

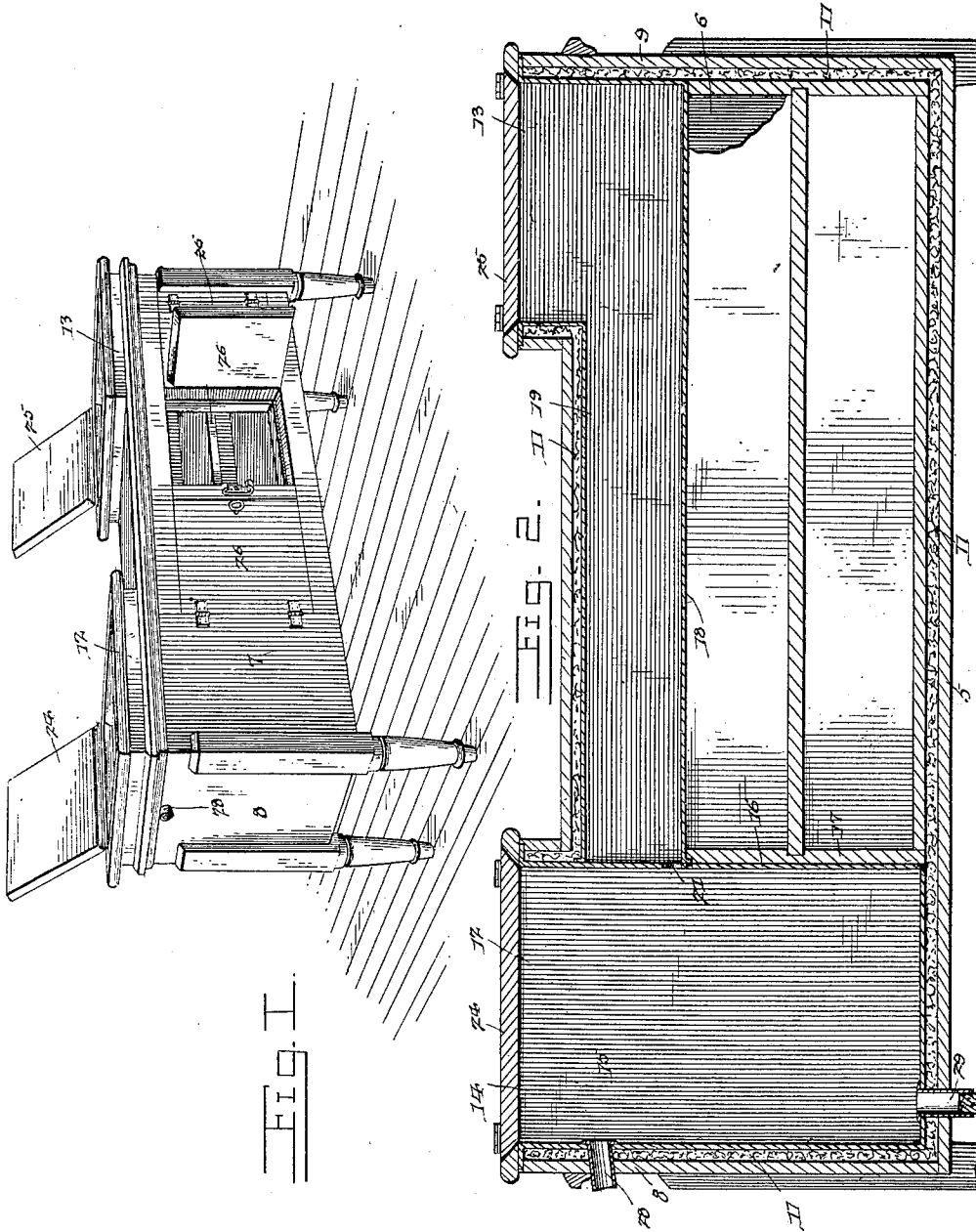
No. 673,881.

Patented May 14, 1901.

A. W. LYDA.
REFRIGERATOR.

(Application filed Nov. 8, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ARTHUR WARREN LYDA, OF BLAIRSVILLE, PENNSYLVANIA.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 673,881, dated May 14, 1901.

Application filed November 8, 1900. Serial No. 35,840. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR WARREN LYDA, a citizen of the United States, residing at Blairsville, in the county of Indiana and State of Pennsylvania, have invented a new and useful Refrigerator, of which the following is a specification.

This invention relates to refrigerators; and it has for its object to provide a device of this nature wherein the ice will be held in such portion of the casing as will secure a most efficient cooling of the contents of the refrigerator and wherein the melted ice will be caught and held to be used for cooling food products in cans by direct circulation of the water around the cans, this water in passing from the block of ice to the water-tank passing along or over the dry closet of the refrigerator to exercise a cooling effect thereon.

