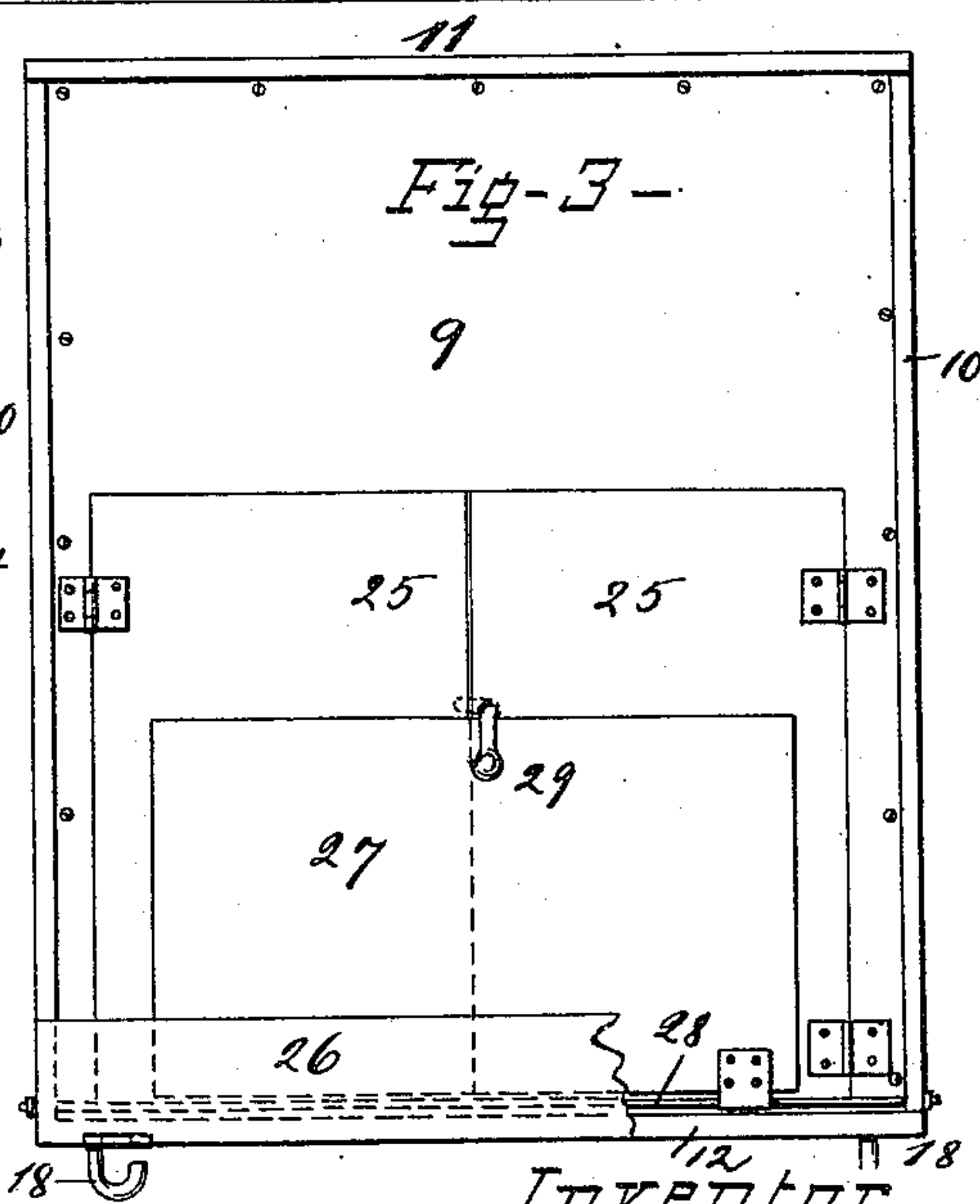
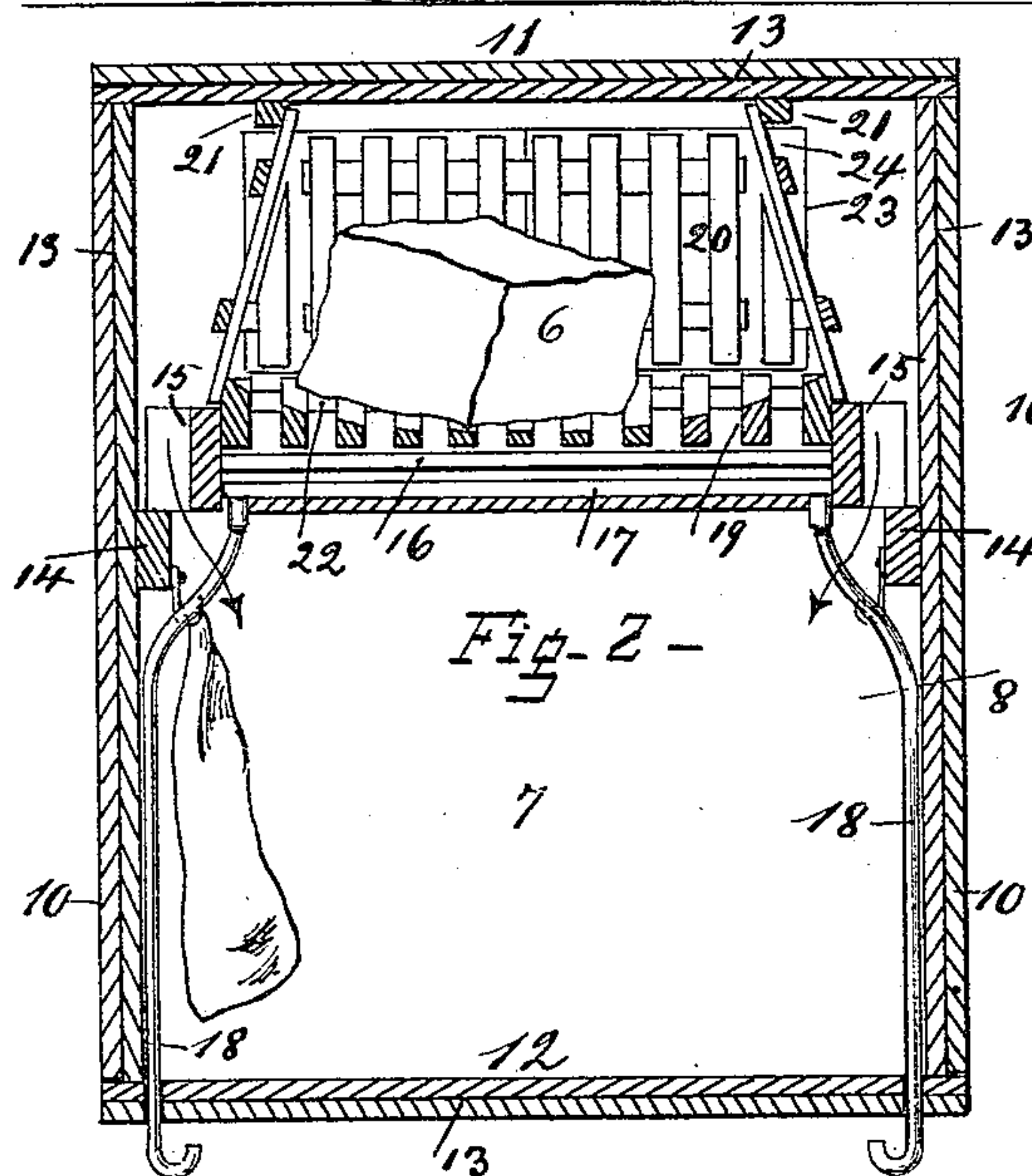
