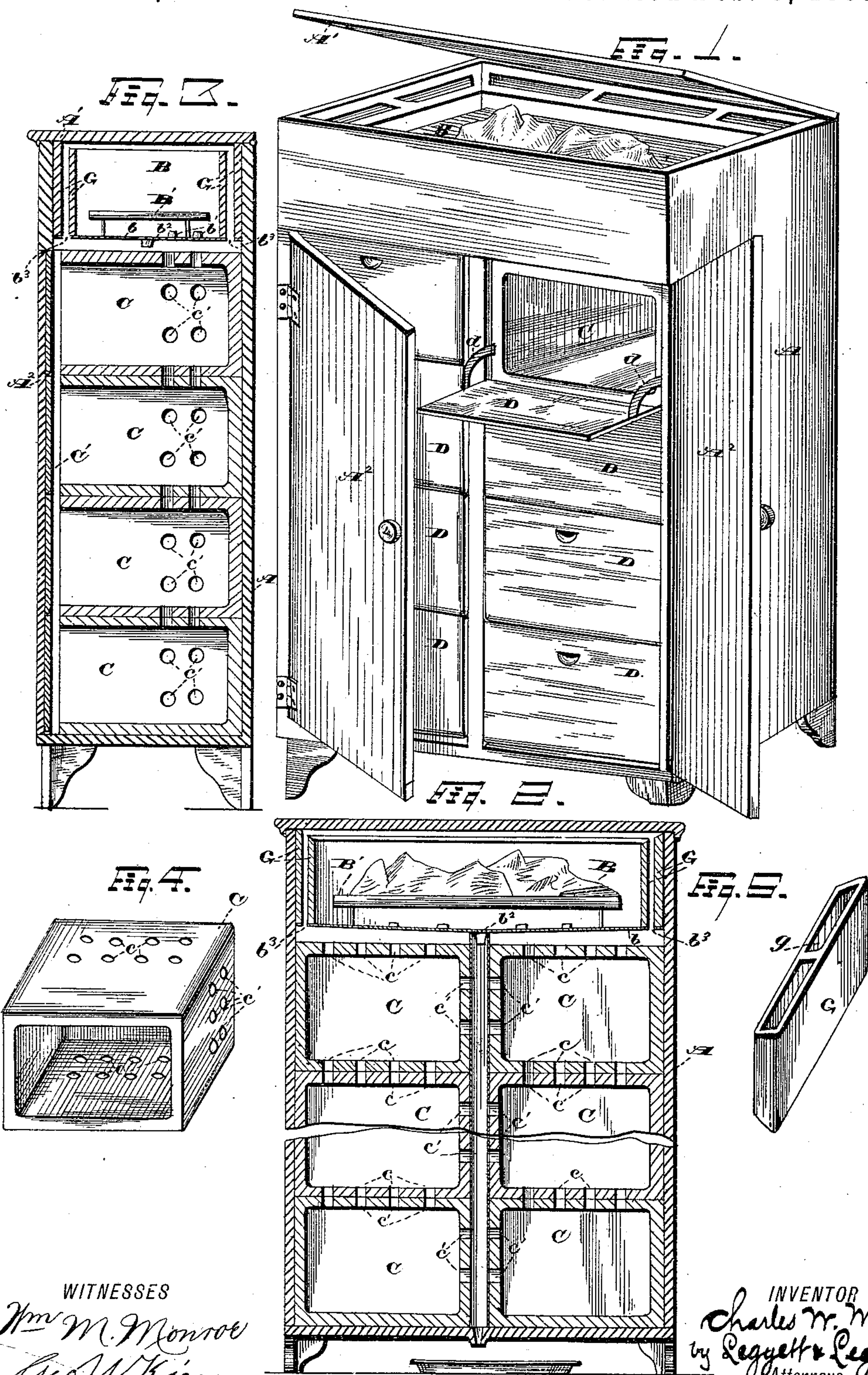


(No Model.)

C. W. MONROE.
REFRIGERATOR.

No. 336,057.

Patented Feb. 9, 1886.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES W. MONROE, OF BAY CITY, MICHIGAN.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 336,057, dated February 9, 1886.

Application filed July 31, 1885. Serial No. 173,144. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. MONROE, of Bay City, in the county of Bay and State of Michigan, 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 pertains to make and use the same.

My invention relates to improvements in refrigerators in which a lining and shelves of glazed pottery material are employed, to the end that such glazed pottery material does not readily absorb odors, and is therefore easily kept clean and sweet. Hollow rectangular open-ended receptacles of glazed pottery material are piled the one above the other, with suitable openings connecting the different adjacent cells the one with the other, and with the ice-box, and each cell provided with one or more openings leading into an air-duct, that in turn leads to the ice-box, to the end that a free circulation of air is had, the cooler air from the ice-box descending through the cells and discharging from the air-ducts on top of the ice.

