

(No Model.)

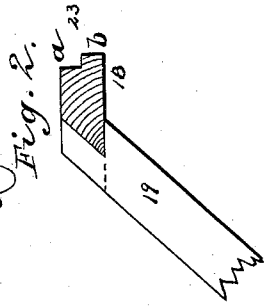
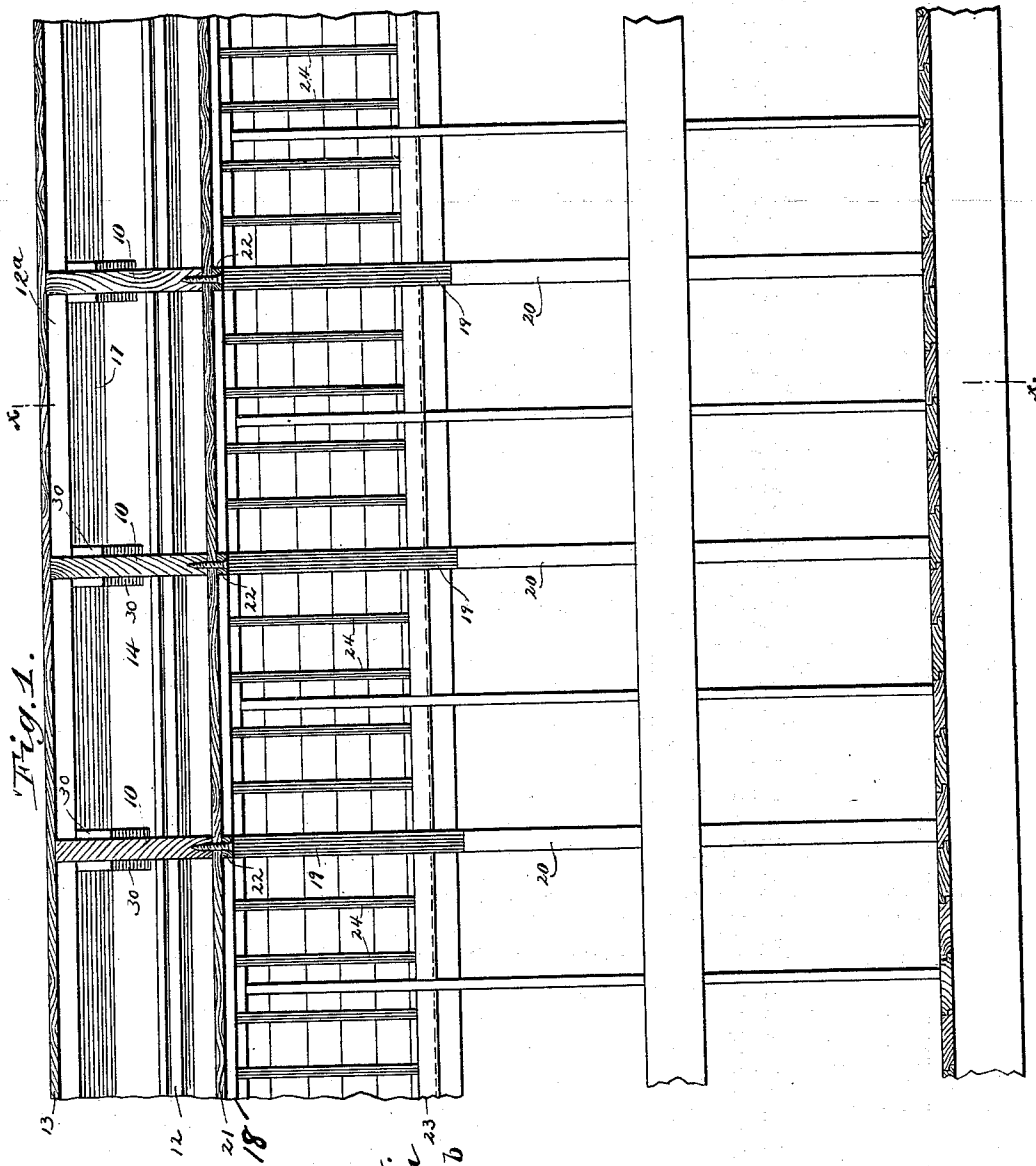
3 Sheets—Sheet 1.

