(No Model.)

G. GARDINER & C. H. MILLINS.

REFRIGERATOR FOR BARRELED LIQUORS ON TAP.

No. 493,157. Patented Mar. 7, 1893.

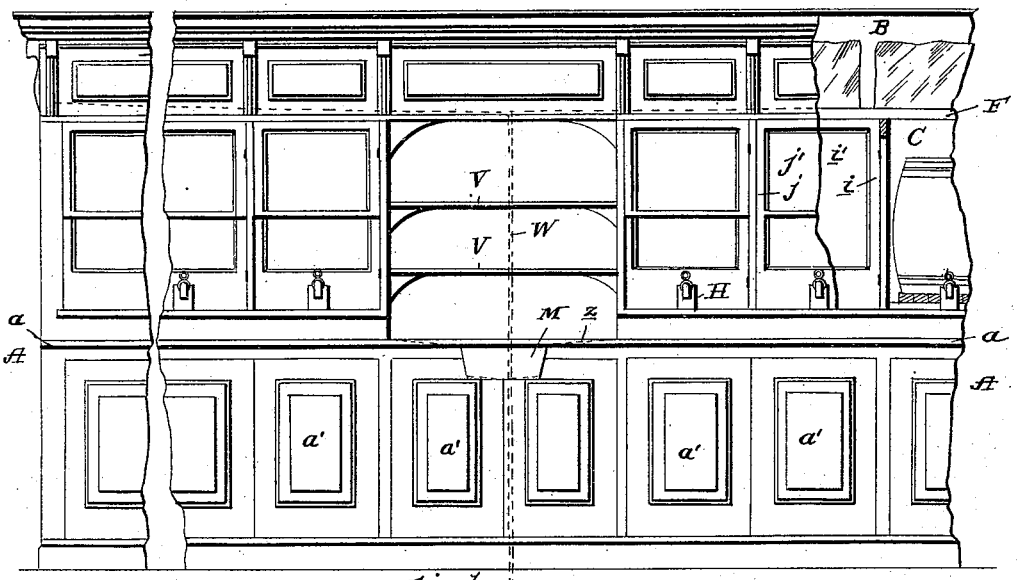
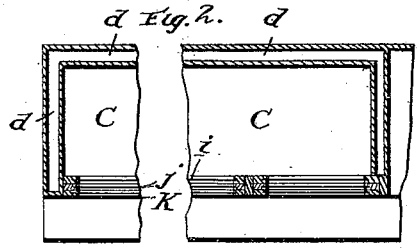
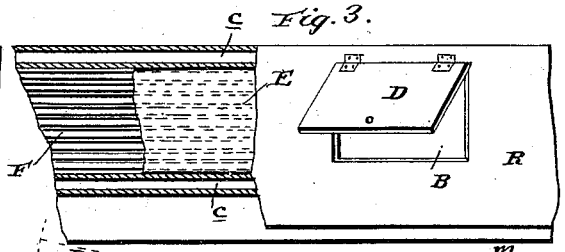
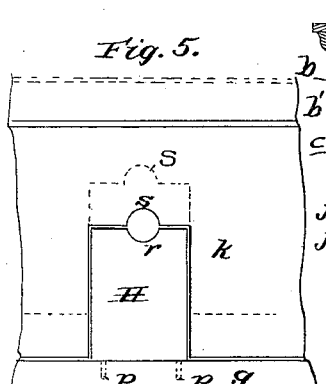
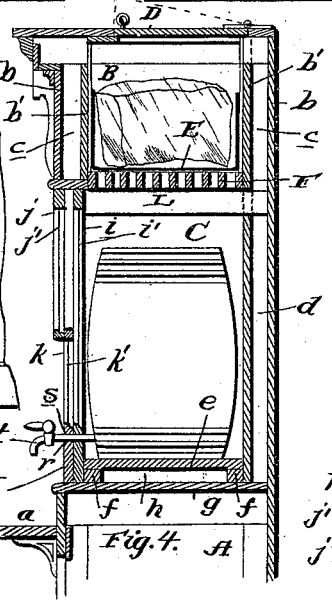


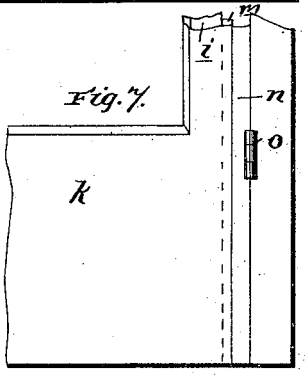
Fig. 1.

