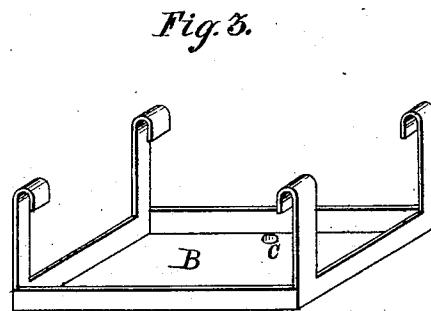
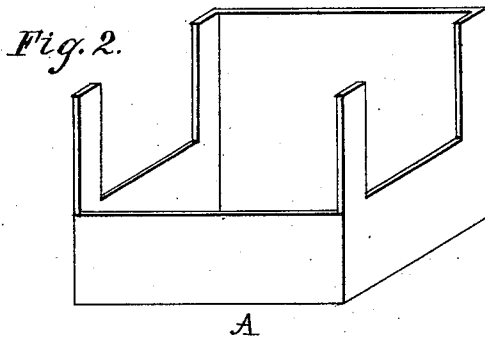
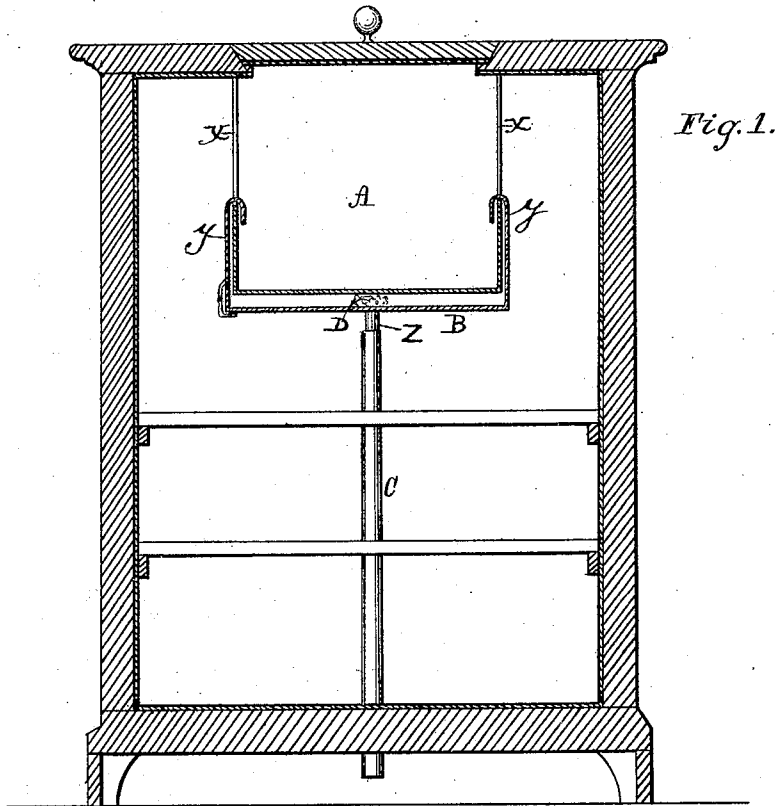


E. S. BITNER.
Refrigerator.

No. 169,078.

Patented Oct. 26, 1875.



Witnesses:

J. A. Harvey
Edw. S. Bitner

Inventor:

Edw. S. Bitner.

UNITED STATES PATENT OFFICE.

ELI S. BITNER, OF LOCK HAVEN, PENNSYLVANIA.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **169,078**, dated October 26, 1875; application filed March 12, 1875.

To all whom it may concern:

Be it known that I, ELI S. BITNER, of the city of Lock Haven, in the county of Clinton and State of Pennsylvania, have invented a new and useful Improvement on a Refrigerator; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a perspective view.

My invention consists in the construction and combination of the ice-box, drip-pan, and drip-tubes, whereby each may be separately and easily withdrawn from the refrigerator to be cleaned, or for repairs or other purpose, and of the intervention of sponge between drip-pan and ice-box, to prevent sediment from clogging the drip-tube and air from entering the refrigerator by way of the drip-tube.

A is the ice-box secured in the upper part of the casing, and leaving air-spaces between two of its sides and the casing. One or more holes in the bottom of the ice-box afford passage for the drip. X are openings in two sides of the ice-box. B is a shallow metallic drip-pan, having spring-hooks *y* extending upward from it, and clasping the ice-box through openings *x*. These hooks may be separate from the drip-pan and clamp under it, as well as hang on the ice-box. A short outlet-pipe, *z*,

depends from and communicates with the orifice in the bottom of the drip-pan. The outlet-pipe *z* enters closely, yet removably, the straight and vertical drip-pipe C, which extends closely, but removably, through the bottom of the refrigerator. Between the bottom of the ice-box and the drip-pan, and covering the mouth of the outlet-pipe *z*, is compressed a piece of sponge, D. It follows that the drip-pan B may be removed by pressing it upward and detaching the hooks *y* from the ice-box, or, when the hooks are separate, by detaching them from its bottom. Thereupon the drip-pipe may be removed by drawing it upward or even downward through the bottom of the refrigerator. The sponge, saturated with drip, prevents sediment from entering the drip-tube and air from coming up through the drip-tube into the refrigerator.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the ice-box having openings *x*, the drip-pan having hooks *y* and outlet *z*, the sponge D, and the drip-pipe C, all these parts save the ice-box being separable from each other and from the refrigerator, as and for the purposes set forth.

ELI S. BITNER.

Witnesses:

J. A. HARVEY,
EUGENE L. PACKER.