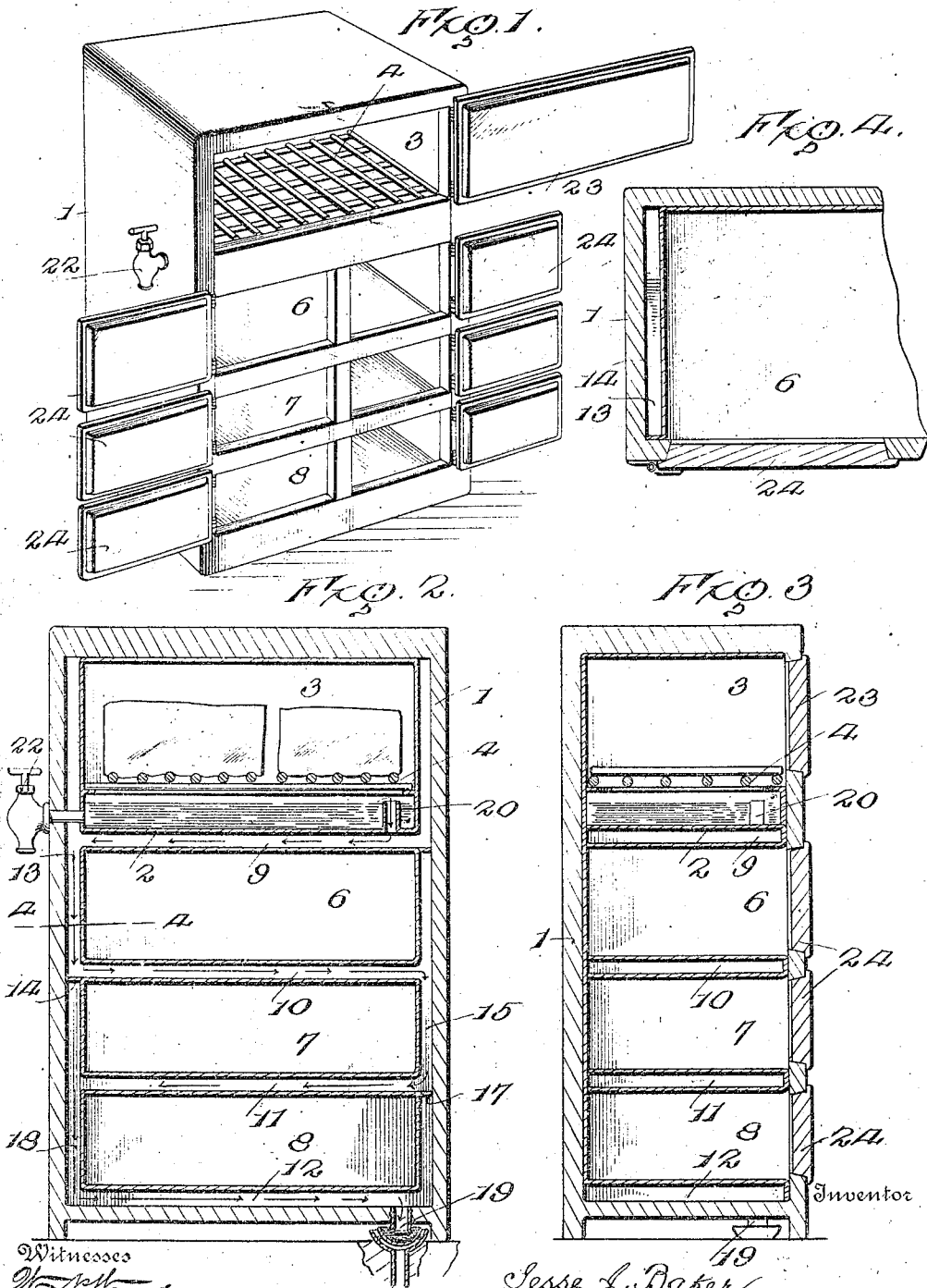


J. J. BAKER.
REFRIGERATOR.
APPLICATION FILED MAY 9, 1910.

981,967.

Patented Jan. 17, 1911.



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UNITED STATES PATENT OFFICE.

JESSE J. BAKER, OF GROVETON, TEXAS.

