

(Model.)

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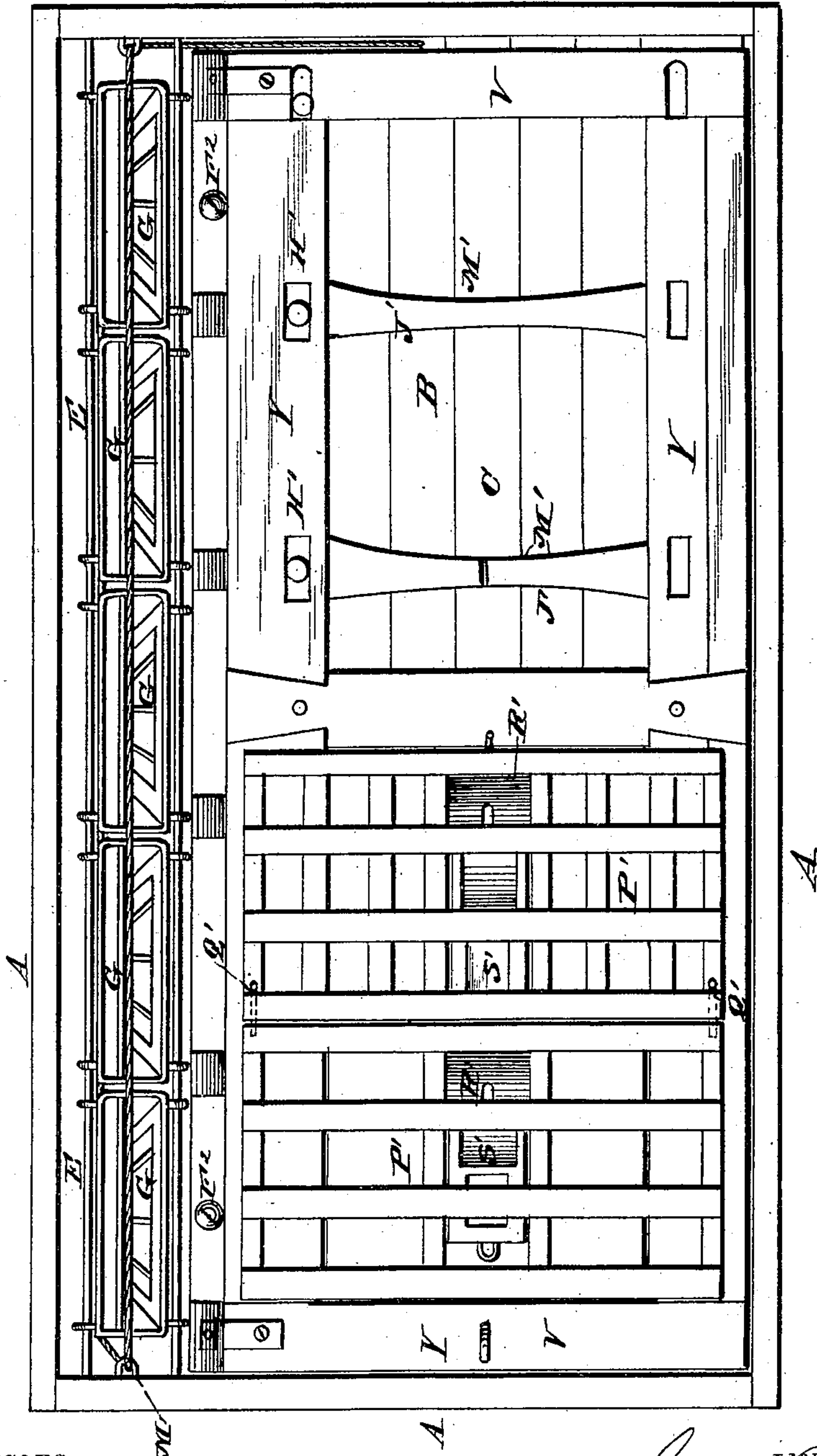
L. WOODRUFF.

STOCK CAR.

No. 245,255.

Patented Aug. 2, 1881.

Fig. 1.



