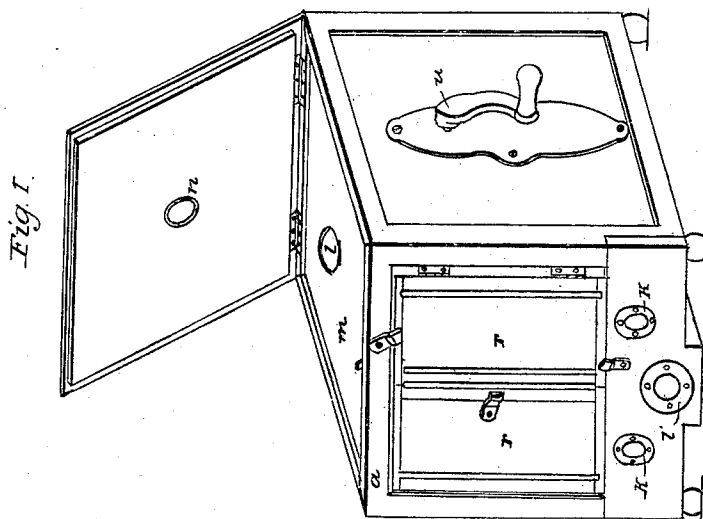
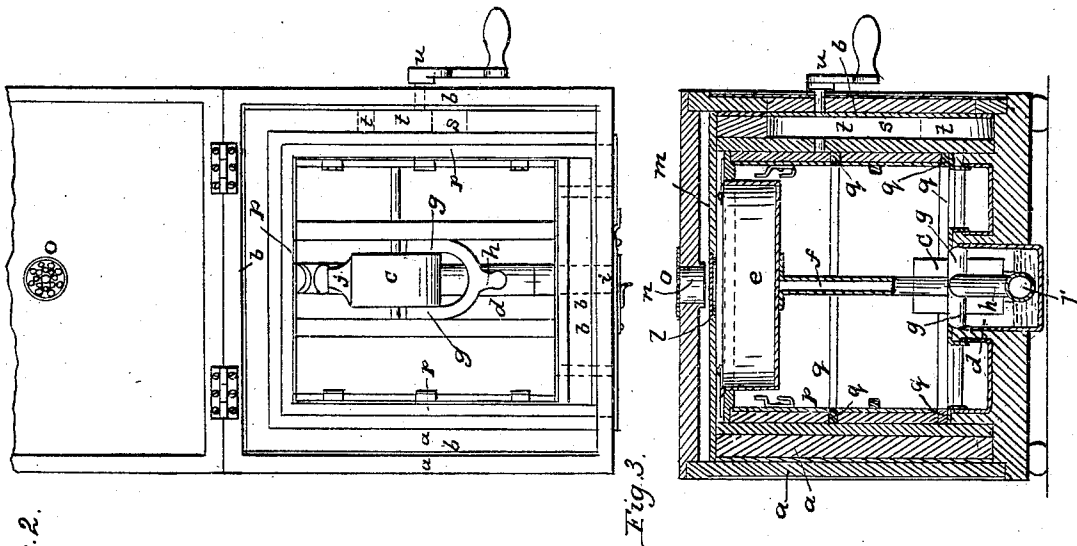


J. F. SCHNEIDER.

Refrigerator.

No. 44,663.

Patented Oct. 11, 1864.



Witnesses:

J. C. Churchill
George Boarder

Inventor:

J. F. Schneider

UNITED STATES PATENT OFFICE.

JACOB F. SCHNEIDER, OF BROOKLYN, NEW YORK.

IMPROVED REFRIGERATOR.

Specification forming part of Letters Patent No. 44,663, dated October 11, 1864.

To all whom it may concern:

Be it known that I, JACOB F. SCHNEIDER, of the city of Brooklyn, county of Kings, in the State of New York, have invented certain new and useful improvements in refrigerators and similar structures for preserving meat, vegetables, &c., by ice; and I do hereby declare that the following is a full and correct description thereof, reference being had to the annexed drawings, of which—

Figure 1 is a perspective view; Fig. 2, a plan view, with the inside lid and ice tray left out; Fig. 3, a vertical cross section.

A part of my invention consists in the arrangement and combination of air-passages and a blower, by means of which air from the outside is introduced into the lower part of the refrigerator and blown out again, for the purpose of keeping the air pure by circulation without coming in contact with the ice in the tray above to waste it; the air introduced being cooled by the water which drips from the ice and is collected in a chamber in which the blower and air-pipes are placed.

Another part of my invention consists in combining with the above described arrangement of air-passages, blower, and ice water chamber in a refrigerator a valve in the top part or lid of the refrigerator which will lift under the pressure of the air when the lower outlet air-passages are stopped, for the purpose of blowing out impure air from the upper part of the refrigerator; and my invention further consists in combining with the walls of a refrigerator a layer or layers of thick paper or pasteboard for the purpose of preventing the conduction of heat and air through the walls of the refrigerator as far as the paper is capable of so doing.

But more particularly to describe my invention I will refer to the drawings, the same letters of reference denoting the same part in the different figures.

The walls *a* of the refrigerator shown in the drawings may be made in the usual manner, and stuffed with charcoal, sawdust, or other non-conductor; but to make them more impervious to air and heat I line them with layers of thick pasteboard, *b*. The blower *c* is located in a trough, *d*, at the bottom of the refrigerator. This trough is sup-

plied with cold water from the ice-tray *e*, the water dripping down through a pipe, *f*. The blower is supplied with air by means of side pipes, *g g*, which are connected by a small pipe, *h*, with a large pipe or conduit, *i*, which leads into the open air. This conduit, being exposed to the cold water in which it is immersed, reduces materially the temperature of the air which enters it by reason of the action of the blower. The air passes out of the nozzle of the blower *j* into the interior of the refrigerator, and from thence outward to the outside through suitable education-orifices, *k*. When it is desired to force air up through the upper part of the refrigerator, these education-orifices are closed by plugs or in any suitable manner, when the pressure of the air will lift the valve *l* in the inner lid, *m*, and the air will pass out through a hole, *n*, in the upper lid, which is provided with a perforated plate, *o*.

For convenience in some cases, I construct my refrigerators with trays or drawers *p p*, which slide in and out on suitable ways, *q*, when the side doors, *r r*, are opened. The blower may be driven by a belt, *s*, and pulleys *t*, from a crank-shaft, *u*, or other driving shaft.

I claim as my improvement in refrigerators—

1. The combination and arrangement of the cold-water trough, air-passages, and blower, when placed in the lower part of the refrigerator, so as to be supplied with the water from the ice-tray above, substantially as described, for the purpose of changing the air in the lower part of the refrigerator without causing a current of air to come in contact with the ice above.

2. The arrangement and combination of the valve and outlet-passages above with the blower, cold-water trough, and induction air-passages below, substantially as described.

3. The arrangement and combination of thick pasteboard or layers of thick paper with the walls of refrigerators, substantially as described.

J. F. SCHNEIDER.

Witnesses:

F. C. TREADWELL, Jr.,
GEORGE BENDER.