Further objects and advantages of the invention will be evident from the following description.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in both views, Figure 1 is a perspective view showing the complete refrigerator with its lids raised and a door open. Fig. 2 is a central longitudinal section of the refrigerator with all openings closed.

Referring now to the drawings, the present refrigerator comprises a casing including a bottom 5, a back 6, front 7, ends 8 and 9, and a top 10, this body portion of the refrigerator being formed of wood, between which and the lining of the refrigerator is a filling of charcoal 11 or other suitable insulating material.

The end portions of the body of the refrigerator are increased in height by the formation of cupolas 12 and 13, the cupola 12 forming an extension of a water-tank 14, having a metal lining 15, this tank being preferably rectangular in cross-section, as shown. Against the inner side 16 of the tank 14 is disposed a vertical partition 17, which extends upwardly for about two-thirds of the height of the main body portion of the refrigerator, and at the top of this partition and extending longitudinally of the body portion in the direction of the opposite end of the body is a metallic partition or shelf 18, which is the bottom of the ice-receptacle 19 of the refrigerator, the

metal of this bottom being extended upwardly to form the sides of the ice-receptacle. One end of the ice-receptacle is formed by the inner side wall of the water-tank, through which latter is formed a drain-opening 21 to permit of drainage of water from the ice-receptacle to supply the tank, and the second cupola 13 forms an upward continuation at one end of this receptacle.

The space below the bottom of the ice-receptacle may be provided with any number and arrangement of shelves desired, it being understood that this portion of the refrigerator is designed to hold food products of a solid nature or liquids in receptacles in the usual manner.

The cupolas 12 and 13 have hinged lids 24 and 25, while in the front of the body portion of the refrigerator are formed doorways having closures 26, as shown.

In practice the ice is placed in the ice compartment or receptacle through the cupola 13, the bottom of this receptacle being slanted sufficiently to insure proper drainage of the melted ice in the direction of the opposite end of the receptacle, from which it passes to the water-tank through the opening in the wall thereof. This water in its passage through the ice-receptacle and over the bottom thereof has a cooling effect upon the air in the compartment therebelow, but runs into the tank at a low temperature, where it collects and has a cooling effect upon the cans of milk or other foods that may be placed therein. An overflow 28 is provided for the water-tank, while a drain 29 is provided at the bottom to permit of drawing off of the contents of the tank when desired. The water in passing over the bottom of the ice-receptacle of course cools the warm air in the compartment below, which air of course rises into contact with said bottom and when cooled descends and permits the warm air at the bottom to rise and be cooled.

It will of course be understood that in practice any suitable linings may be used and that modifications in structure and proportions, as well as in materials, may be made without departing from the spirit of the invention.

It will also be understood that, if desired, cold water may be run through the ice-com-

partment and thence to the tank, the water being drawn from a spring or other suitable source, when ice is not available.

What is claimed is—

- 5 1. A refrigerator comprising a body portion having a tank at one end extending throughout the height of the refrigerator, a partition dividing the body portion at the side of the tank into an upper ice-compart-
10 ment and a lower dry compartment the ends of which lie against the tank, an ice-feeding opening at the end of the ice-compartment remote from the tank, and a communicating opening between the tank and the adjacent
15 end of the ice-compartment, said tank having an overflow above the dry compartment.
2. A refrigerator comprising a body portion having cupolas at its ends, a water-tank at one end of the body extending throughout
20 the height of the refrigerator and with which the cupola at that end communicates, a metallic partition dividing the body at the side of the tank into an upper ice-compartment and a lower dry compartment the ends of
25 which lie against the water-tank, the second cupola forming an upward continuation of one end of the ice-compartment for supplying ice thereto, removable closures for the upper ends of the cupolas, and an overflow

for the tank above the bottom of the ice-com- 30
partment, said tank having communication with the ice-receptacle through an opening in the wall of the tank.

3. A refrigerator comprising a body portion having cupolas at its ends, a water-tank 35
at one end of the body and with which the cupola at that end communicates said tank extending throughout the height of the body, a metallic partition dividing the body at the side of the tank into an upper ice-com- 40
partment and a lower dry compartment the ends of which lie against the side of the tank, the second cupola forming an upward extension of the ice-compartment at one end for supplying ice thereto, removable closures for 45
the cupolas, and an overflow for the tank at a point above the level of the bottom of the ice-compartment, said compartment having communication with the tank through a drain-
opening. 50

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

ARTHUR WARREN LYDA.

Witnesses:

COULTER WIGGINS,
ELSA B. WIGGINS.