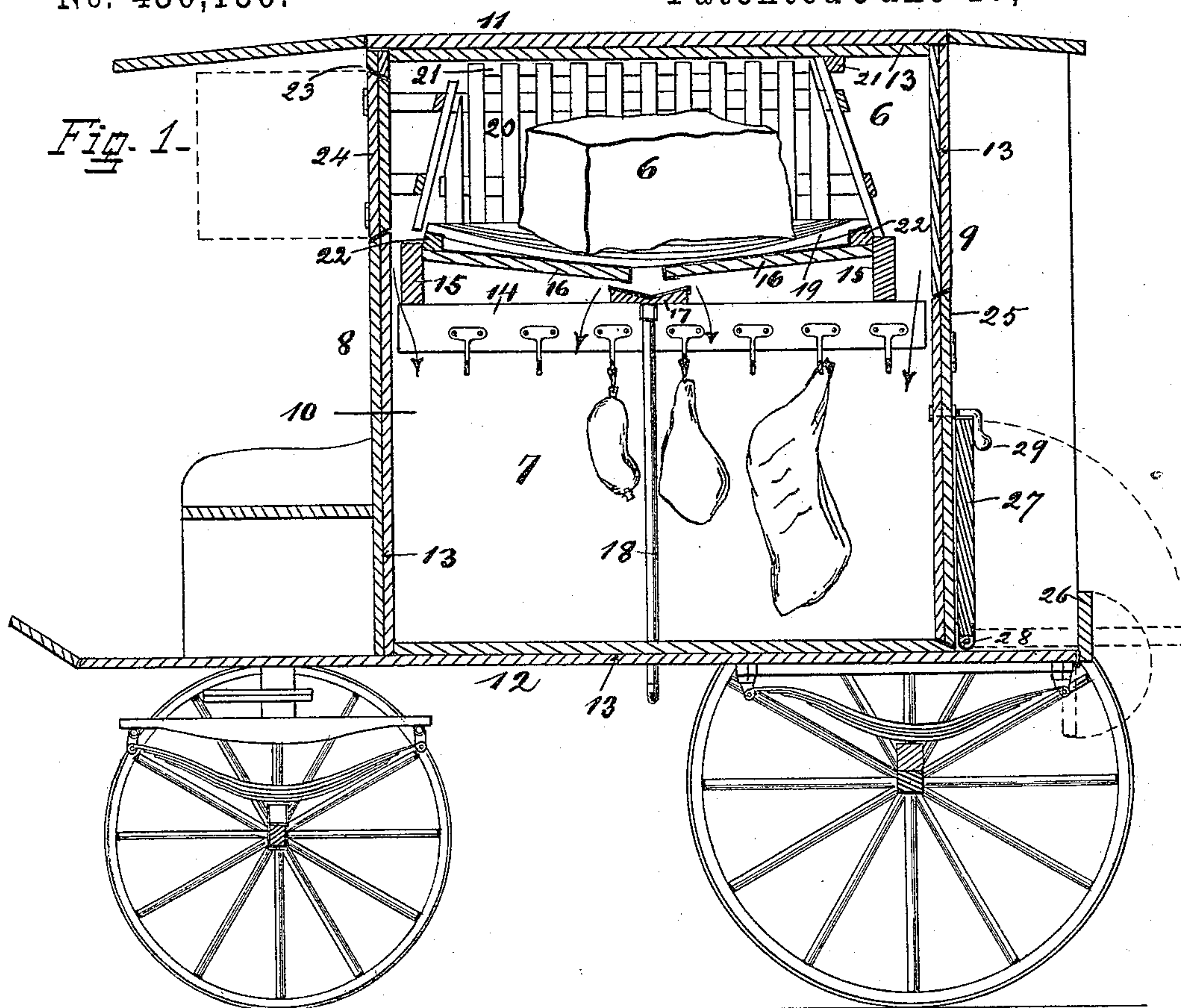