WITNESSES

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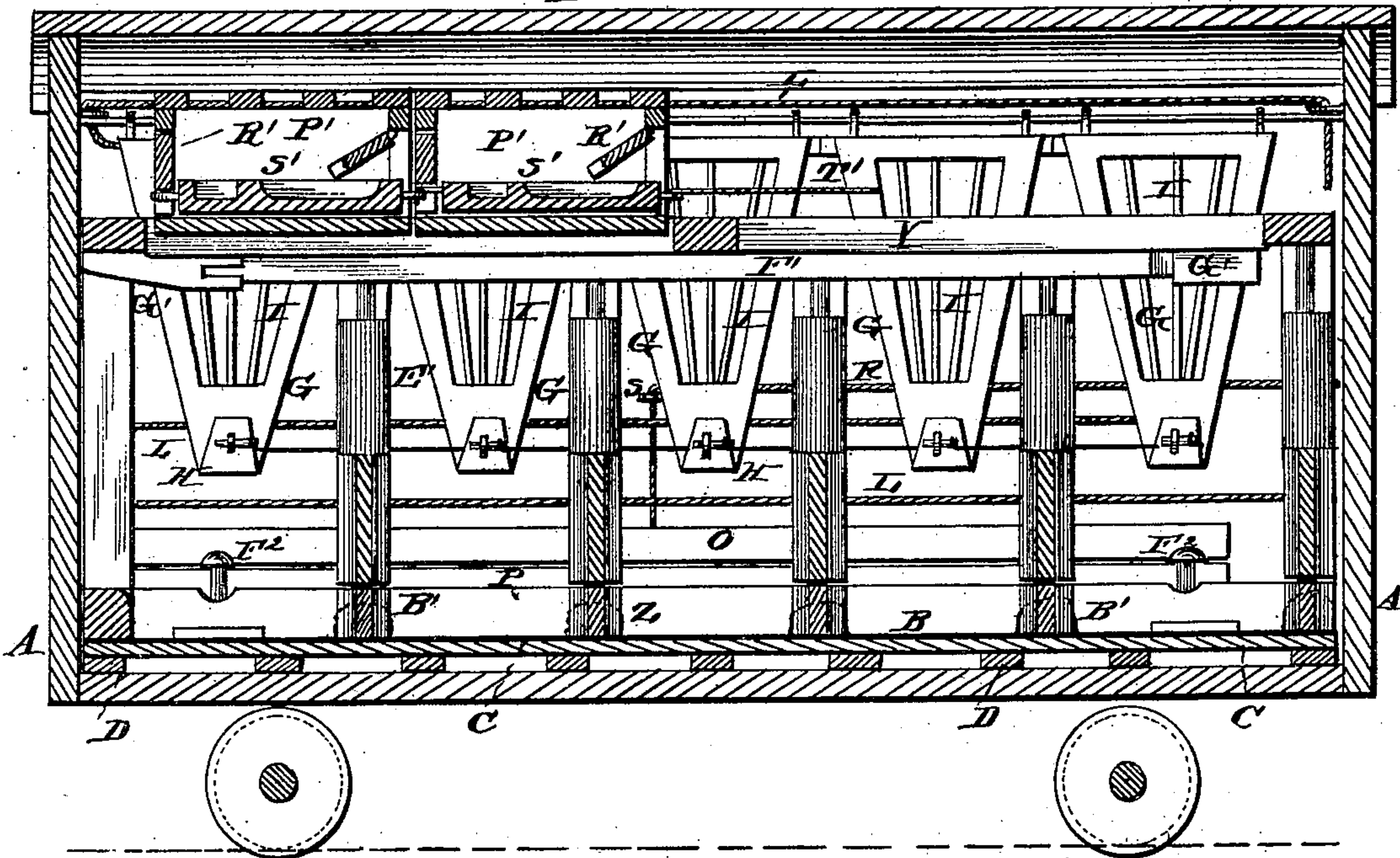
INVENTOR
