2 Sheets—Sheet 1.

T. C. PHILLIPS.

Refrigerators.

No. 206,822. Patented Aug. 6, 1878.

Fig. 1.

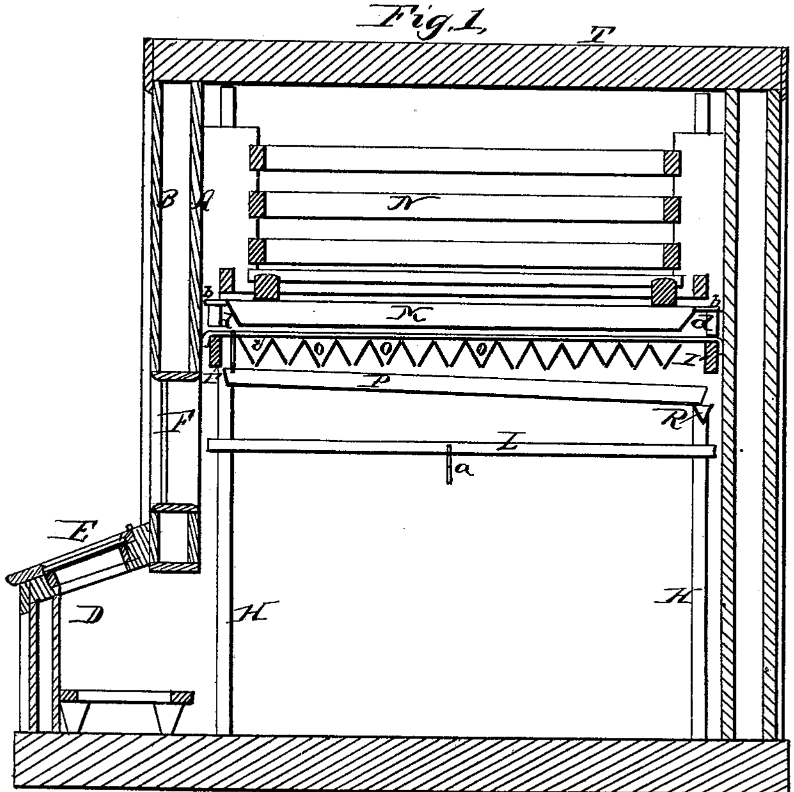
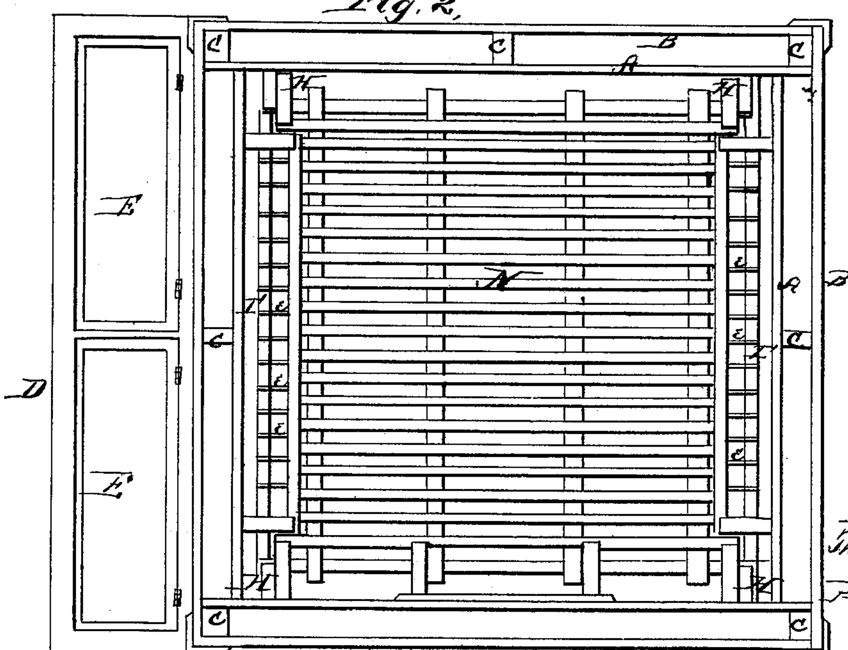


Fig. 2.



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2 Sheets—Sheet 2.

T. C. PHILLIPS.

Refrigerators.

No. 206,822. **Patented Aug. 6, 1878.**

Fig. 3.