(No Model.)

C. G. SCHMIDT.
REFRIGERATOR WAGON.

No. 430,150.

Patented June 17, 1890.



Attest
Fred. D. Behrens
Rankin D. Jones

Inventor
Charles G. Schmidt
by Carl Spengel Atty.

UNITED STATES PATENT OFFICE.

CHARLES G. SCHMIDT, OF CINCINNATI, OHIO.

REFRIGERATOR-WAGON.

SPECIFICATION forming part of Letters Patent No. 430,150, dated June 17, 1890.

Application filed December 3, 1889. Serial No. 332,396. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. SCHMIDT, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Combined Wagon and Knockdown Refrigerators; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in delivery-wagons, and principally to such as are used for the transportation of meat and other articles which may be affected by the heat.

The object is to provide such vehicles with a refrigerator attachment in order to keep such perishable articles fresh during the hot season while in transit from the stores and warehouses to the consumers.

A further object is to have the refrigerator attachment easily removable at the beginning of the cold season when its services may be dispensed with, and it therefore becomes unnecessary to carry the additional weight of the now useless device. I also intend to provide a chopping-board suitable to be used to cut and handle the meat on, and means for its proper support and retention.

I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of the wagon with the refrigerator in position. Fig. 2 is a central vertical cross-section of the upper part of the wagon; and Fig. 3 is an end view of the wagon, taken in about the same position as shown in Fig. 2.

6 is the ice, and 7 the meat, chamber.

8 is the front, and 9 the rear, wall.

10 10 are the side walls.

11 is the top, and 12 the bottom.

So much of the two side walls, top, and bottom, as is between front and rear walls, and thereby forms part of the refrigerator, is double and lined with paper between, as shown at 13, in order to make these parts more impervious to the outside temperature and lessen its unfavorable influence on the ice.

Other means might be used to make these walls non-conductors for heat, but the described construction appears the most suitable one, as it is both light and cheap. The difference of these double thick portions of top, bottom, and side walls and their thinner parts outside of the refrigerator proper forms a suitable abutment for front and rear walls to rest against, and by securing these latter with screws at those points a very good joint is obtained.

14 14 are two rails secured to the side walls between front and rear wall. They may have the meat-hooks secured to them, and at the same time serve as a support for frame 15, having the pan 16 and drip-trough 17 below it. The pan slopes from the sides of frame 15 toward the center, where it is open to permit the melt-water to escape to drip-trough 17. From here it escapes through pipes 18 to the outside.