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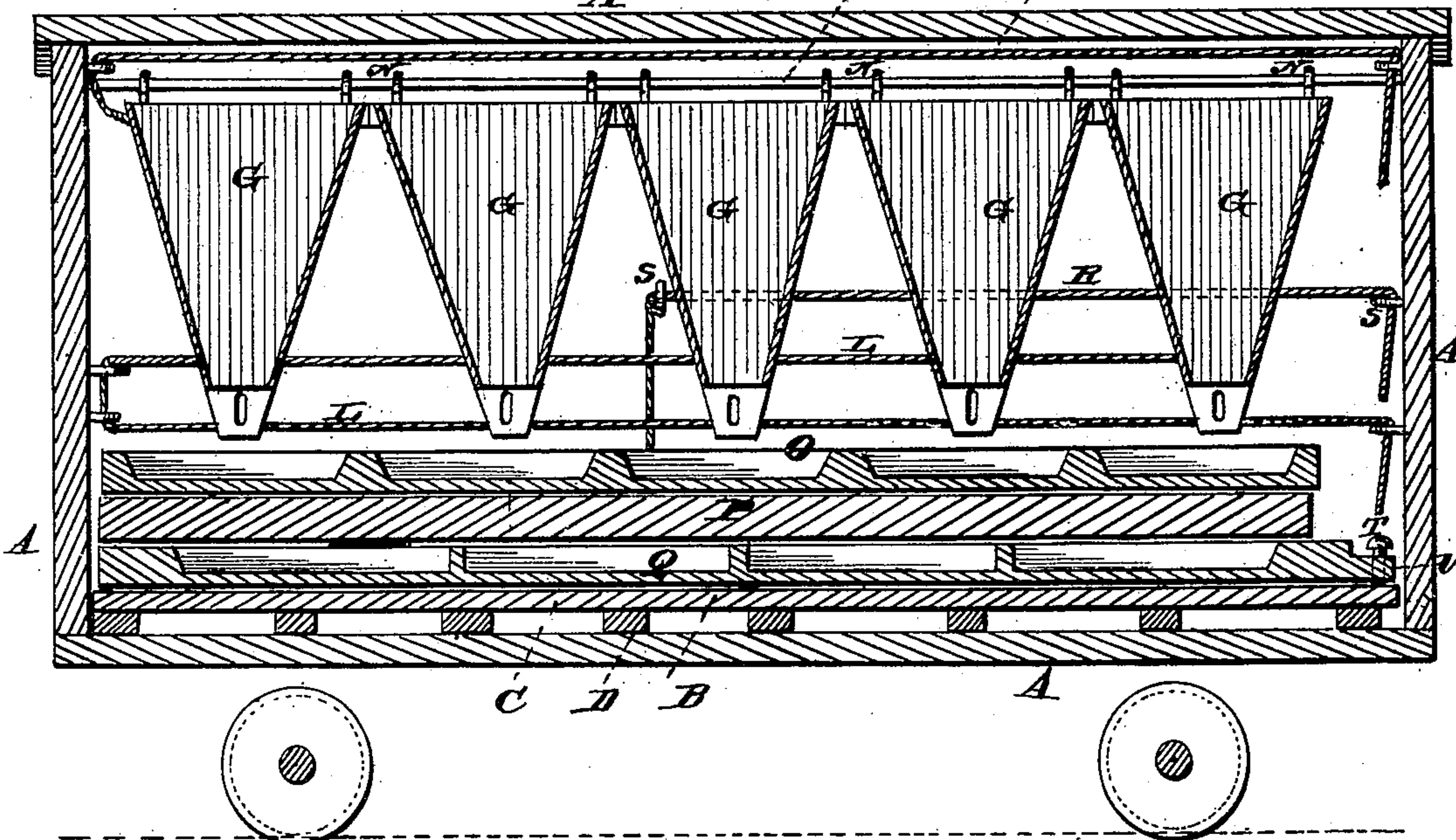
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A Fig. 2.