F. E. CANDA.

FEEDING RACK FOR CATTLE CARS.

No. 440,010.

Patented Nov. 4, 1890.



WITNESSES:
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INVENTOR:
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(No Model.)

3 Sheets—Sheet 2.

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Fig. 3.

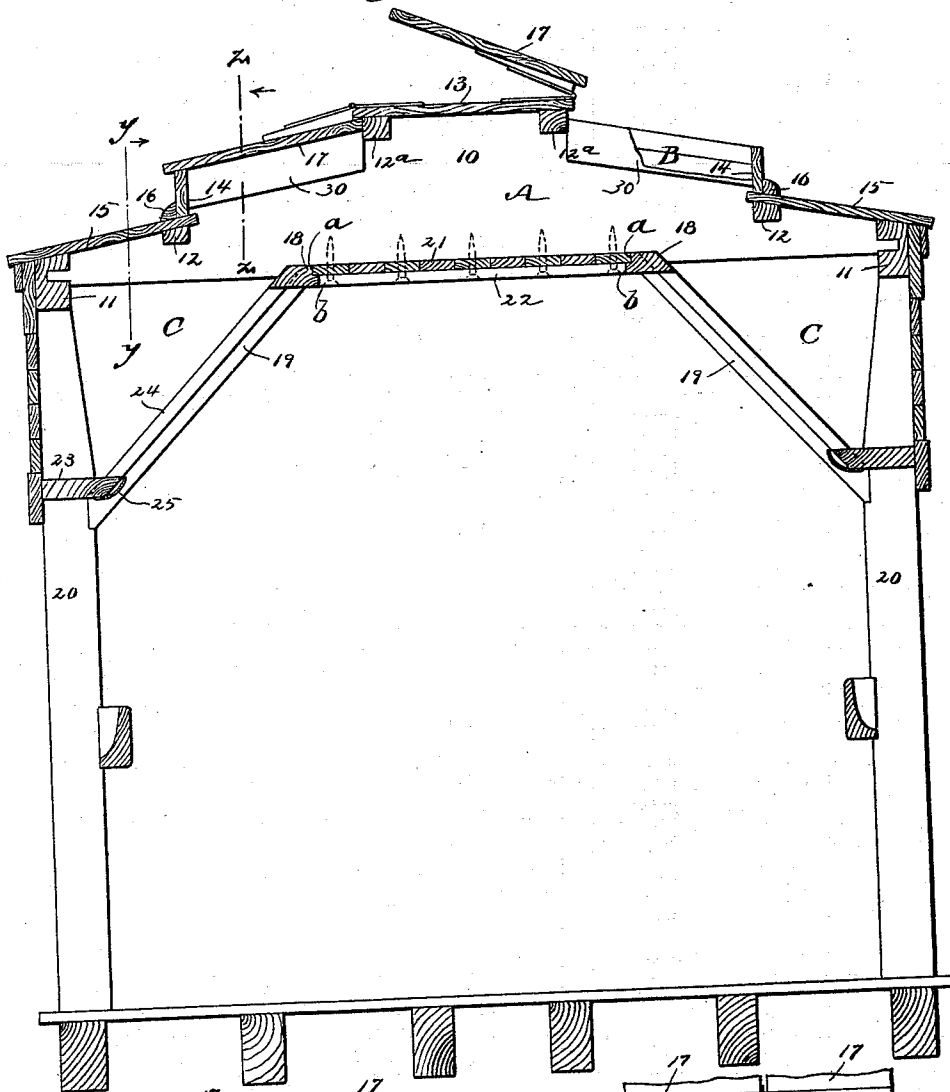


Fig. 5.

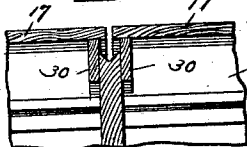
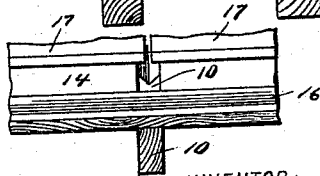


Fig. 4.



