2 Sheets—Sheet 1.

J. E. LIPPITT.

PORTABLE ICE-HOUSES.

No. 194,097. Patented Aug. 14, 1877.

Fig. 1.

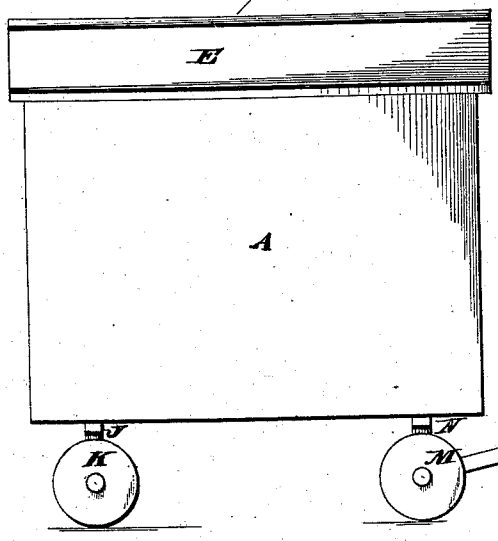


Fig. 3.

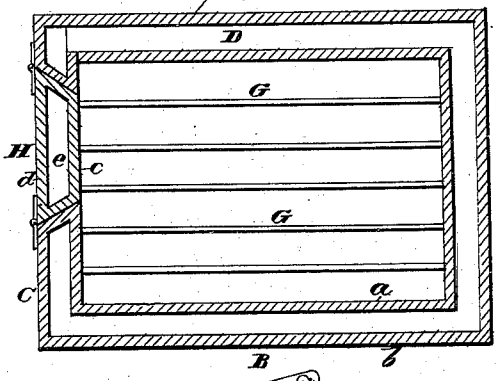
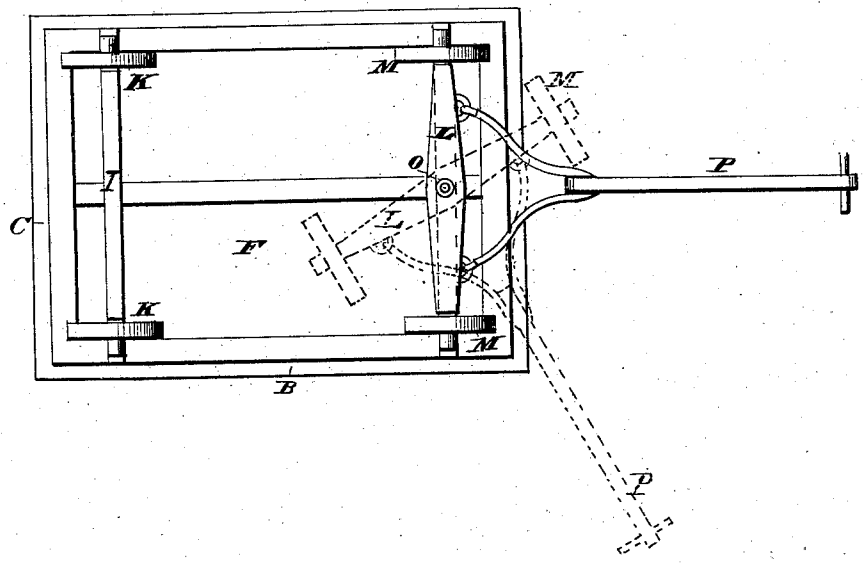


Fig. 2



WITNESSES.

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2 Sheets—Sheet 2.

J. E. LIPPITT.

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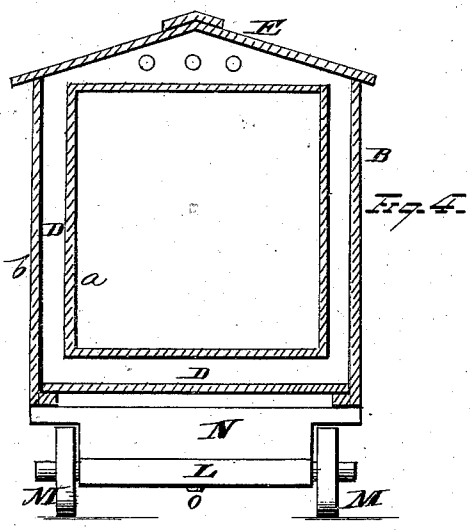


Fig. 4.

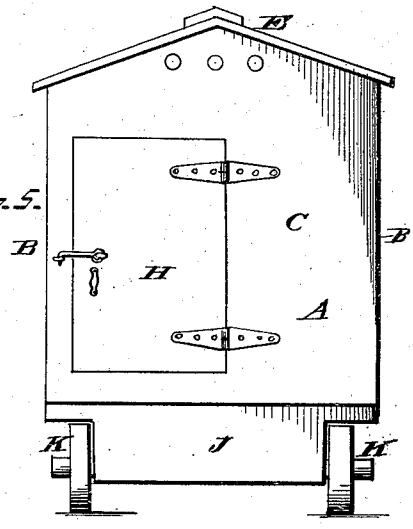


Fig. 5.

Fig. 6.