A Fig. 3, E



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(Model.)

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Fig. 4.

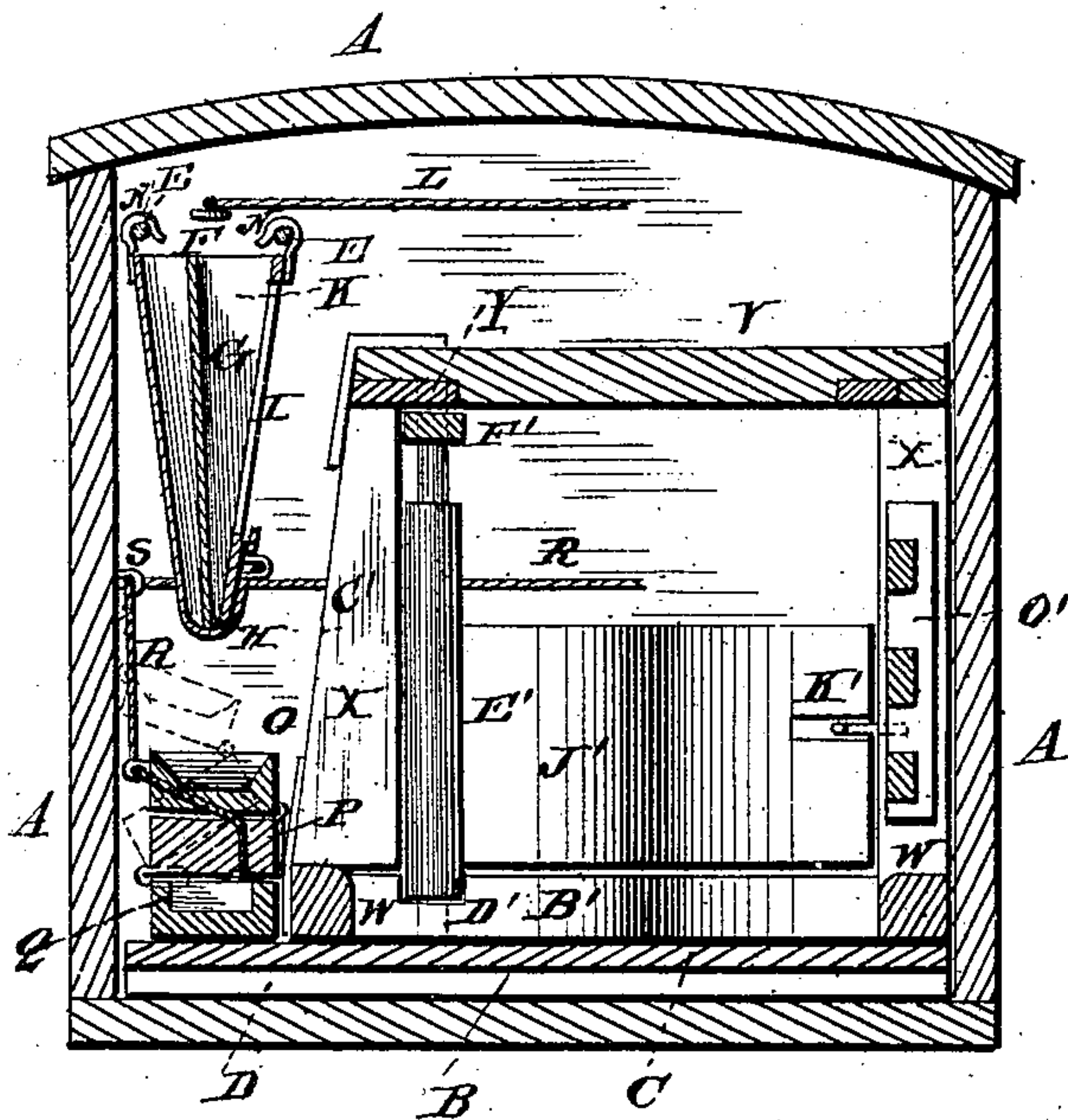


Fig. 6.

