

E. ZÄHRINGER.
COMBINED REFRIGERATOR, BOTTLE-COOLER, AND WATER-COOLER.

No. 194,945.

Patented Sept. 4, 1877.

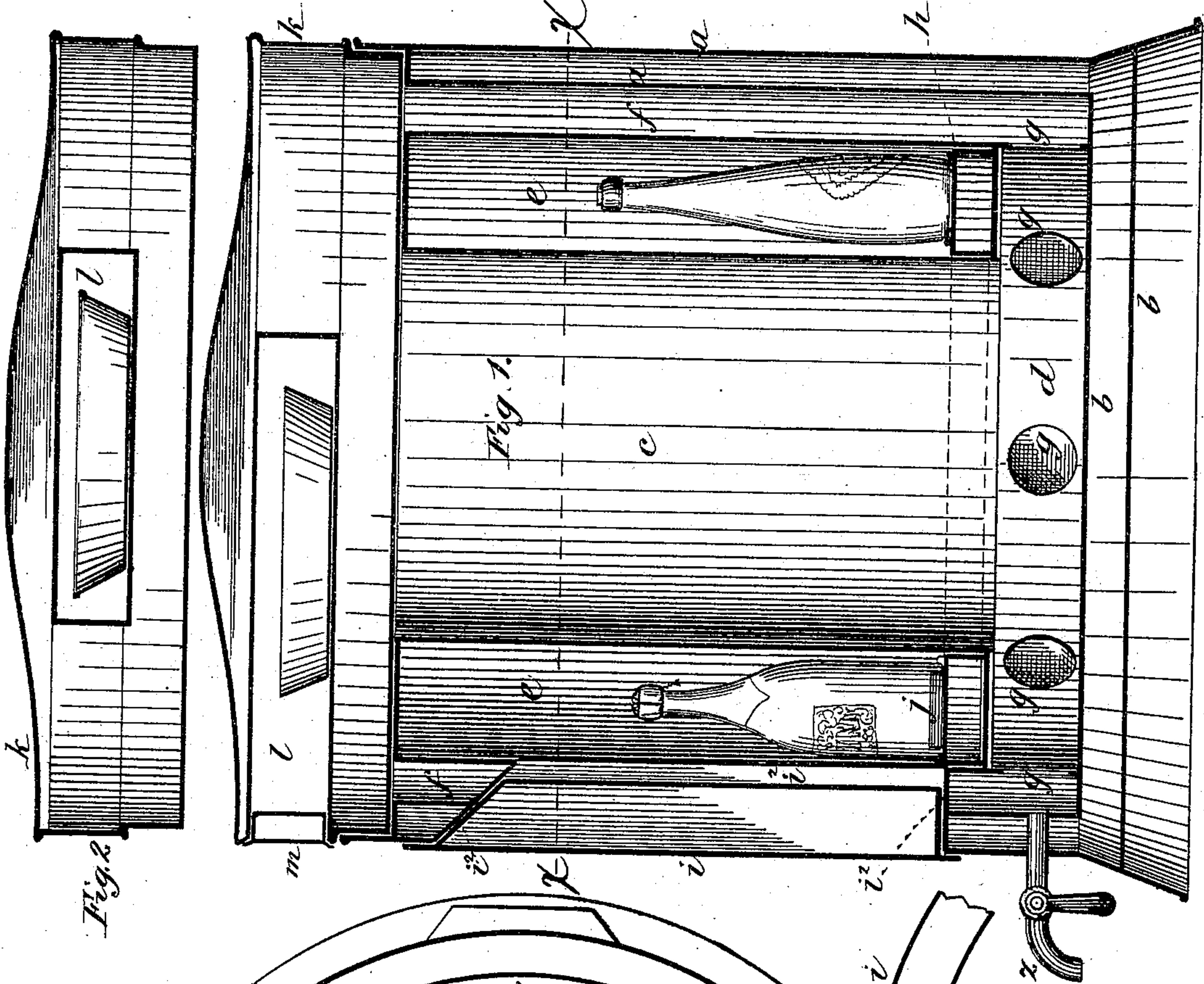
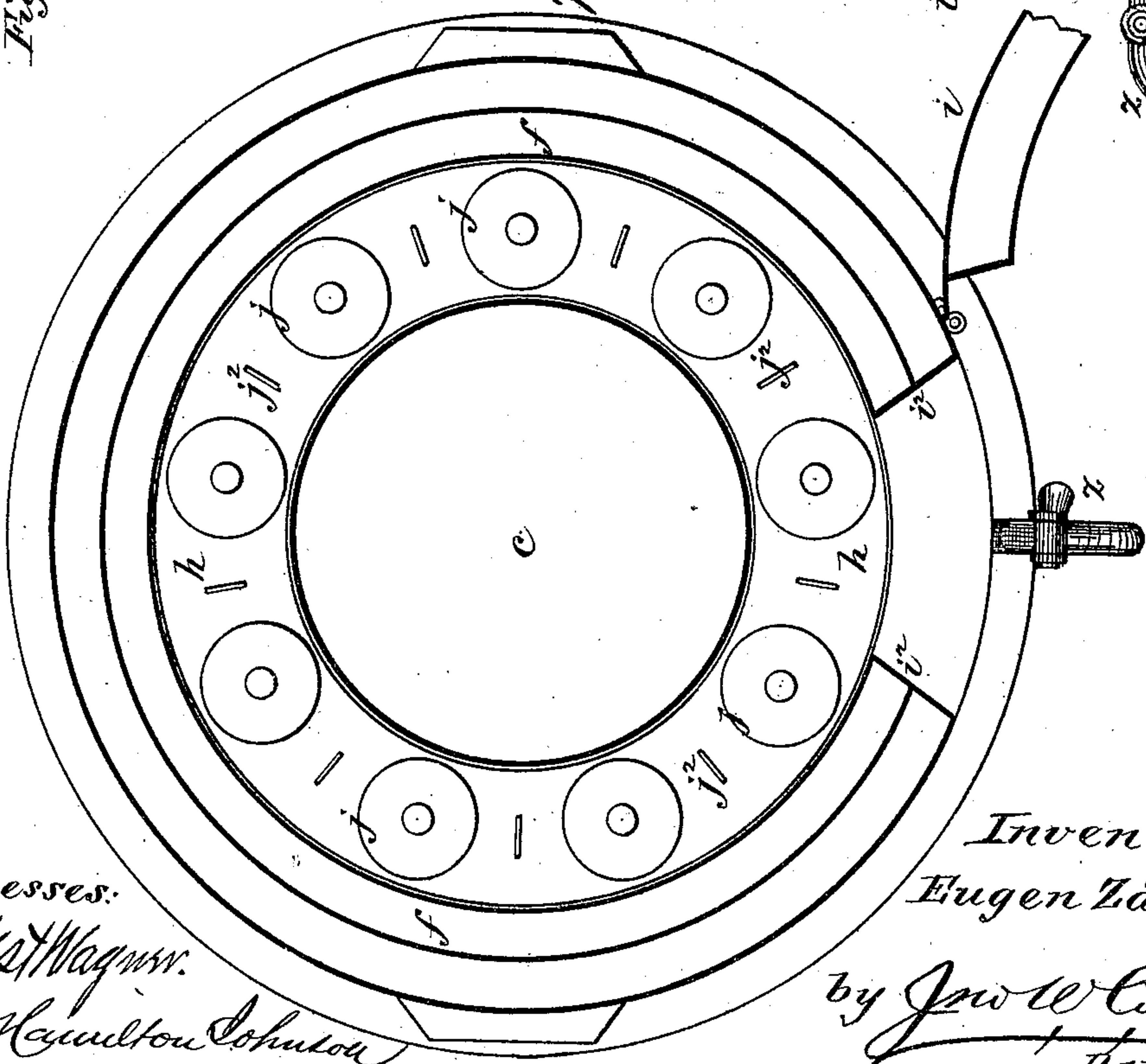


