

(No Model.)

G. S. BROWN.
REFRIGERATOR.

No. 310,371.

Patented Jan. 6, 1885.

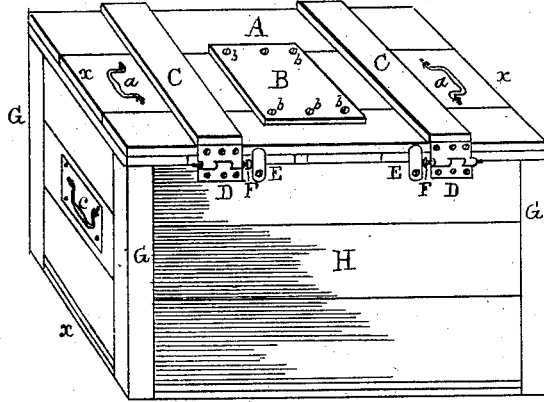


Fig. 1.

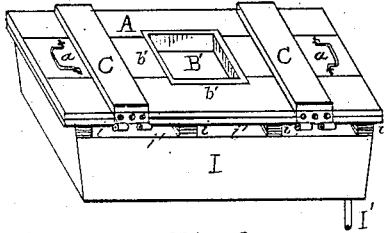


Fig. 2.

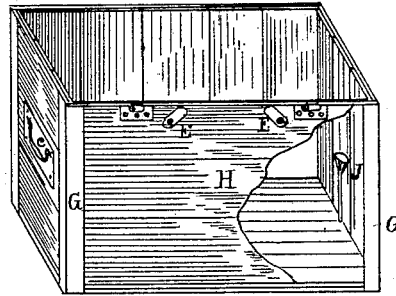


Fig. 3.

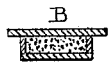


Fig. 4.

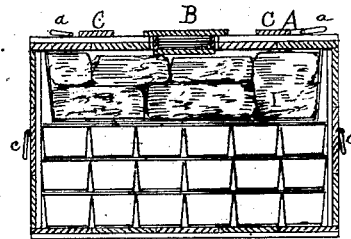


Fig. 5.

Witnesses.

Wm. C. Smith
W. C. Chappin

Inventor

George S. Brown
Per *Wm. R. Singleton*
Atty.

UNITED STATES PATENT OFFICE.

GEORGE SIMONS BROWN, OF CHARLESTON, SOUTH CAROLINA.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 310,371, dated January 6, 1885.

Application filed November 7, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. BROWN, a citizen of the United States, residing at Charleston, in the county of Charleston and State of South Carolina, have invented a new and useful Improvement in Refrigerators, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in refrigerators for transportation of perishable articles—such as meats, fruits, &c.—which will be hereinafter more particularly described, and pointed out in the claim.

In the drawings forming part of and accompanying this specification, Figure 1 is a perspective view of the refrigerator. Fig. 2 is a perspective view of the cover of the box with the ice-chamber attached to it. Fig. 3 represents a perspective view of the shell of the box without the cover and ice-chamber. Fig. 4 is a vertical section of the cover. Fig. 5 is a longitudinal vertical section of Fig. 1 on *x x x*.

A is the cover, made of two thicknesses of thin boards crossing each other grainwise.

B is the cover for the door B' in the top A, which is to be secured by screws *b b*, or in any other suitable manner, so as to be fastened tightly down upon the india-rubber gasket-board *b' b'*, Fig. 2.

C C are the battens to secure and stiffen the top A. Attached to each end of these battens C C are the clamps D D, which are secured by pins F F, made to be easily removed, and which are kept in place by buttons E E. By removing the pins from both sides the top A can be entirely removed, as shown in Fig. 2, leaving the box, as in Fig. 3, for placing inside of the latter the articles to be preserved. For this purpose there are handles *a a* put on the top A. Similar handles, *c c*, are placed at the ends of the box for lifting and carrying it. The corners of the box A are protected by plates G G, in the usual manner.

H is the body of the box, made of thin boards crossing each other grainwise. Thus with two thicknesses of half-inch boards a box having one inch thickness will be stiffer and stronger and lighter than if the boards

were of one thickness only, and, as these refrigerators are for constant transportation, will last much longer. These boards thus crossed are fastened by small screws.

I is the ice-chamber, made of sheet-zinc, and is attached to the under side of the top A.

iii are battens running across the under side of the top A, and *v* is a space between the sheet-zinc I and the top for passage of cold air from the ice-chamber I into the box H. The inside of the box H is to be well lined with woolen cloth or felt, and the top edges of the walls all around also to have cloth or felt or india-rubber packing, so that when the cover is put on and secured by the pins F in the clamps the box H will be airtight. From the bottom of the ice-chamber I is a drain-pipe, I'.

In the box H is a funnel, J, having an outlet-pipe through the bottom of box H, with a trap to prevent the air from passing into the box. When the cover A, with the ice-chamber, is placed on the box H, the pipe I' fits into the funnel J, in which is a sponge, so that the melted water from the ice-box will run off through the funnel and waste-pipe J, the sponge assisting in making the pipes airtight.

Practical tests have been made with these refrigerators with the following result: One hundred and twenty-five pounds of ice during three hottest days in Charleston, South Carolina—6th, 7th, and 8th October—one and a half hour each day in the sun, the ice held out sixty hours.

When the refrigerator is to be filled, the top A is entirely removed. The articles to be shipped—as boxes of fruit, shown in Fig. 5—are placed in the bottom of box H, and secured, if necessary, by strips or thin boards placed on each layer of boxes to support the next layer and prevent injuring the fruit below. The ice-chamber and cover are then put in place. The ice is put into the chamber through the ice-door B', and when packed and secured the cover B is put on and screwed down upon the gasket *b'*, and the whole is ready for shipment.

I claim—

A refrigerator-package for transportation of

perishable articles, constructed of thin boards
crossing each other grainwise, having the ice-
chamber attached to the under side of the top,
which top is removably secured to the two
5 sides by pins, and having an opening in it to
put in the ice, substantially as and for the
purpose described.

In testimony that I claim the foregoing as
my own I hereto affix my signature in pres-
ence of two witnesses.

GEORGE SIMONS BROWN.

Witnesses:

S. D. KEEP,
H. R. STAFFORD.