19 is the ice-grate, concave toward its center in order to keep the ice from bumping against the ice-cage 20. This latter confines the ice on the grate and prevents it from falling against the interior of the walls of the refrigerator and injuring same, a possibility which exists when the wagon is moving on steep grades. To attain this object more properly, the walls of the ice-cage lean inwardly with their upper ends, where they are secured to strips 21, fastened to the top. Their lower ends rest and are secured on frame 15. The concavity of the ice-grate is produced in one direction by bending the bars as shown in Fig. 1, and in the other direction by increasing their thickness as they approach the frame, as shown in Fig. 2. The bars are secured to end pieces 22, by which they are all united, and thus form the grate. In order to permit access to the interior of the ice-cage for purposes of supplying ice, an opening 23 has been provided in the front wall 8, to which the adjacent part of the ice-cage connects, so that the opening of door 24 also opens the latter.

Access to the provision-chamber is had through a door 25 in rear wall 9. Between this wall and the tail-gate 26 is a space which may be used to keep the various cutting-tools in.

27 is a cutting or chopping board hinged

to a rod 28, reaching clear across the wagon, and when down rests on the bottom of the former, as shown in dotted lines in Fig. 1. When in this position, part of it projects beyond the bottom and sides of the wagon, in order to permit a free movement in sawing meat, which cannot very well be done within the limited space inside of the wagon. The board is smaller than the width of the wagon and hinged loosely, so it may be pushed either way to its extreme limit, thereby producing a free and open space between it and the adjacent rear wheel for the vender to stand in and permitting him to saw either right or left handed, whatever side of the wagon he may elect to stand on, pushing the chopping-board away from him to the extreme other limit on the opposite side. The saw is thereby given a free and unobstructed movement over the board outside of the wagon. Rod 28 prevents the board from tipping while down and extending beyond its support formed by the bottom of the wagon.

29 is a gravity-catch, keeping this board up, and at the same time locking the rear doors. In order to reduce the possibility of spilling any melt-water from the drip-trough into the provision-chamber, I have provided two escape-pipes, as already explained, one of which will always guide the water off should the wagon sway from side to side or move on an uneven road.

The arrows in Figs. 1 and 2 indicate the direction in which the cold air moves.

When the use of the refrigerator becomes unnecessary in the late fall, it may be taken out without much trouble. The nut on one end of rod 28 is unscrewed, releasing the cutting-board 27, and the front and rear wall are unscrewed, exposing the interior and permitting easy removal of the ice-cage and of frame 15 with the ice-grate, pan 16, and trough 17. When the hot season approaches, the same parts are just as easily reattached in reverse order, as just described.

Having described my invention, I claim as new—

1. In combination with a refrigerator-wagon constructed substantially as shown and described and having its rear wall set in from the end, producing thereby a clear and open floor-space extending beyond said wall, a chopping-board longer than this floor-space, but

not as wide as the wagon-body, so as to extend outside of the body of the wagon when down during use, and preventing the latter from interfering with the necessary free movements in sawing meat, the inner part of this chopping-board resting on the extending floor-space, its tipping over being prevented by a suitable iron rod passing clear across the wagon, and to which this chopping-board is loosely hinged, all as fully shown and described.

2. In a convertible or knockdown refrigerator-wagon, the combination, with the permanent sides of the wagon, having supporting-rails 14 connected to them, the removable refrigerator outfit consisting of a rectangular frame 15, resting on said rails and inclosing a dripping-pan 16, an ice-grate on top of frame 15, having its upper surface concavely formed in order to confine the ice to its center, and an ice-cage rising from the outer edges of this grate, converging toward the top in order to prevent the ice from injuring the inside of the wagon, all as fully shown and described.

3. In combination with the permanent parts of a wagon, the detachable refrigerator attachment consisting of removable front and rear walls, an open drip-pan supported between the permanent parts of the wagon, a concave ice-grate resting thereon, and an ice-cage the sides of which converge toward their upper ends, one of them being connected to the ice-chamber door, and, opening with it, gives access to the interior of the ice-cage simultaneously with the opening of the ice-chamber, all as fully shown and explained.

4. In combination with a refrigerator-wagon, a chopping-board attached thereto, resting when in use on the floor of the wagon, being hinged immediately in front and below the provision-chamber doors in such a manner as not to interfere with their opening when down and in use, but when raised after use will lie across and against the now closed doors, and, being held in such position by a catch on them, will prevent their voluntary opening, all as fully shown and explained.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES G. SCHMIDT.

Witnesses:

CARL SPENGEL,
RANKIN D. JONES.