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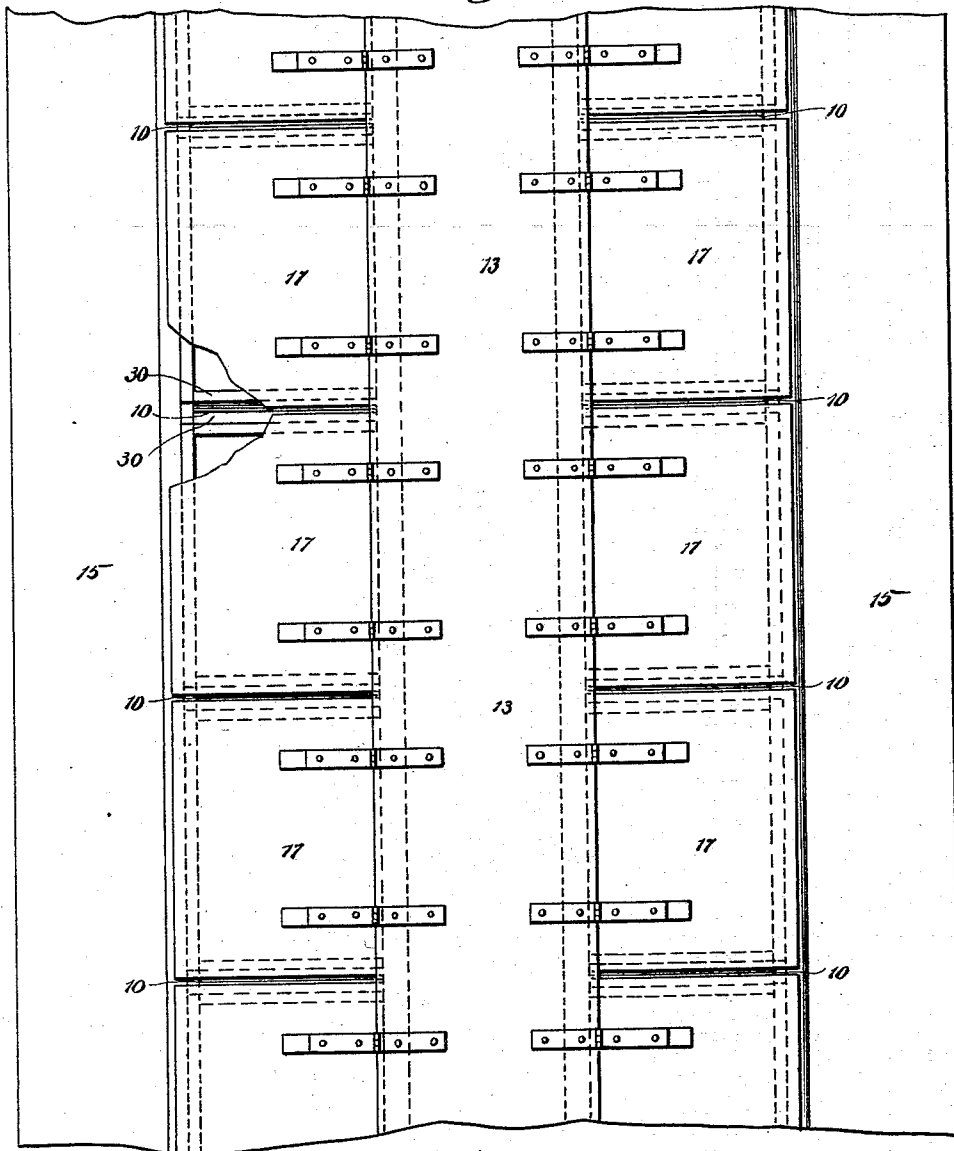
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Fig. 6.



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UNITED STATES PATENT OFFICE.

FERDINAND E. CANDA, OF NEW YORK, N. Y.

FEEDING-RACK FOR CATTLE-CARS.

SPECIFICATION forming part of Letters Patent No. 440,010, dated November 4, 1890.

Application filed December 6, 1889. Serial No. 332,796. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND E. CANDA, of New York city, in the county and State of New York, have invented new and Improved Feeding-Racks for Cattle-Cars, of which the following is a full, clear, and exact description.

This invention relates to the construction of cattle-cars, the object of the invention being to provide for the stowage of the fodder employed in the feeding of the cattle, and at the same time to provide for the easy delivery of such fodder from the storage-compartments to the feeding-racks.

