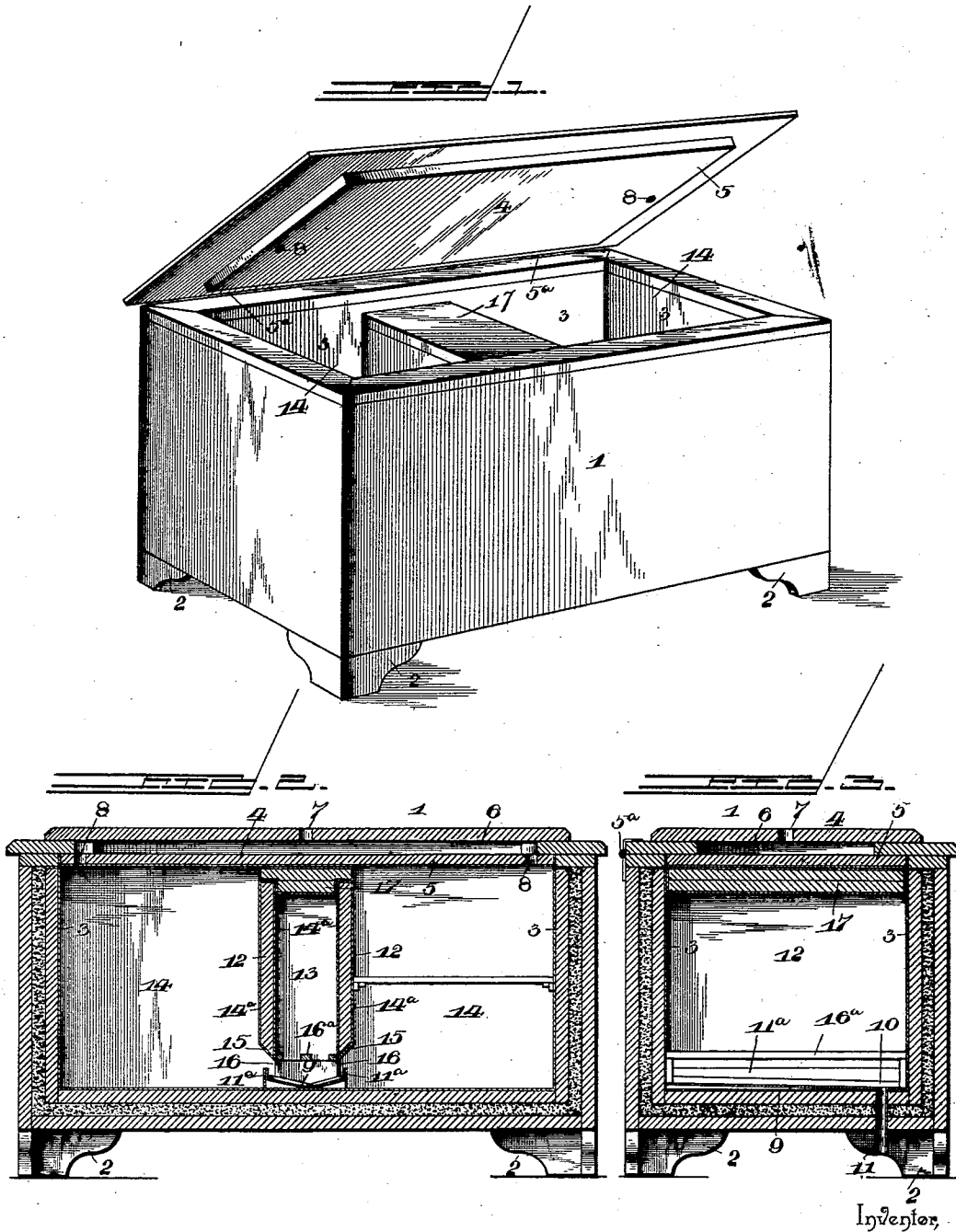


(No Model.)

L. O. READ.
COMBINED ICE CHEST AND GRATE.

No. 564,764.

Patented July 28, 1896.



Witnesses
W. H. Doyle.
S. C. H. H. H. H. H.

By his Attorneys,

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UNITED STATES PATENT OFFICE.

LAWSON O. READ, OF CHATTANOOGA, TENNESSEE.

COMBINED ICE CHEST AND CRATE.

SPECIFICATION forming part of Letters Patent No. 564,764, dated July 28, 1896.

Application filed November 15, 1895. Serial No. 569,106. (No model.)

To all whom it may concern:

Be it known that I, LAWSON O. READ, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and useful Combined Ice Chest and Crate, of which the following is a specification.

This invention relates to combined ice chests and crates, and it has for its object to provide a device of this character that shall not only act in the capacity of an ordinary household refrigerator for holding ice and refrigerating provisions, but which shall also be well adapted for use as a refrigerator-crate for the transportation of perishable provisions.