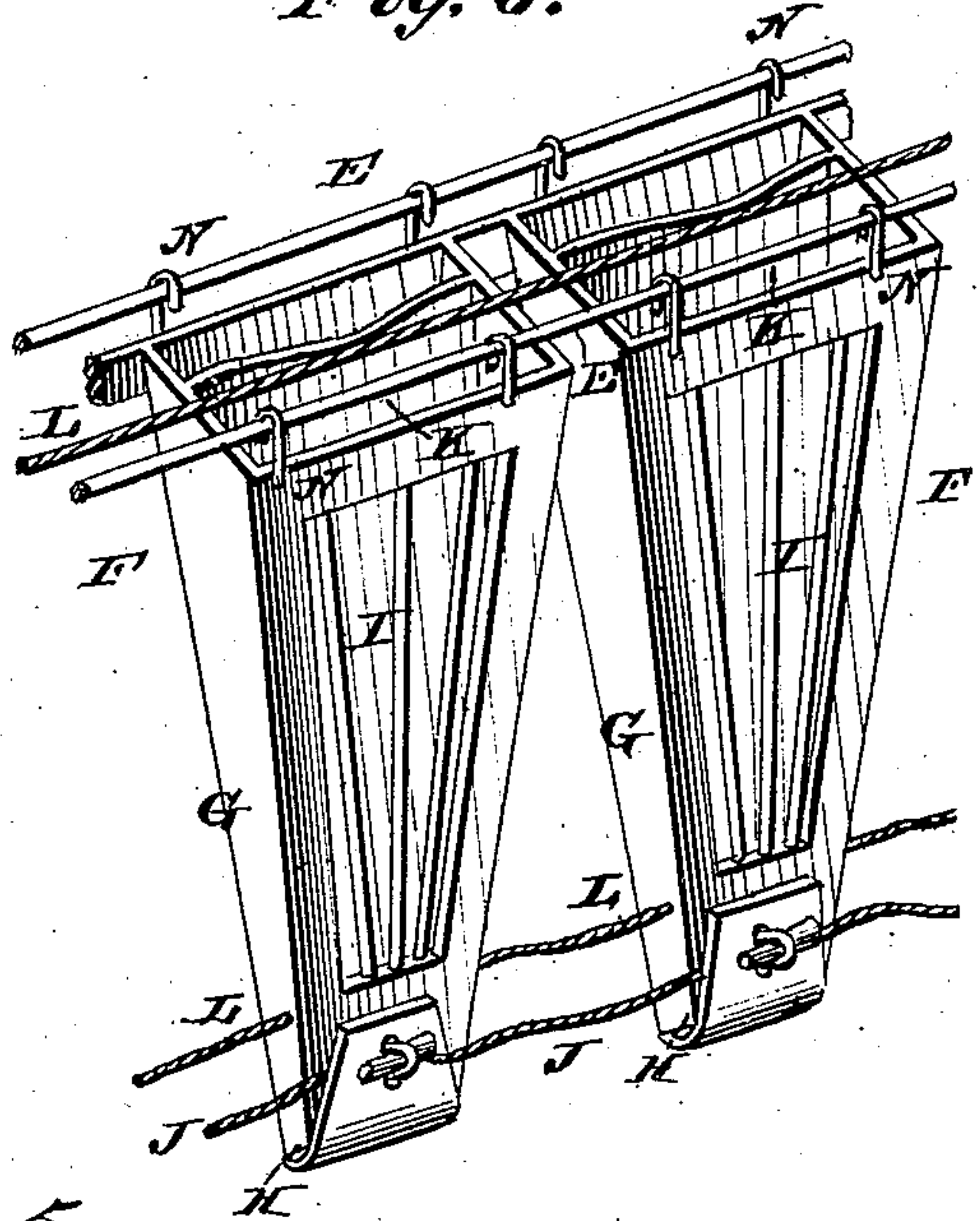
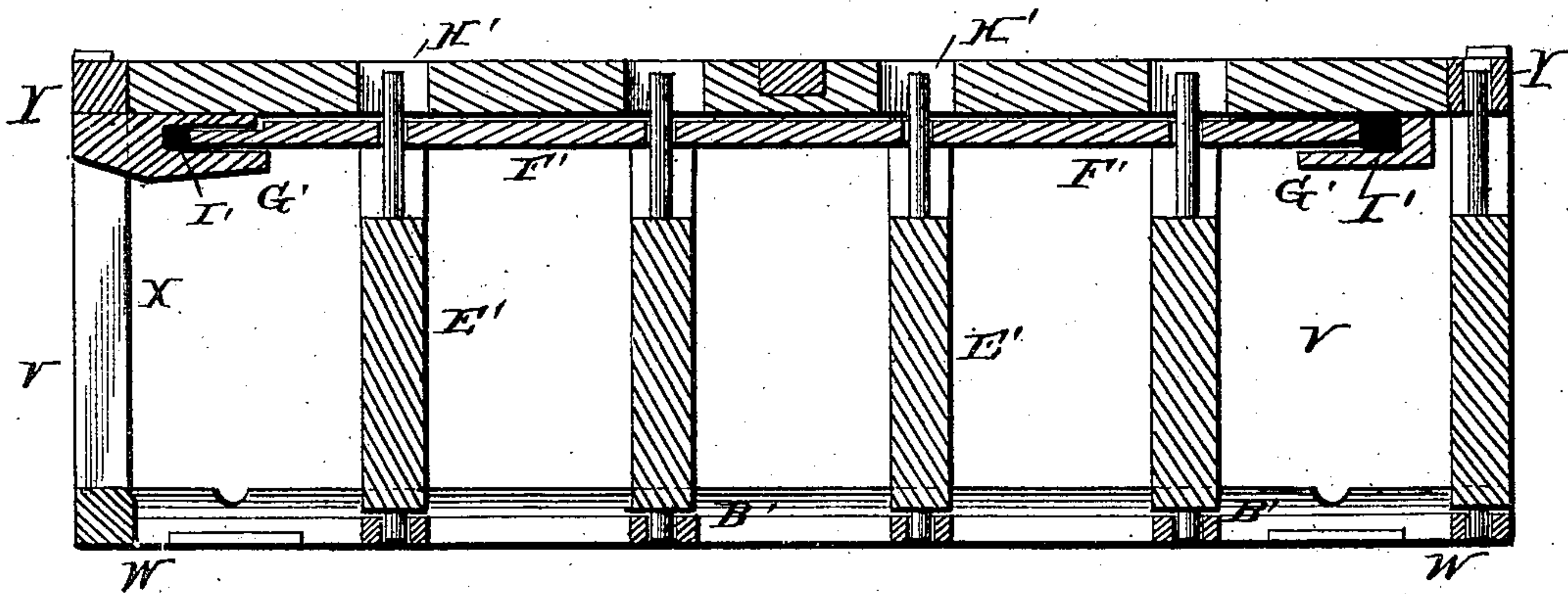


Fig. 5.



