

(No Model.)

F. SOMMERS.  
REFRIGERATING ICE HOUSE.

No. 419,131.

Patented Jan. 7, 1890.

Fig. 1.

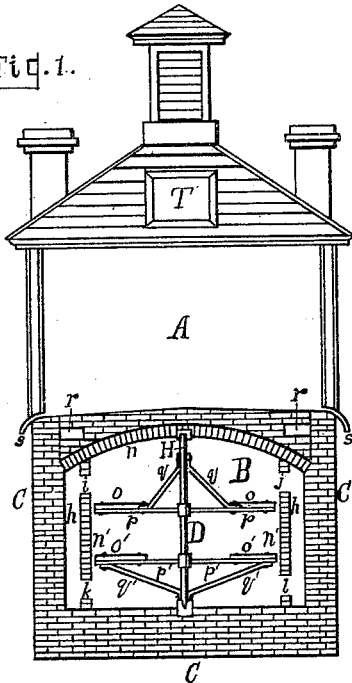


Fig. 3.

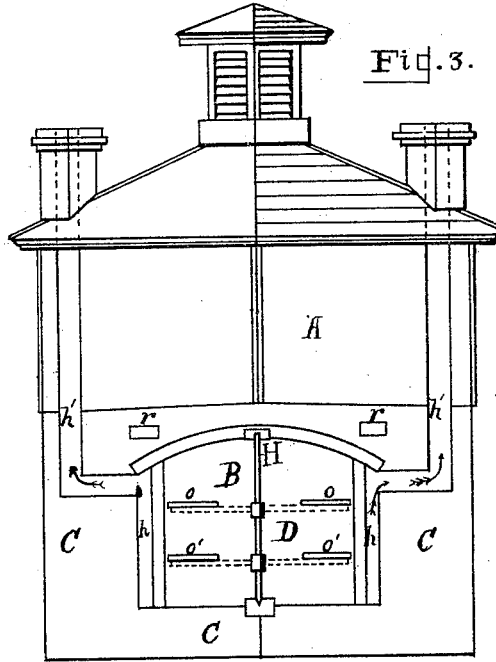


Fig. 2.

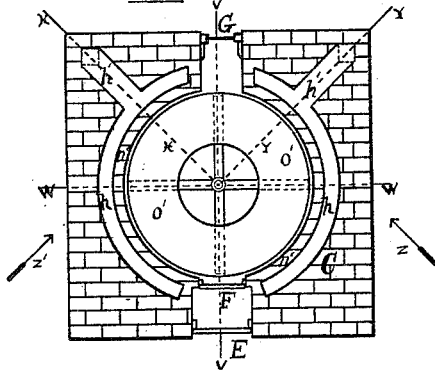
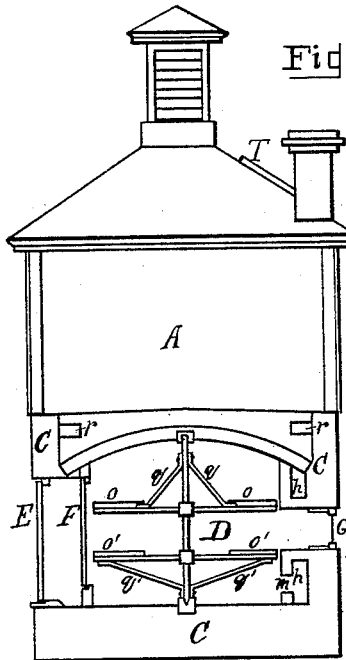


Fig. 4.



Attest:

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# UNITED STATES PATENT OFFICE

FRANK SOMMERS, OF BELLEVUE, IOWA.

## REFRIGERATING ICE-HOUSE.

SPECIFICATION forming part of Letters Patent No. 419,131, dated January 7, 1890.

Application filed April 4, 1889. Serial No. 306,033. (No model.)

### *To all whom it may concern:*

Be it known that I, FRANK SOMMERS, of Bellevue, in the county of Jackson and State of Iowa, have invented a new and useful Improvement in Refrigerating Ice-Houses; and I do hereby declare the following to be a clear, full, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

The purpose of this invention is the construction of a combined ice-house and refrigerator so arranged as to adapt it to the general purposes for which ice-houses are used on farms and in other similar places.

In the drawings, Figure 1 represents the relative position of an ice-house and refrigerator combined, and for the most part cutting the line *ww* of Fig. 2. Fig. 2 represents a ground plan of the refrigerator and its ventilating-flues and revolving-shelf stand. Fig. 3 represents two vertical sections of the refrigerator, one of which is built upon the line *xx*, as viewed in the direction indicated by the arrow *z* in Fig. 2, the other section being built upon the line *yy*, as viewed in direction indicated by the arrow *z*, the upper portion of the figure presenting a corner view of the ice-house. Fig. 4 is a vertical section of the refrigerator, cutting the line *vv* in Fig. 2, and showing also the superposing ice-house.

A is the ice-house; B, the refrigerator; C, the foundation and outside walls of the refrigerator; D, a system of circular shelving turning upon a pivoted standard having supporting arms and braces.

E is an outside and F an inside door; G, a window; *h* the ventilating-flue.

*h'* and *h''* are exit passage-ways for the air from the circular flue to the chimneys.

*i*, *j*, *k*, *l*, and *m* are air passage-ways between the shelving-apartment of the refrigerator and the ventilating-flues.

*n* is the arched ceiling, and *n'* the circular wall, forming in connection with the outside walls the circular ventilating-flues.

*o* and *o'* are circular revolving shelves supported by the pivoted upright standard H by

means of the arms *p* and *p'* and braces *q* and *q'*, respectively.

An annular opening *r* occupies a position between the floor of the ice-house and the arched ceiling of the refrigerator, and may, at the option of the builder, be enlarged or lessened, so as to diminish more or less the amount of material constituting the dividing-wall between the ice-house and the refrigerator; or it may be dispensed with altogether, at the option of the builder.

The window G may, when desirable, be left slightly ajar, sufficiently to admit of a circulation of pure air through the refrigerator, though the occasional opening of the doors may answer all practical purposes.

The ice-house has one or more waste-pipes *s* to carry away the waste water caused by the melting of the ice, and it is further provided with a suitable opening T, preferably in the roof, for the admission of the ice.

The standard H is pivoted at top and bottom, and is designed to sustain any desirable number of circular shelves. Of course it is evident that a person standing in the doorway F is enabled to bring anything sitting on either of the shelves within his reach.

The walls of the refrigerator and those of the ice-house may be constructed of any material that is best calculated to resist the temperature of warm weather.

It will be observed that the braces *q* and *q'* are so arranged as to afford an unobstructed use of the shelves, the former being placed over the shelves and acting as draft-braces, while the latter, being under the shelves, perform the offices of push-braces.

The air is constantly (or as often as the window and doors are opened) being carried from the refrigerator-apartment, through the apertures *i*, *j*, *k*, *l*, and *m*, into the circular flues, and thence through the exit passage-ways up to and out of the chimneys.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a combined ice-house and refrigerator, the combination, with a building having a

partition dividing the building into an upper and lower compartment, of waste-pipes communicating with the upper compartment, a wall within the lower compartment forming  
5 in connection with the wall of the building a surrounding flue, air-outlet conduits in communication with said flue, the said flue communicating with the lower compartment, a window and door to said compartment, and a series of revolving shelves located in  
10 said lower compartment, substantially as set forth.

FRANK SOMMERS.

Witnesses:

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WM. KEGLER.