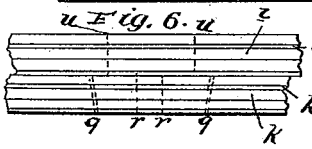


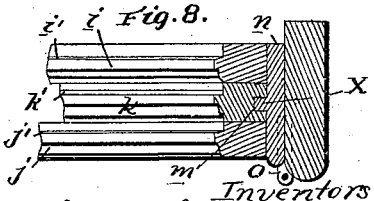












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UNITED STATES PATENT OFFICE.

GEORGE GARDINER AND CHARLES H. MILLINS, OF SPOKANE, WASHINGTON.

REFRIGERATOR FOR BARRELED LIQUORS ON TAP.

SPECIFICATION forming part of Letters Patent No. 493,157, dated March 7, 1893.

Application filed April 11, 1892. Serial No. 428,748. (No model.)

To all whom it may concern:

Be it known that we, GEORGE GARDINER and CHARLES H. MILLINS, both of Spokane, county of Spokane, and State of Washington, have jointly invented a new and useful Refrigerator for Barreled Liquors on Tap; and we hereby declare that the following is a full, clear, and exact description of the same.

The nature of our invention consists in providing a refrigerator, so formed, that barrels or casks of liquor may be placed therein and the liquors drawn therefrom as desired without opening said refrigerator or in any way allowing the escape of the cold air therein.

In the accompanying drawings, Figure 1 is an upright front view of our invention. Figs. 2 and 3 a top view with sections of the top and upper portions removed, showing the construction thereof. Fig. 4 is an upright sectional view of our invention with liquor barrel or cask in position therein. Fig. 5 is a front view of the lower part of the front, of the cold air chamber. Fig. 6 is a sectional horizontal view of the combination, composing the front of the cold air chamber. Fig. 7. is a view of a section of the door of the cold air chamber, showing one of the hinges of said door. Fig. 8. is a sectional view of the front of the cold air chamber, showing the relative positions and the combination of the several parts of the door of the cold air chamber, there being as many doors to said cold air chamber as there are sections, therein for barrels or casks.

To enable others skilled in the art to make use of our invention we will proceed to describe its construction and operation.

We construct the lower portion of our refrigerator below the shelf *a*—*a* in Fig. 1. and *a* Fig. 4. in ordinary cupboard form A. having the doors *a'* Fig. 1.

B Figs. 1 and 4. is the ice-box. C. Figs. 1 and 4 the cold air chamber. D Figs. 3 and 4 a trap-door in top R. of the ice-box B. E Figs. 3 and 4. metal ice-vessel, F Figs. 3 and 4. strips of wood, resting on the cross-timbers L Fig. 4 and supporting E and descending toward the water pipe W. Fig. 1. Ice-box B is constructed with double walls as shown by *b*—*b* and *b'*—*b'* Fig. 4 forming dead air spaces *c*—*c* Fig. 4. the wall *b* of the back of the ice-box B extending downward, forming the back of the whole combination and the wall *b'* of the back of the ice-box B extending downward and forming the inner wall of the back of the cold air chamber C. Fig. 4. thereby creating the dead air space *d* Fig. 4. By the provision of the aforesaid strips F, arranged at suitable intervals apart, for supporting the ice vessel E, it will be perceived that the cold air may freely enter the cold air chamber C.

The floor of the cold air chamber C. shown by *e* Fig. 4 which is laid on the timbers *f*—*f* Fig. 4. which timbers are laid on the top *g*, Fig. 4. of the cupboard A. Figs. 1 and 4., forming the lower portion of the whole combination, thereby forming the dead air space *h*. Fig. 4.

