H. P. KIRKHAM.
Horse-Stall for Vessels.

No. 201,253. Patented March 12, 1878.

Fig:1.

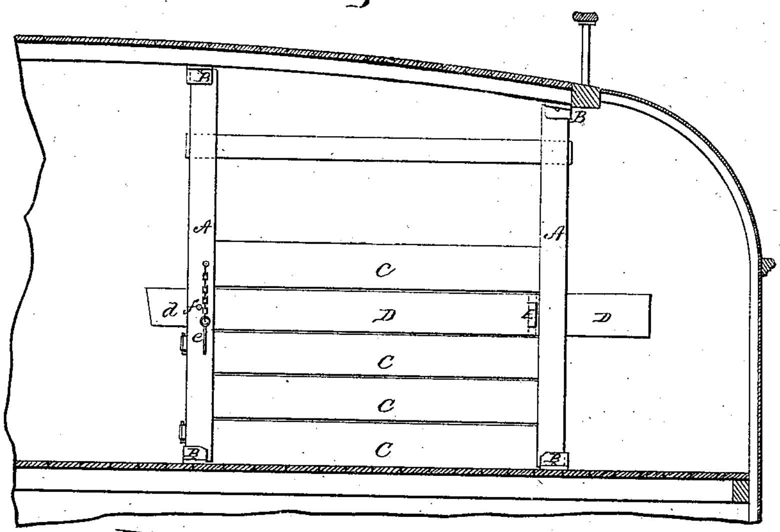


Fig:5.

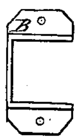


Fig:2.

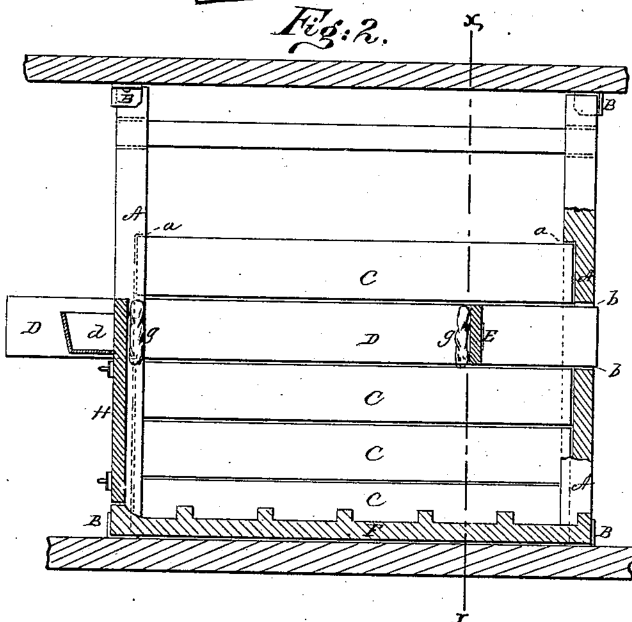


Fig:3.

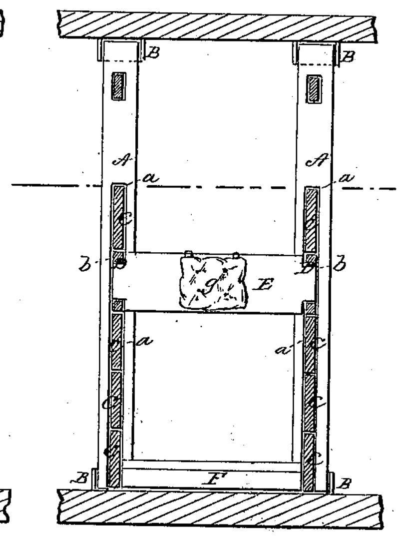
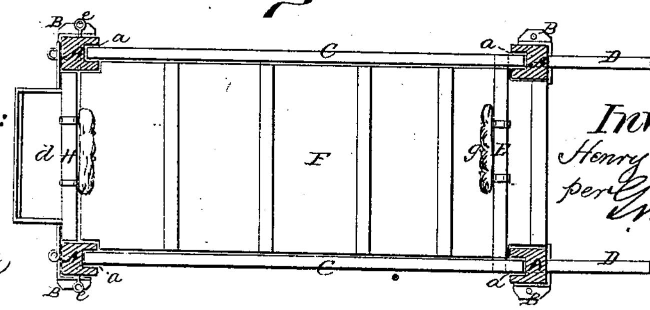


Fig:4.



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UNITED STATES PATENT OFFICE.

HENRY P. KIRKHAM, OF NEW YORK, N. Y.