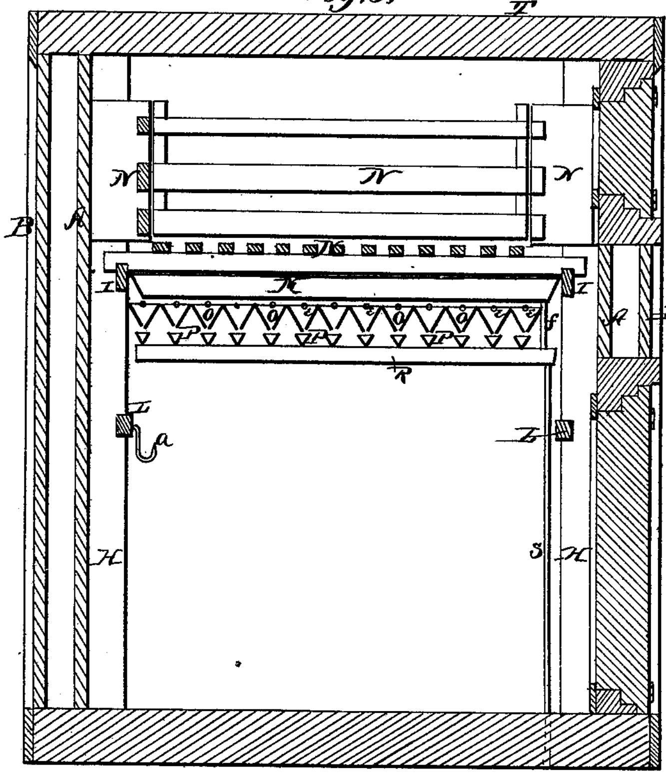
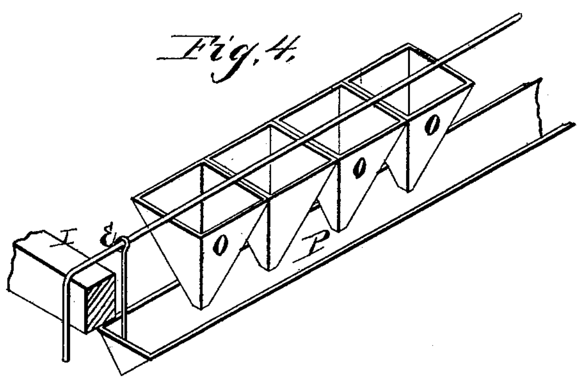


Fig. 4.



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UNITED STATES PATENT OFFICE.

THOMAS C. PHILLIPS, OF HUNTINGTON, WEST VIRGINIA.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **206,822**, dated August 6, 1878; application filed June 26, 1878.

To all whom it may concern:

Be it known that I, THOMAS C. PHILLIPS, of Huntington, in the county of Cabell and State of West Virginia, have invented certain new and useful Improvements in Refrigerators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a refrigerator, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a vertical longitudinal section, Fig. 2 a plan view with the top removed, Fig. 3 a vertical cross-section, and Fig. 4 a detail perspective of the drip-cups, of my improved refrigerator.

The sides of my refrigerator are made hollow, consisting of inner walls, A, and outer walls, B, both being secured to vertical studding C by means of ordinary wood-screws, so that said walls can be easily taken down and put up again, as may be required. The space between the walls is to be filled with sawdust, charcoal, or other suitable non-conducting material.

The double-walled body or case may, of course, be made of any suitable form and size, and has at the bottom, on the front, an extension, D, with hinged glass doors E E on top, said extension or chamber D being intended for the purpose of containing such smaller articles as it may be desired to have exposed to view, while they are at the same time virtually within the refrigerator and subjected to the effects of the cold therein. Above this chamber D, in the front of the case, is a window, F, enabling persons to see into the main cooling-chamber of the refrigerator.

Within the body of the refrigerator is a frame composed of vertical corner-posts H H, connected at a suitable point on two opposite sides by bars I I, and on the other two sides, above these bars, by two other bars, I′ I′, as shown. These bars I I′ form, as it were, a division, or rather supports for the devices which divide the refrigerator into a cooling-chamber below and an ice-chamber above. Access is had into these chambers through the side of the refrigerator by means of doors G and G′, respectively.

In the cooling-chamber suitable cross-bars L, with hooks or other devices *a*, are attached to the uprights H, for suspending meats and other articles. I may, however, provide said chamber with any desired arrangement of shelving, cranes, hooks, &c.; but in all cases I propose to have such devices connected to the uprights H, so that the entire interior structure of the refrigerator can be removed at will.

In the upper portion of the structure or frame, and forming the bottom of the ice-chamber, is the pan M, supported by means of projecting rods *b b* upon blocks *d d*, secured to the uprights H above the ends of the cross-bars I. On top of the pan M are placed racks N N, of any suitable construction, all around the ice-chamber, to form passages for the cold air to descend along the sides of the refrigerator into the cooling-chamber below. Below the ice-pan are suspended a series or rows of square funnels, O O, which are placed close together, and the funnels in each row are connected together and attached to a rod, *e*, which rests in notches on the cross-bars I I. The lower ends of the funnels are, of course, open; and below each row of connected funnels is a trough or gutter, P, suspended at one end from the rod *e*, and the other end supported upon a main trough, R, which receives the water or condensation from all the gutters P. The trough R is suspended by suitable rods from the frame H I, and has the waste-pipe S connected to one end of it. The ice-pan M is provided with a waste-pipe, *f*, leading into the main trough R.

By the use of the funnels O, as described, a large condensing-surface is obtained, the natural result of which is to effect a great saving in ice. No moisture can get down on the meat or other articles in the cooling-chamber, as any water that may collect on the lower side of the pan will fall into the funnels, and from thence be carried out through the waste-pipe S.

The entire refrigerator, from the construction as shown and described, can be put up

and taken down very easily, and, when taken down, can be packed and shipped in a small compass without damage.

T is the top of the refrigerator.

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

1. In a refrigerator, the combination, with the metallic ice-pan M, of the series of rows of removable and connected funnels O, arranged closely together under the ice-pan, to receive and discharge the water of condensation of the latter, substantially as described.

2. In a refrigerator, the combination, with the metallic pan M and the series of rows of funnels O, each row suspended by means of a rod, *e*, of the troughs P and main trough R, having waste-pipe S, substantially as described, and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS C. PHILLIPS.

Witnesses:

D. W. EMMONS,

JOHN H. OLEY.