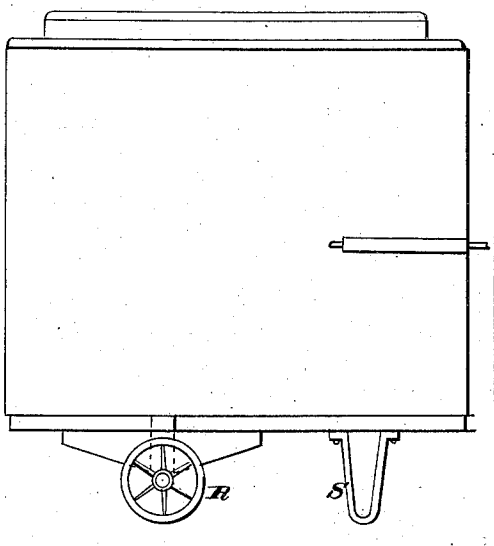
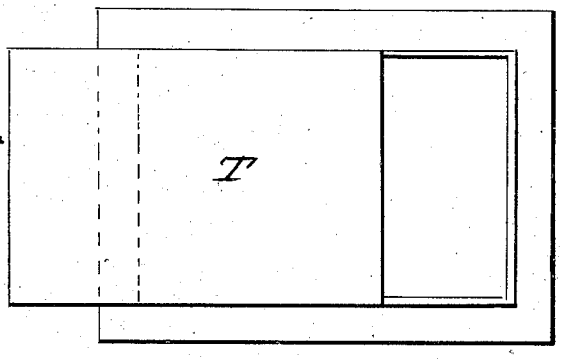


Fig. 7.



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UNITED STATES PATENT OFFICE.

JOHN E. LIPPITT, OF WILMINGTON, NORTH CAROLINA.

IMPROVEMENT IN PORTABLE ICE-HOUSES.

Specification forming part of Letters Patent No. **194,097**, dated August 14, 1877; application filed July 7, 1877.

To all whom it may concern:

Be it known that I, JOHN E. LIPPITT, of Wilmington, in the county of New Hanover and State of North Carolina, have invented certain new and useful Improvements in Ice-Houses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in cars for the transportation of ice.

Heretofore ice shipped to the South has been taken from the vessel or store-house and packed in barrels or boxes for shipment by rail or water to dealers residing in the interior country. Very serious waste attended the shipment of ice in the manner above set forth, owing to the open structure of the barrels or boxes, which allowed of the entrance of heat, and the consequent melting and waste of ice. Again, great waste and loss arose from the breakage incident to the transportation of several hundred weight of ice in an unpacked condition in ordinary barrels and boxes.

The object of my invention is to provide portable ice-houses of such construction that any desired quantity of ice may be readily stored and packed within the ice-house, and the latter adapted to be moved about on wheels or rollers, and transported on drays, steamers, or cars to the point of destination. The ice can then be sold direct from the portable ice house or car, thereby preventing waste and loss from shrinkage in weight, and when the car is emptied it is returned to the shipper, and another filled and returned.

My invention consists, first, in an ice-house mounted on wheels or rollers, and adapted for transportation by drays, railways, or steamers.

My invention further consists in several details of construction, as will more fully appear from the following description and claim.

In the accompanying drawings, Figure 1 is a side elevation of my improved ice-car. Fig. 2 is a bottom view of the same, showing the construction and arrangement of the trucks. Fig. 3 represents a horizontal section; Fig. 4, a vertical section, and Fig. 5 an end view, of my invention. Fig. 6 is a side elevation of a modified form of construction; Fig. 7, a top view of the same.

A designates the body of the car, which is constructed with its sides B and ends C formed with inner and outer walls *a b*, which together constitute an intervening dead-air space, D, about the interior of the car. E is the top or roof, and F is the floor, both of which are preferably constructed with inner and outer sheathings to form intervening dead-air spaces, to serve as protecting-walls, and prevent the entrance of the outside air to the interior of the car or ice-receptacle. G represents grate-bars, any number of which may be combined with the car. These grates are secured at their ends to the body of the car a few inches above the floor, thus constituting a space between the floor and grate-bars.

When the ice is to be packed in the car, the space below the grates is filled with sawdust, and then the large and heavy pieces of ice are drawn into the car upon the bars G, and readily moved to any portion of the car, and properly packed for transportation. The ice is thus sustained above the floor, and has an underlying packing of sawdust or other material, which serves to exclude the atmosphere, and also receive any drippings from the ice.

H is a door, and is formed of inner and outer walls *c d*, thus constituting a dead-air space, *e*, between the same. The door may be made with inclined edges, if desired, and the same covered with felt or other material, to insure a tight joint between the door and body of the car. I represents the rear axle, attached to a bolster, J, and K are the wheels, which are either rigidly or loosely secured to the axle, as may be desired. L is the forward axle, provided with wheels *m*. Axle L is pivoted at its center to the forward bolster N by means of a king-bolt, O, whereby the forward axle may be turned to any angle to direct the movement of the car. To the forward axle is secured a handle or tongue, P, for the purpose of drawing the car.

Fig. 6 represents a car adapted to hold small quantities of ice. In such case the car is supported on rear wheels R and forward standard S. Instead of employing a swinging door, as heretofore described, the top T of the car is constructed to form a sliding top, and allow

of the ice being packed and discharged through the top of the car. It is evident that the larger cars may likewise be provided with the sliding top, if so desired.

Portable ice cars or houses of the character above described are found to be of great value in transporting ice from the vessel or dock to the interior towns or cities. The ice is first packed snugly within the car in sawdust, and then the car may be drawn onto a dray, and from thence to a steamer or railway-car. The seller is furnished with a perfect ice-house, within which the ice is safely kept until disposed of, when the empty car is returned to be again packed and reshipped.

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

A portable ice-storing house, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of June, 1877.

JOHN E. LIPPITT.

Witnesses:
R. M. DIX,
WM. LARKINS.