WITNESSES

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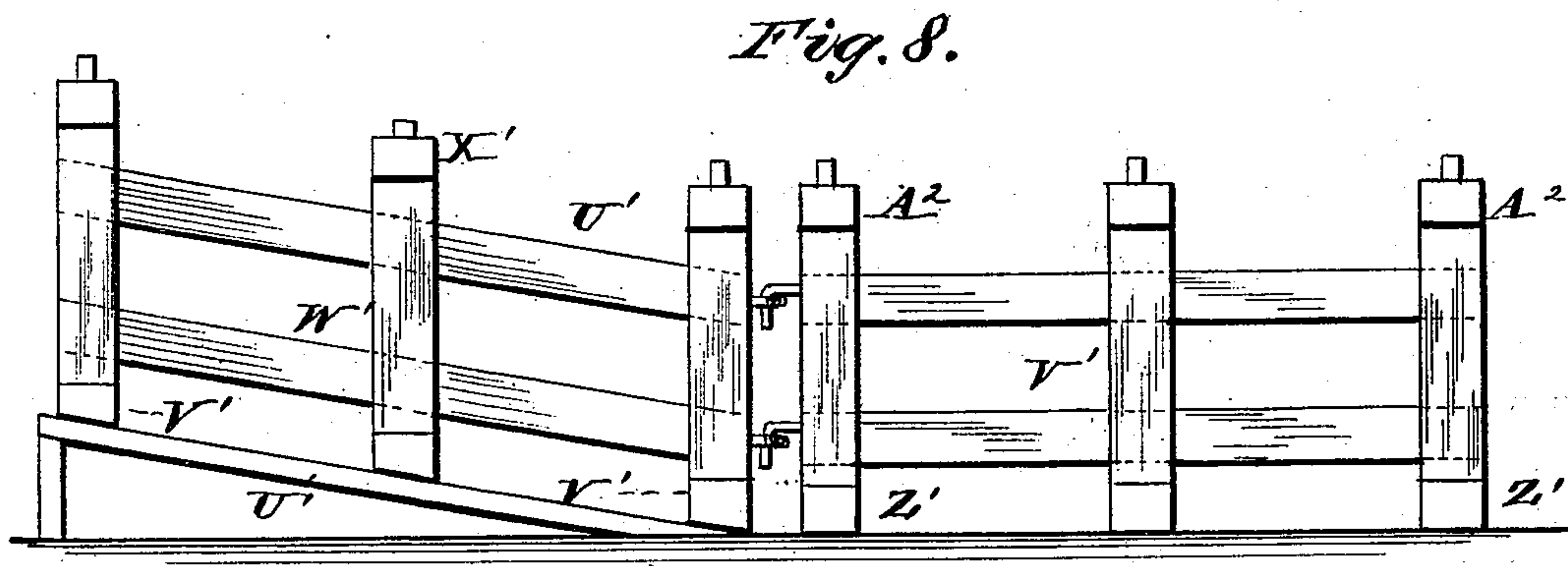
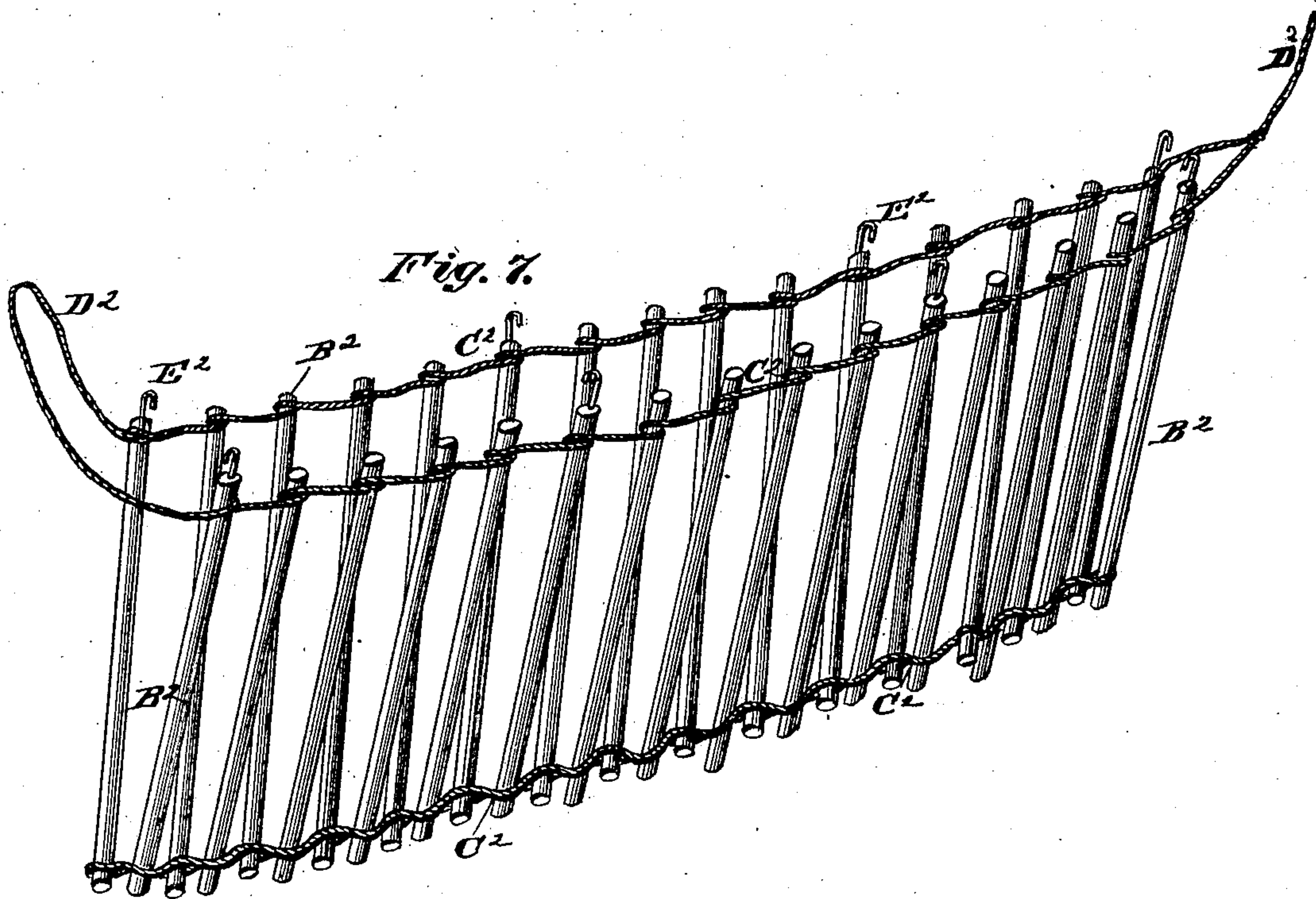
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UNITED STATES PATENT OFFICE.