The front walls of the cold air chamber C. Figs. 1 and 4. are composed of a combination of three sashes with glass therein, the inner sash *i* and the glass therein *i'* Figs. 1. 4. 6 and 8 making the inner front wall of the chamber C Fig. 4. and the sash *j*, and the glass therein *j'* Figs. 1. 2. 4. and 8. forming the upper half of the outer wall and sash *k* with *k'*, the glass therein Figs. 1. and 4. forming the lower half of the outer wall thereof, the sash *k* sliding upward between the sashes *i* and *j* and being held in position by the tenon X. Fig. 8. moving in the mortise *m* Fig. 8. by which combination an air space is formed between the inside wall *i i'* and the outer wall consisting of the sash *j* and the glass therein *j'*, the sash *k* and the glass therein *k'* Fig. 4. All three of the sashes *i*, *j* and *k* are united at the perpendicular edges thereof as indicated by the wooden device *n* Fig. 8. to which on one edge are the hinges as shown by *o*, Figs. 7 and 8.

In Fig. 5 H is a wood device with projections *p*—*p* on the bottom, which projections fit into mortises in *g* Figs. 4 and 5. The device H is beveled as indicated by the dotted lines *q*—*q* in Fig. 6. Said device H being wider at the inner side of the sash than at the outside and in the top of said device H is cut, a semi circle *r* with a corresponding semi circle *s*. in the sash above *r*. the two semicircles *r* and *s* forming the circular orifice *r*.

s. Figs. 4 and 5, through the outer sash *k* and the device H through which the faucet pipe *t* Fig. 4 is placed.

The dotted lines *r*—*r* Fig. 6 indicate the semi-circle *r* at the top of device H Fig. 5.

The dotted line *s* Fig. 5 shows position of semi-circle *s* Fig. 5 when the outer lower sash *k*. Figs. 1 and 4 is raised. When said sash *k* is raised the device H Fig. 5. can be easily removed making an opening sufficiently large in the base of the sash *k*. Figs. 1 and 4. to enable the door of the cold air chamber C Figs. 1 and 4 said door consisting of the sashes *i*. *j* and *k* Figs. 4 and 8 to be turned on its hinges without coming in contact with the faucet *t*. Fig. 4. a corresponding hole being cut in the base of the inner sash *i* as indicated by lines *u*—*u* Fig. 6.

In Fig. 1. *z*—*z* indicate metal drain communicating with sink M. and *v*—*v* shelves.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a refrigerator, substantially as described, the combination of the cold air chamber C, having a series of doors in its front wall, the ice box or chamber B, arranged above the cold air chamber, the open work strips F, separating the cold air chamber and the ice chamber or box, the ice vessel or pan mounted upon the strips F, and having its bottom wall inclined upwardly from its middle to its ends, the drainage pipe leading from the middle of said vessel or pan, the dead air space *h*, formed beneath the cold air chamber, the dead air space *d*, formed at the back of said cold air chamber, and the dead air spaces *c*, *c*, formed at the front and back of the ice box or chamber substantially as and for the purpose set forth.

2. In a refrigerator, substantially as described, a door for a cold air chamber or the like, comprising an inner section *i*, having a hole at or adjacent to the lower end, an upper outer section *j*, a lower, outer section *k*, adapted to slide between the sections *i*, *j*, and having a recess in its lower end and a curvilinear notch in the upper wall of said recess and the device H, adapted to take into the recess of the slidable section *k*, and having a curvilinear notch in its upper end adapted in conjunction with the notch in the upper wall of the recess in the section *k*, to receive the spigot of a beer keg or the like, substantially as and for the purpose set forth.

3. In a refrigerator, substantially as described, the combination with a cold air chamber or the like; of a door comprising the frame section *n*, having the tongues X, on the inner sides of its upright side bars, the inner sash *i*, fixedly connected to the section *n*, and having a glass *i'*, and an opening in its lower end, the upper outer sash *j*, also fixedly connected to the frame section *n*, and having the glass *j'*, the lower outer slidable sash *k*, carrying the glass *k'*, and having grooves to engage the tongues *x*, of the frame section and also having a recess in its lower end provided with beveled side walls and a curvilinear notch in the upper wall of said recess, and the device H, having the beveled sides and adapted to take into the recess of the slidable sash *k*, and provided with a notch in its upper end, substantially as and for the purpose set forth.

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