My invention further relates to the details of construction, in which doors for closing the respective cells are hinged at the bottom of the respective doors, which latter opening outward form shelves, to receive articles that are being placed in or removed from the cells.

In the accompanying drawings, Figure 1 is a view in perspective of my improved refrigerator. Fig. 2 is a front elevation in section. Fig. 3 is an elevation in transverse section. Fig. 4 is a view in perspective of one of the pottery cells or receptacles. Fig. 5 is a view in perspective of one of the hollow pottery linings for the ice-box.

A represents an outside wooden casing that may be of any desired form or size, and is provided with a cover, A', giving access to the ice-box B, and preferably with doors A², for access to the body of the refrigerator. Inside the casing A are piled one or more tiers, according to the size of the refrigerator, of open-ended rectangular glazed-pottery structures. These structures are provided with one or more holes, c, on top and bottom, arranged so that the holes register when the

cells are in position, except that the lower cell has no openings on the bottom side.

One or more openings, c', on the side next the air-duct E, registers with holes c in the walls of the duct. The walls of the duct E are preferably of galvanized sheet-iron. The duct leads from the ice-box to the bottom of the refrigerator, and is arranged between the tiers of cells, as shown, in case there are more than one tier. This duct may form a conduit for the water from the ice box, in which case it should have a drip-pipe, e', at the bottom; or, if preferred, a tube may lead down through the duct to discharge the water. In front of each cell or structure C is a door, D, that at the bottom is pivoted to the casing. Each door D is provided with curved arms d, the hook ends d' of which engage the casing when the door is in a horizontal position, and support the doors in position, forming a shelf, convenient in placing articles in or removing them from the cells or compartments. These doors are not intended to close tight against the cells. On the contrary, a passage-way, C', is left between the doors and cells. Outside of the door, as D, are the doors A² aforesaid.

A short distance above the upper tier of cells is the diaphragm b, that is preferably of galvanized metal, and forms the bottom of the ice-box, and consequently catches the drip from the ice, the latter being supported on a suitable shelf, B', or on slats, if preferred. The plate b has suitable openings, b', for the passage of air, and the openings have tubes extending upward a short distance—say, half an inch, more or less—to prevent the water from entering these air-spaces. An opening, b², leading to the duct E, is for the escape of water, and the plate b should be slightly dish-ing, so that the water will gravitate to the discharge orifice or tube, as the case may be.

In case slats are used for supporting the ice, the air-tubes b' should be arranged under the center of the respective slats, so that water will not drip into these openings.

G are hollow glazed tiles that form the side lining of the ice-box, and are arranged with the chamber thereof opening top and bottom. The chambers g in these lining-tubes connect with the openings b³ of the plate b, by means of which a free circulation of air

is had through the passage-way C', in front of the cells, up through the tubes G, and discharging above the ice. The bottom of each structure C forms a shelf, on which to place articles in the refrigerator. The glazed pottery material of which these cells are made is impervious to moisture, and does not absorb odors.

The cells may at any time be removed and cleansed and scalded.

The glazed pottery of which the cells or structures C and the lining-tiles G are made is cheap and durable, and with the parts arranged in the manner described makes a refrigerator that is desirable in every respect.

What I claim is—

1. In a refrigerator, the combination, with suitable outside casing, of the cells or receptacles C, of glazed pottery, arranged substantially as described.

2. In a refrigerator, the combination, with a series of rectangular vessels of glazed pottery arranged in tiers, with the open ends presenting outward, of doors for each cell, said doors being pivoted at the bottom, and provided with curved arms arranged to engage the casing to hold the doors in a horizontal position, substantially as described.

3. In a refrigerator, the combination, with a series of cells of glazed pottery arranged substantially as indicated, forming the body of the refrigerator, of an ice box above, said

ice-box having a lining of hollow tile, the chambers in the tiles being in open relation with the passage-ways that connect with the cells, substantially as set forth.

4. In a refrigerator, the combination, with the cells C, of glazed pottery, arranged substantially as indicated, and openings connecting the adjacent cells, of a vertical air-duct, E, and suitable openings connecting the duct with each cell, substantially as set forth.

5. In a refrigerator, the combination, with the cells C, arranged substantially as indicated, of the ice-box B, provided with the hollow-tile lining G, air-ducts in open relation with the chambers of said lining-tile, and leading from the bottom of the refrigerator to the upper portion of the ice-box, substantially as set forth.

6. A refrigerator consisting, essentially, of a casing, an ice-box lined with hollow tiles, cells arranged in tiers through the body of the refrigerator, said cells consisting of rectangular vessels of glazed pottery, the parts being arranged substantially as indicated.

In testimony whereof I sign this specification, in the presence of two witnesses, this 22d day of July, 1885.

CHARLES W. MONROE.

Witnesses:

CHAS. H. DORER,
ALBERT E. LYNCH.