LYMAN WOODRUFF, OF ELLENSBURG, OREGON.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 245,255, dated August 2, 1881.

Application filed April 28, 1881. (Model.)

To all whom it may concern:

Be it known that I, LYMAN WOODRUFF, of Ellensburg, in the county of Curry and State of Oregon, have invented certain new and useful Improvements in Stock-Cars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a plan view of my improved cattle-car, the roof being removed so as to show the construction. Fig. 2 is a longitudinal section centrally through the car. Fig. 3 is a longitudinal sectional view taken through the feed-rack. Fig. 4 is a vertical cross-section. Fig. 5 is a longitudinal sectional view through the sliding cap-plate and the gate-posts. Fig. 6 is a detail view of the feed-rack. Fig. 7 shows a modification of the same, and Fig. 8 is a view of the inclined way for loading the car set up in position for use.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to cars for the transportation of stock; and it consists in the construction and arrangement of certain parts, whereby an ordinary grain or freight car may be converted into a stock-car, and which said parts may be removed and set up on the deck of a vessel to form stalls for the shipment of stock by water, substantially as will be hereinafter more fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents an ordinary railroad-car, which is provided with a false floor, B, consisting of planks C, laid loosely upon cross-ties D and breaking joints, so as to require no fastenings. By this false floor, which may be readily removed and replaced, the floor of any ordinary freight-car which may be temporarily employed for transportation of stock is protected from filth.

A short distance under the roof of the car, near one side of the latter, two rods, E E, are arranged longitudinally to support the feed-rack F. The latter consists of a series of canvas bags, G, one for each stall, secured together at the top and tapering toward the bottom, where they terminate in spouts H.

To the front sides of the bags are secured slats I, connected together and to the bags by cords J, thus forming racks K, in which hay may be placed so as to be readily reached by the cattle. When grain is to be fed it is placed in the bags G, from which it drops through spouts H into the feed-trough arranged below. Ropes L, attached to the top of the bottom of one of the end bags, are passed through pulleys M and extend to the end of the car, so that the feed-bags, which are supported by hooks N upon the rods E, may be readily extended for use or drawn together at one end of the car.