The invention consists in a novel arrangement and combination of parts, as will be hereinafter described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a central longitudinal sectional view of a portion of a car embodying my invention. Fig. 2 is a detail view illustrating a certain connection employed in the construction of the car. Fig. 3 is a cross-sectional view on line $x x$ of Fig. 1. Fig. 4 is a longitudinal sectional view of a portion of a car, the view being taken on line $y y$ of Fig. 3; and Fig. 5 is a view on line $z z$ of Fig. 3. Fig. 6 is a plan view of a portion of the roof of the car.

In constructing the car forming the subject-matter of this application I provide carlings 10, that are connected to the plates 11 in the ordinary manner. Into the carlings 10 there are framed purlins 12 and 12^a, the purlins 12^a being located directly beneath the roof or running board 13, while the purlins 12 are located adjacent to the plates 11. Above the purlins 12 there are secured auxiliary face-boards 14, which rest upon the main roof-boards 15, battens 16 being by preference located as represented in Fig. 3. To the running-board 13, I hinge traps or doors 17, which normally rest in the position in which the trap is shown upon the left in Fig. 3 and constitute a portion of the roof of the car.

To the carlings 10, I secure longitudinal

strips 18, into which there are framed struts 19, which abut against the posts 20, the posts being by preference gained to receive the lower ends of the struts. The adjacent sides or faces of the strips 18 are formed with shoulders a and b , the ceiling-boards 21 abutting against the shoulders a , while a strip 22, which constitutes the upper chord of a truss formed by the struts 19 and such strip, abuts against the shoulders b , the parts being held to place by screws or other fastening devices that are passed up through the strip 22 and through the ceiling-boards to engage the carling. Between the posts I arrange strips 23, into which strips the lower ends of the rack-bars 24 are framed, the upper ends of such bars being framed into the strips 18. The struts 19, arranged as above, in connection with the posts and carlings, form an important feature in the construction of cattle-cars, as they greatly add to the strength of the car, make it stiff, and capable of resisting the torsional strains to which stock-cars are subjected in case of collision or derailment. My improvement thus contributes directly to the safety of the live stock carried, provides fodder-space, and yet leaves abundant head-room within the car.

Although not positively essential, I prefer to protect the strips 23 by means of irons 25, that are attached as represented in Fig. 3.

From the construction above described it will be seen that between each carling there is formed a storage-compartment A, to which compartments access is obtained through the openings B, that are normally closed by the lids or traps 17, the compartments A in turn being in free communication with the manger-spaces C, as will be readily seen by an inspection of Fig. 3. In this way I provide for the carrying of a large amount of fodder, which may be readily fed from the storage-compartments to the manger-spaces, and at the same time I provide for the filling of the manger-spaces through the openings B.

With such a construction as the one above described it becomes desirable to make some provision whereby the approaching edges of adjacent traps 17 will be prevented from becoming bound together by congealed water, as would be the case if such ends abutted and

rested directly upon the carlings. To avoid this binding of the traps, I prefer to cut away the carlings, as shown upon the right in Fig. 3 and in Figs. 4, 5, and 6, the ends of the traps 5 being supported by strips 30, that are secured to the carlings, as shown. The upper edge of the cut-away portion of the carlings is V-shaped and constitutes a gutter that is adapted to carry off any water which may drip from 10 the edges of the traps thereinto, the carling extending outward so that it is flush with the outer surface of the auxiliary face-boards. It will be noticed that the edges of the traps 17 do not touch, a space being left between such 15 edges.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

1. In a cattle-car, in combination with the 20 roof of the car and the carlings supporting the roof and the floor 21, the inclined struts extending from the carlings to the side posts,

as herein shown and described, whereby the car is strengthened, space provided for hay, and the struts rendered available as parts of 25 the hay-racks, as set forth.

2. In a cattle-car, the combination, with the carlings, side posts, and roof, of the inclined struts, rack-bars, and ceiling-boards, as herein shown and described, whereby fodder-cham- 30 bers and rack are provided between the several carlings without loss of head-room, as set forth.

3. In a cattle-car, the combination, with the carlings formed with V-shaped cut-away sec- 35 tions, of strips 30, secured to the carlings, and lids 17, hinged to the car roof or board 13 and resting upon the strips, substantially as shown and described.

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Witnesses:

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