REFRIGERATOR.

981,967.

Specification of Letters Patent.

Patented Jan. 17, 1911.

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To all whom it may concern:

Be it known that I, JESSE J. BAKER, a citizen of the United States, residing at Groveton, in the county of Trinity and State of Texas, have invented certain new and useful Improvements in Refrigerators; 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 appertains to make and use the same.

This invention relates to improvements in refrigerators.

The prime object of the invention is to provide a structure in which the refrigerating chambers are cooled by the water from the melting ice in its exit from the refrigerator.

A further object of the invention is to construct the ice receiving chamber so as to form a water receptacle above the refrigerating chambers to cool the topmost chambers, and arrange an over-flow pipe to carry the water from the receptacle, the water passing around the various refrigerating chambers and thereby cooling the same.

The invention also relates to the specific details and construction and arrangement of parts to be hereinafter described, and particularly pointed out in the claim.

In the drawings: Figure 1 is a perspective view of the improved refrigerator. Fig. 2 is a transverse section of the same. Fig. 3 is a central vertical section. Fig. 4 is a detail horizontal section, taken through one of the refrigerating chambers.

The same numerals refer to like parts in all the figures.

1 represents a casing, of the type usually employed in refrigerators, and is divided by a horizontal partition, 2, to form with the walls of the casing an ice chamber 3. Just above the bottom of the ice chamber 3 is a grating 4, to support the ice, and the space under the same forms a receptacle for the water when the ice melts.

Below the partition 2, are refrigerating chambers 6, 7, and 8, each being spaced from the other, and the upper chamber being spaced from the partition 2, and the bottom chamber being spaced from the bottom of the casing to form ducts 9, 10, 11, and 12. The duct 9 is connected to the duct 10, by a vertical duct 13, formed between the refrigerating chamber 6, and the side wall of the casing. A baffle plate 14, extends

from the top of the chamber 7, to the side wall of the casing to direct the water to the duct 10. The opposite end of the duct 10 communicates by means of a short vertical duct 15 with the duct 11. A baffle plate 17 extends from the top of one end of the refrigerating chamber 8, to direct the water to the duct 11. The duct 11, communicates with the duct 12 by means of a short vertical duct 18, and in the bottom of the latter is a pipe 19, provided with a cap to form a water seal.

An overflow pipe 20, communicates with the duct 9, and extends up in the water receptacle below the grating in the ice chamber, so that the water will flow by gravity through the various ducts.

A draw-off cock 22, communicates with the water receptacle, to draw the water therefrom when the refrigerator is not in use.

The ice chamber is provided with a door 23, and the refrigerating chambers are closed by doors 24.

In the practical operation of the invention, ice is placed on the grating in the ice chamber, and as it melts the water will fall into the chamber below, and will act with the ice as a cooling agent, the cool air passing from the chamber through the overflow pipe to the ducts, serves to cool the walls of the refrigerating chambers. Then as the water receptacle becomes full, the cool water flows through the overflow pipe and around the various ducts to the exit pipe below. As the water flows through the ducts, it will, together with the cool air from the ice chamber, cool the walls of the refrigerating chambers. The water will be carried off, but the seal at the exit pipe will preclude the escape of the air, so that one will serve materially to prolong the low temperature of the other in the ducts.

The invention is extremely simple in structure, and durable. The fact that the escaping air and water are in continuous contact with one or the other of the refrigerating chambers enables me to economically cool the various chambers.

What I claim is:

In a refrigerator, the combination of a casing, a partition near its upper end forming a water receptacle, a grating for supporting ice above the water receptacle, a draw-off cock communicating with the water receptacle, a series of refrigerating

chambers below the partition arranged with a cooling space above, below and at their ends, a tube extending through the partition near one end of the water receptacle, to permit the water from the melting ice to escape after rising above its end and flow through said cooling space, a baffle plate at the upper end of the first chamber substantially beneath said tube for directing the water over the top of the chamber, baffle plates arranged at the alternating upper ends of the

other chambers, an exit pipe communicating with the lowermost cooling space, and means for permitting the water to flow from the exit pipe and prevent the entrance of air. 15

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

JESSE J. BAKER.

Witnesses:

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