The feed-trough O, which is arranged below the rack, extends through the entire length of the car and is provided with a compartment for each stall. The feed-trough is hinged by its front edge to the cover P of the water-tank Q, which is arranged below, and to which the said cover is hinged by its rear edge. A rope, R, suitably attached to trough O and cover P, passes through sheaves S to the end of the car, from whence it may be readily manipulated to raise the said trough and cover to the position shown in dotted lines in Fig. 4 when the stock is to be watered. A set-screw, T, passing through a bracket, U, at one end of the tank bears upon the floor, so that the tank may be adjusted to a level position when the car is upon a grade.

V is a frame, consisting of sills W, having uprights X, supporting the top plates or caps, Y. The longitudinal sills are provided with their under sides with rounded or semi-oval mortises or recesses Z, to receive the correspondingly-shaped brackets A' at the ends of a set of cross-bars, B', by which the frame which is built up on the temporary floor of the car is divided into stalls or compartments. The frame itself is so constructed as to be readily put up or taken down when required. The side facing the feed-rack is made slanting, as shown at C', to make room for the manipulation of the rack and trough. At the ends adjoining the feed-trough the cross-pieces B' are provided with mortises D' to receive the lower ends of the gate-posts E', for the lower ends of which bearings are provided in said cross-pieces, as shown. The upper ends of the said posts are journaled in a plate, F', arranged

to slide longitudinally in sockets or brackets G' under the top cap, Y, which latter is provided with longitudinal slots H' to receive the extreme upper ends of the gate-posts. Springs or elastic packing I' are placed in the sockets G' at the ends of plate F'.

The posts E' carry the gates or partitions J', which have latches K', by which the said gates may be locked to the uprights at the opposite side of the frame. One or more of the gates adjoining the car-door are made in two or more sections, M', so as to be capable of being folded and permit the end gates to swing open in loading or unloading the car. By the construction and arrangement of the gates, as described, they will give or sway when the cattle are thrown against them by the sudden jerking motion in starting or stopping, thus preventing the injury to the cattle which is frequently caused in this manner. The sides of the gates and of the cross-bars B' are sloped from the ends to center, as shown at N', so as to occupy less space and conform more nearly to the sides of the cattle.

The stall in front of the car-door is provided with a slat-gate, O', which also forms a convenient ladder for the attendant.

P' P' are poultry-coops, supported upon the top of frame V, and provided at the corners with sliding latches, to connect them in an exact line with each other. The sides of said coops are provided with swinging doors R', to admit the feed-troughs S', having compartments for grain and water, and which are connected by a cord, T', by which they may be simultaneously withdrawn from the coops through the outer door of the one at the end when it is required to fill them. By this arrangement of the coops space is economized and great convenience in handling poultry is attained.

U' is an inclined gangway leading to the door of the car, and provided with mortised slats V' for the reception of the lower ends of the detachable sides W', the upper ends of which are connected by braces X'. An approach to the said gangway is formed by panels Y', connected by ties Z' and braces A'. This device may be readily put up whenever required for loading and unloading the car.

In Fig. 7 of the drawings I have shown a modified construction of the folding feed-rack above described, which is to be used on ship-board, where two frames may be set up facing each other. Said rack is made of slats B², connected by ropes C², so as to form, when extended, a double manger, which may be suspended upon ropes D² reeved through eyes E² at the upper ends of the slats.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood. It is simple, durable, and convenient, and the frame constituting the device may readily be put up or taken down in a car or on the deck of the vessel. To facilitate the taking down the sill of the frame is provided at each corner with a set-screw, F², which may be adjusted so as to raise the entire frame, when the cross-bars, gates, and the temporary floor may be readily removed from under it.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with a railroad-car, of a temporary floor and a removable frame, having stalls for the accommodation of stock, substantially as set forth.

2. The herein-described water-tank, having hinged cover, in combination with the feed-trough hinged to said cover and mechanism for raising the said trough and cover, as set forth.

3. In a stock-car, the water-tank, provided at one end with a set-screw for adjusting the said tank to a level position, as set forth.

4. The combination, with the frame V, having rounded mortises Z, of the cross-bars B', having brackets A', the gates having the lower ends of their posts journaled in said cross-bars, and the set-screws F² for raising the frame, substantially as set forth.

5. The combination, with the frame V and cross-bars B', of the sliding plate F', springs I', and the gates J' L', the upper ends of the posts of which are journaled in the said sliding plate, as herein described, for the purpose set forth.

6. As an improvement in devices for the transportation of stock, the combination of the false floor, the folding feed-rack, the frame V, having cross-bars B', and the gates or partitions arranged to sway or move vertically, the upper ends of their posts being journaled in a longitudinally-sliding cushioned plate, all arranged and operating substantially as herein described, for the purpose shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

LYMAN WOODRUFF.

Witnesses:

WALTER SUTTON,
JOHN FITZHUGH.