IMPROVEMENT IN HORSE-STALLS FOR VESSELS.

Specification forming part of Letters Patent No. **201,253**, dated March 12, 1878; application filed November 3, 1877.

To all whom it may concern:

Be it known that I, HENRY P. KIRKHAM, of the city, county, and State of New York, have invented a new and Improved Stall for the Transportation of Horses; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification.

This invention is in the nature of an improvement in stalls for the transportation of horses; and the invention consists in a horizontally-adjustable chock provided with a series of holes in the sliding bars thereof, and in combination with a bolt fixed to a stall for the transportation of horses on shipboard.

In the accompanying sheet of drawings, Figure 1 is a cross-section of the between-decks of a ship, showing side view of stall; Fig. 2, a side view of stall, partly in section; Fig. 3, cross-section taken in line *x x*, Fig. 2; Fig. 4, plan or top view of stall, and Fig. 5 detail of shoe.

Similar letters of reference indicate like parts in the several figures.

By this invention the horse may be confined in such a manner within the stall as will prevent him from being injured in a heavy seaway.

To construct my stall, four uprights, A, are prepared, of a length sufficient to snugly fit between the decks where the stalls are to be erected. These uprights have formed in them channels *a* and slots *b*. To the under side of the upper deck and upper side of the lower deck are firmly bolted shoes B, into which shoes are received the upper and lower ends, respectively, of the uprights A, the uprights being inserted within the shoes through the open side *c* thereof. When the uprights A are so placed, the channels *a* should face each other. Into these channels are placed boards or slats C, the edge of one resting upon the other, as shown in Figs. 1, 2, and 3, forming the sides of the stall, and through the slots *b* are fitted rails D, so that they freely slide in and out of said slots. Fitted to these rails is a cross-piece, E, near that portion of them that enters into the slots *b* of the rear uprights A. Within the stall is placed a false floor, F. This floor fits snugly within the stall. To the front of the stall is hinged a door, H, to the outside of which is fixed the manger *d*.

Now, my stall for the transportation of horses, being constructed substantially as I have described it, may be erected, as before stated and shown, with facility, and, when not in use, with equal facility it may be removed, the several parts bundled together and stowed away, so that they occupy but little space, the door being unhinged for that purpose, and therefore removable, as well as the other parts; and the false floor not only preserves the deck from injury, but it can be readily removed and the deck beneath it thoroughly cleansed at any time.

In a heavy seaway it is desirable that the horse within the stall should be confined as snugly in his stall as possible. To do this readily, the rails D are slipped forward until the cross-piece E is brought in contact with the hinder part of the horse and his breast against the door of the stall, so that he is effectually "chocked" within the stall, and prevented from injuring himself by being thrown from his legs or from the stall as the ship rolls, the stalls being arranged athwartships between decks. The rails D are held in the position to chock the horse or otherwise by pins *e*, which enter into holes *f* formed through the uprights and rails, as shown in Figs. 1 and 4.

To prevent the horse from being chafed within the stall, the cross-piece E and the inside of the door may be provided with pads *g*, and, in addition to these pads, similar pads may be fastened by lanyards to the four corners of the stall.

I am aware that uprights are old in connection with stalls, and that channels have been formed with the uprights by uniting two uprights together, and that side pieces have been placed in the channels so formed, which construction is shown in the patent of J. W. Adams, granted November 4, 1873, No. 144,304.

I am also aware that chocks vertically adjustable have been employed in a contrivance for shoeing horses, as shown in the patent of J. Ditch, granted November 25, 1873, No. 144,963, and also as shown in the patent of F. H. Relph,

granted April 6, 1875, No. 161,825, in a device for slinging oxen, which patent also shows uprights with slots formed in them on one of their faces, and chocks which are not adjustable excepting in a vertical direction; but none of these patented contrivances have slots cut through the timber for the reception of sliding bars to which chocks are fixed, so that the chocks may have a horizontal adjustment, and thereby keep the horse tightly confined, front and rear, in the stall, and so that the chocks may be capable of adjustment for animals of different sizes; and I do not claim any of the features shown and described in the before-mentioned patents of J.W. Adams, dated November 4, 1873, No. 144,304, J. Ditch, November 25, 1873, No. 144,963, and F. H. Relph, April 6, 1875, No. 161,825; but

What I do claim as new, and desire to secure by Letters Patent, is—

In a stall for the transportation of horses on shipboard, a horizontally-adjustable chock with a series of holes in the sliding bars thereof, in combination with a bolt, substantially as and for the purpose described.

HENRY P. KIRKHAM.

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