To this end the present invention contemplates a refrigerating apparatus of the character noted which shall have such a circulation of cold and warm air as to positively prevent the accumulation of odors and the consequent contamination of provisions.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the drawings, Figure 1 is a perspective view of a combined ice chest and crate constructed in accordance with this invention, the main lid being shown partly open. Fig. 2 is a central vertical longitudinal sectional view. Fig. 3 is a central vertical transverse sectional view.

Referring to the accompanying drawings, 1 represents a metal-lined rectangular box provided at its bottom corners with short supporting-feet 2, which rest on the floor to elevate the bottom of the box thereabove. The rectangular box 1 has fitted on its inner sides and bottom the interior metal lining-plates 3, which are usually employed in connection with most refrigerators, and the open top of the box 1 is designed to be covered and uncovered by the main hollow lid 4. The main hollow lid 4 is hinged at one edge, as at 5^a, to the top of the box 1 at one side edge thereof, and is provided on its under side with a rectangular panel 5, which snugly registers with in the open upper end of the box 1 to form a perfectly air-tight closure. The hollow lid 4 is provided with an interior air-circulating

space 6, with which air-circulating space communicates the warm-air-escape opening 7, formed centrally in the top of the lid 4, and the vent-holes 8, formed in the lower side of the lid and communicating, respectively, with the interior of the box near its opposite ends.

The bottom of the box 1 has fitted or formed therein a V-shaped drip-pan 9, which is arranged centrally between the ends of the box and extends transversely thereof from side to side. The said central transversely-arranged V-shaped drip-pan 9 is provided at a suitable point in its gutter or apex with a drip-opening 10, in which is fitted the upper end of a short drip-pipe 11, extended through the bottom of the box. At the parallel side edges of the centrally-arranged drip-pan 9 the metal forming the latter is bent up to form the short upwardly-disposed side pan-flanges 11^a, directly above and in vertical alinement with which flanges are arranged the transverse partition-walls 12.

The pair of transverse partition-walls 12 is arranged centrally within the box 1 to divide the interior thereof into a central ice-chamber 13 and provision-chambers 14 at both sides of the ice-chamber, and said partition-walls 12 are of a narrower width than the depth of the box, so as to terminate at their lower edges short of the pan-flanges 11^a and at their upper edges short of the top edges of the box 1.

The partition-walls 12 extend transversely from side to side of the box 1, and are provided with the metal facing-plates 14^a, and at their lower edges with the inclined faces 15, which overhang the upper edges of the flanges 11, and serve to deflect drip-water into the pan 10. By reason of the walls 12 terminating short of the flanges 11^a, side cold-air passages 16 are formed at opposite bottom sides of the central ice-chamber 13 for the passage of cold air from the said chamber into the provision-chambers between the walls 12 and the ends of the box 1.

The ice-chamber 13 has fitted therein an ice-supporting rack or shelf 16^a, which lies flush with the bottom edges of the walls 12, so that the drippings from the ice will readily run into the pan 9, while the cold air descending from the ice will readily escape out through the cold-air passages 16 into the chambers 14. At the top the ice-chamber 13

is inclosed by a removable flanged cover 17, which has an air-tight fit on the upper edges of the walls 12, to absolutely prevent the escape of warm air from the chambers 14 into the chamber 13. When in the position at the top of the chamber 13, the cover 17 lies below the plane of the top edges of the box 1, in order that the panel 5 of the lid 4 will register within the top of the box 1, and will practically serve to hold the cover 17 firmly in place, as will be readily understood.

The cold air which escapes through the passages 16 into the chambers 14 rises as it warms up, carrying all odors and dampness with it, and such warm foul air being excluded from the chamber 13 by the cover 17 passes into the vent-holes 8 of the lid 4, which communicate with the chambers 14, and finally escapes through the warm-air-escape opening 7 in the top of the said lid 4.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a combined ice chest and crate, the combination of a box provided with a pair of centrally-arranged transverse partition-walls dividing the interior thereof into a central ice-chamber and provision-chambers at both sides of said ice-chamber, said ice-chamber being provided at its opposite bottom sides

with cold-air passages communicating with the lower portions of said provision-chambers, a separate cover fitted within the box over the open upper end of the ice-chamber, and the main lid hinged to the box and provided with oppositely-located vent-holes communicating with the provision-chambers, substantially as set forth.

2. In a combined ice chest and crate, the combination of a box, a V-shaped drip-pan arranged transversely within the box on its bottom and provided at the side edges with short upwardly-disposed side pan-flanges, a drip-pipe fitted in the gutter or apex of said pan, narrow transverse partition-walls arranged above and in vertical alinement with said short flanges, said partition-walls dividing the interior of the box into a central ice-chamber, and provision-chambers at both sides of the ice-chamber and provided at their lower edges, which terminate short of said flanges, with inclined faces overhanging the flanges, a separate cover fitted within the box over the open upper end of the ice-chamber, and the main lid hinged to the box and provided with oppositely-located vent-holes communicating with said provision-chambers, substantially as set forth.

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

LAWSON O. READ.

Witnesses:

W. E. SLOAN,

W. G. PHILLIPS.