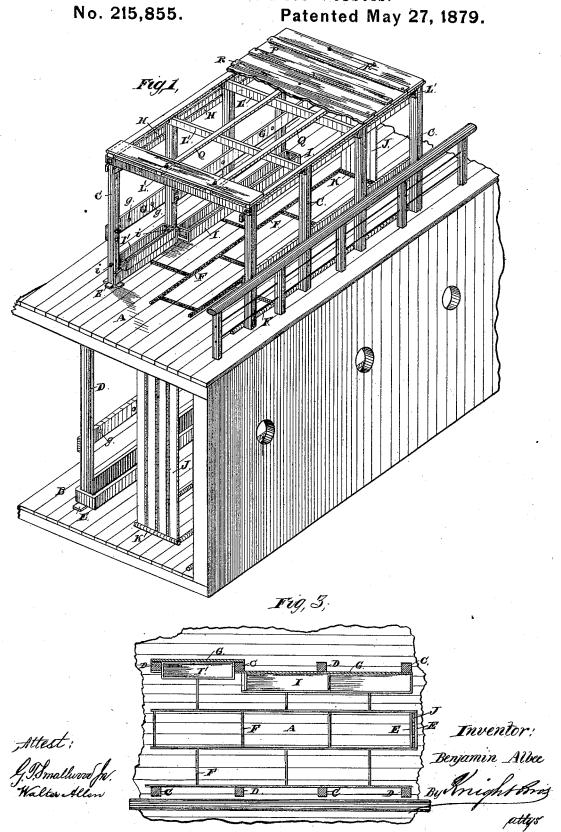
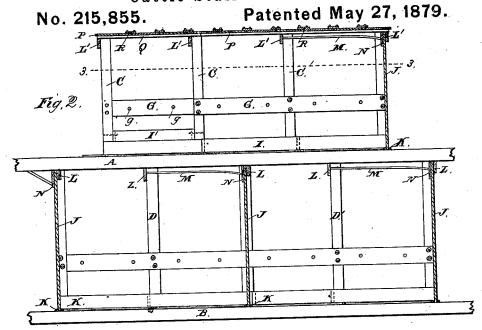
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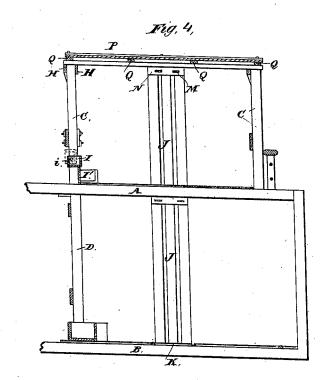
Cattle-Stall for Vessels.



B. ALBEE.

Cattle-Stall for Vessels.





Inventor:

Atlest: Jio, I Smallwood Ja. "Walter Allen Benjamin Albee .

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## UNITED STATES PATENT OFFICE.

BENJAMIN ALBEE, OF EAST BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM T. JACKSON, OF SAME PLACE.

## IMPROVEMENT IN CATTLE-STALLS FOR VESSELS.

Specification forming part of Letters Patent No. 215,855, dated May 27, 1879; application filed January 6, 1879.

To all whom it may concern:

Be it known that I, Benjamin Albee, of East Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Cattle-Stalls for Vessels, of which the following is a specification.

My improvements are applicable to the construction of stalls for confining cattle either

between decks or on the upper deck.

My improved stalls are constructed with breast-planks and head-planks, all firmly bolted to stanchions, and with vertical shifting partition-boards between each four cattle. They are provided with feed-troughs, preferably made reversible, so that they may be placed upside down or with the top outward when not in use. Round battens are fixed on the decks to prevent slipping.

In order that the invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in

which—

Figure 1 is a perspective view of a part of the deck of a vessel with my deck-stalls applied, a part of the roof being omitted in order to expose the interior. Fig. 2 is a vertical longitudinal section, looking toward the head of the stalls. Fig. 3 is a horizontal section on the line 3 3, Fig. 2. Fig. 4 is a transverse section.

A and B represent, respectively, the upper and second decks of a vessel. C and D D' are stanchions of the upper and lower deckstalls, respectively, the feet of which are secured in steps E E. F F represent the round battens fastened to the decks. G G are the breast-planks, and H H the head-planks, both of which are firmly bolted to the front stanchions, C and D. The breast-planks G are provided with holes g or other appliances for tying the cattle.

I I' represent the feed and water troughs, which are preferably hung, as shown at I', on pivots i i, which permit the troughs to be completely inverted or placed with their tops outward, as illustrated in dotted lines, when not in use.

The reversible feed and water troughs are

especially desirable for an upper deck, where there is danger of shipping water in rough weather, as when the troughs are filled with salt-water the cattle will drink it and sickness results.

J J are the movable vertical partitions, the lower ends of which are set in steps K, while their upper ends are secured by bracing them against suitable abutments L L' by means of struts M M, connected at their ends by crosspieces N N. These up-and-down partition-boards are planed on both sides and rounded on their edges to prevent any possibility of injury to the cattle. They may be placed between as many of the stalls as required, so that unruly or vicious animals can be completely isolated. Under ordinary circumstances a partition is placed between every four stalls.

On the upper deck, L' L' represent rafters securely bolted to the stanchions C and D, and constituting the abutments against which the upper ends of the partition-planks J J are braced, and between which the bracing-struts M and cross-pieces N are placed. On these rafters are laid transverse strips or ribs Q Q to receive the roof-plates P P, which are se-

curely bolted thereto.

The head-planks H of the deck-stalls are made double, and being firmly fastened to each other and to their stanchions with screw-bolts add to the strength and stability of the structure.

The joints between the roof-plates P are covered by battens R. The breast-planks or tie-planks G are placed on the inner sides of the stanchions, if there is plenty of room for this arrangement—otherwise on the outside—in order that the thickness of the stanchions may be added to the length of the stall.

The tie-planks and water and feed troughs are all attached by bolts, affording facility for taking them out in case it becomes necessary

to remove dead animals.

Having thus described my invention, what I claim as new therein, and desire to secure

by Letters Patent, is-

1. The stalls constructed as herein described, with stanchions CD, breast-planks G, and head-planks H, and separated at will by

movable vertical partition-planks J, secured at the bottom by steps K, and at the top by abutments L L', cross-pieces N, and bracing-struts M, all sustantially as set forth.

2. In cattle-stalls for vessels, the stanchions C D, breast-planks G, perforated at g, headplanks H, reversible trough I', vertical and Guyn S. Brooks.

movable partition-planks J, steps K, abutments L L', cross-pieces N, and bracing-struts M, all substantially as set forth.

Witnesses:

John Leighton,
Guyn S. Brooks.