Fig. 2.



Witnesses:

J. W. Wagner.
J. W. Hamilton Johnson

Inventor
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UNITED STATES PATENT OFFICE.

EUGEN ZÄHRINGER, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN COMBINED REFRIGERATOR, BOTTLE-COOLER, AND WATER-COOLER.

Specification forming part of Letters Patent No. 194,945, dated September 4, 1877; application filed March 10, 1877.

To all whom it may concern:

Be it known that I, EUGEN ZÄHRINGER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Combined Refrigerator and Water-Cooler, which improvements are fully set forth in the following specification and accompanying drawings.

A refrigerator, bar-bottle, and water-cooler are combined in a vessel resembling the ordinary water-cooler. Its construction, so far as I know, is new, and involves an annular closed chamber surrounding the central ice-receptacle, and surrounded by an annular space, having bottom openings communicating with said ice-receptacle through a bottom space, which extends beneath the bottom of the annular closed chamber and forms the water-reservoir. The annular closed chamber is to receive bar-bottles or other vessels or articles to be refrigerated; and the object of the annular space surrounding this closed chamber is to isolate it from contact with the outer double walls of the refrigerator, and thereby maintain a greater degree of cold in said closed chamber. Access is had to this chamber through a double-walled door, the opening for which has walls crossing the annular space. This annular space also communicates at the top with the central ice-receptacle, so that the closed refrigerating-chamber has the contact of the ice on its inner walls, its bottom, and its outer walls and its top by cold air. A ring-plate is arranged to be revolved horizontally upon the bottom of the closed chamber, and is provided with collars or sockets within which to seat and hold the bottles or other vessels, and knobs or grasps by which to rotate the carrier to bring the desired bottle or other thing opposite the door for removal. A double-walled cover is combined with the refrigerator, and has a closed chamber, within which fruit, butter, pies, and other articles may be kept. This chambered cover has a door similar to the refrigerator-door. The bottom of the cover is in close proximity to the top of the ice-receptacle, and extends over the cold-air annular space, thereby keeping the cover-chamber cold.

Referring to the drawings, Figure 1 represents a vertical section of a combined refrig-

erator, bar-bottle, and water-cooler embracing my invention; Fig. 2, a similar view of the chambered cover; and Fig. 3, a horizontal section taken through the line *x x* of Fig. 1.

The refrigerator proper has double walls *a* and bottom *b*, the spaces between which may be filled with any non-conducting material. A central ice-receptacle, *c*, terminates in a bottom space, *d*, of greater diameter than the ice-receptacle. A closed chamber, *e*, is formed around the ice-receptacle, and surrounding the closed chamber is an annular space, *f*, which communicates with the bottom space *d* by openings *g* in the vertical wall of said bottom space. The bottom space *d* forms the cold-water reservoir, and extends under the bottom of the closed chamber; and the annular space *f* isolates said chamber from the outside double walls. The bottles or other articles to be kept cool are placed within the closed chamber upon a rotatable ring-plate, *h*, supported by rollers or spheres upon the bottom of said chamber.

The central ice-receptacle *c* and the annular space *f* being filled with ice and water, and the inner and outer walls of the closed chamber being in contact therewith, the air in said chamber will be kept at quite a low temperature. The refrigerator has a double-walled door, *i*, the opening for which has its surrounding walls *i*² crossing the annular space *f*, and thus gives access to the refrigerating-chamber and the carrying-ring plate, which has sockets or collars *j* to receive and hold bottles or other vessels, and is revolved to bring at the door such as may be desired for use by means of knobs or grasps *j*² arranged between the collars. The refrigerating-chamber *e* is filled with the bottles, &c., by turning the bottom carrying-plate; and the door is high enough to admit of the easy removal of the bottles.

The bottom water-cooling space has a cock, *z*, by which to draw the water.

The top of the ice-receptacle *c* and the top of the annular space *f* are open, and the cover *k* is supported over these open ends, so that it is cooled on its entire under side. It has a closed chamber, *l*, for fruit, butter, &c., which is kept cold by the refrigerator; and it may have one or more doors, *m*, similar to the door of the refrigerator proper. This cover-cham-

ber is very convenient for use, and combines a horizontal top cooling-chamber with the vertical refrigerator-chamber. The cover is removed to supply the refrigerator with ice.

I claim—

In a combined refrigerator and water-cooler, the annular closed refrigerating-chamber *e*, the central ice-receptacle *c* on its inner side, and the annular ice-space *f* on its outer side, (these communicating beneath said closed chamber by the space *d* and wall-openings *g*

g,) in combination with the non-conducting double-walls *a b*, whereby the inner and outer walls of the refrigerating-chamber are cooled alike.

In testimony that I claim the foregoing as my invention I have hereunto set my hand in the presence of two subscribing witnesses.

EUGEN ZÄHRINGER.

Witnesses:

MARK F. WILSON,
THOS. SIMPSON.