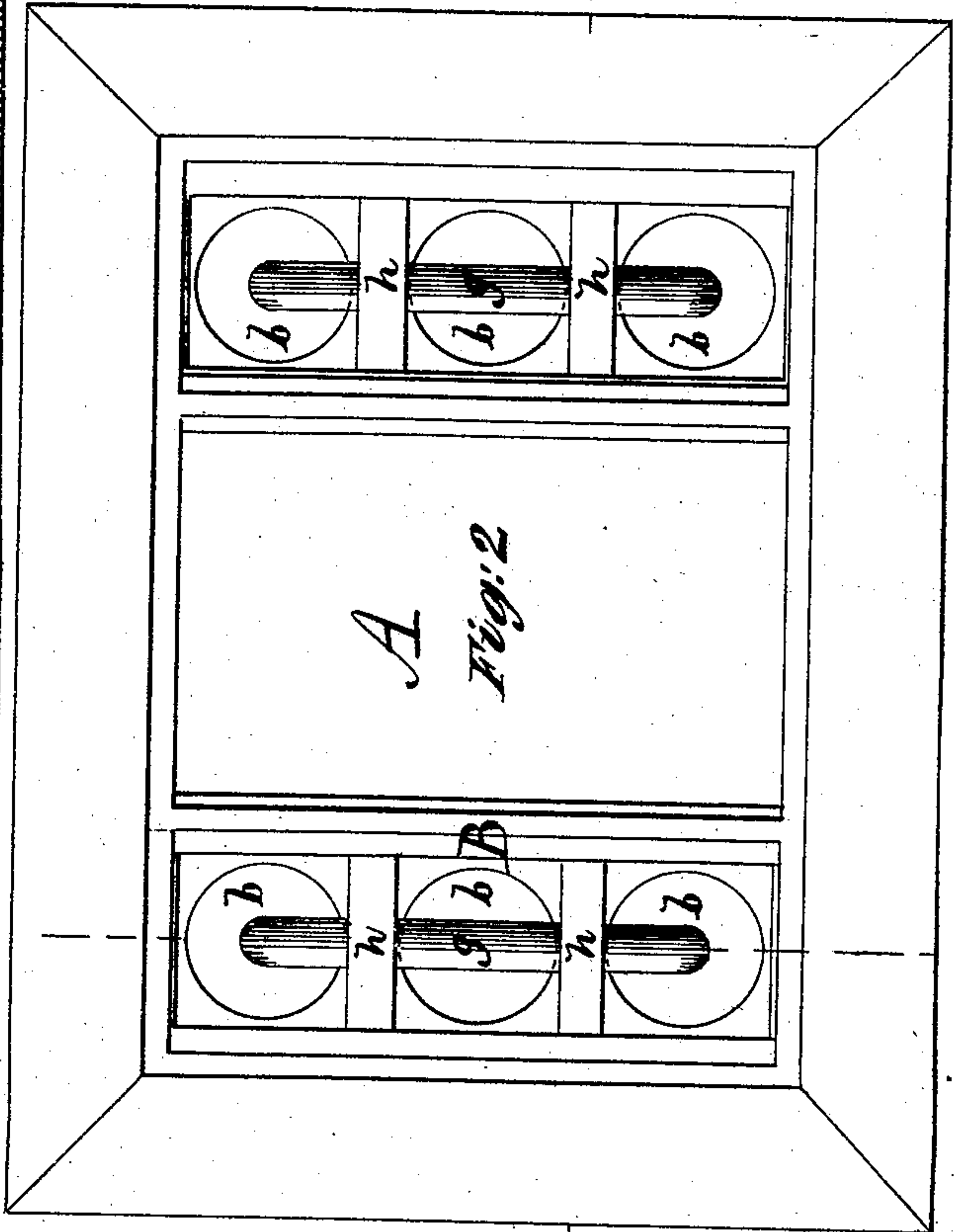
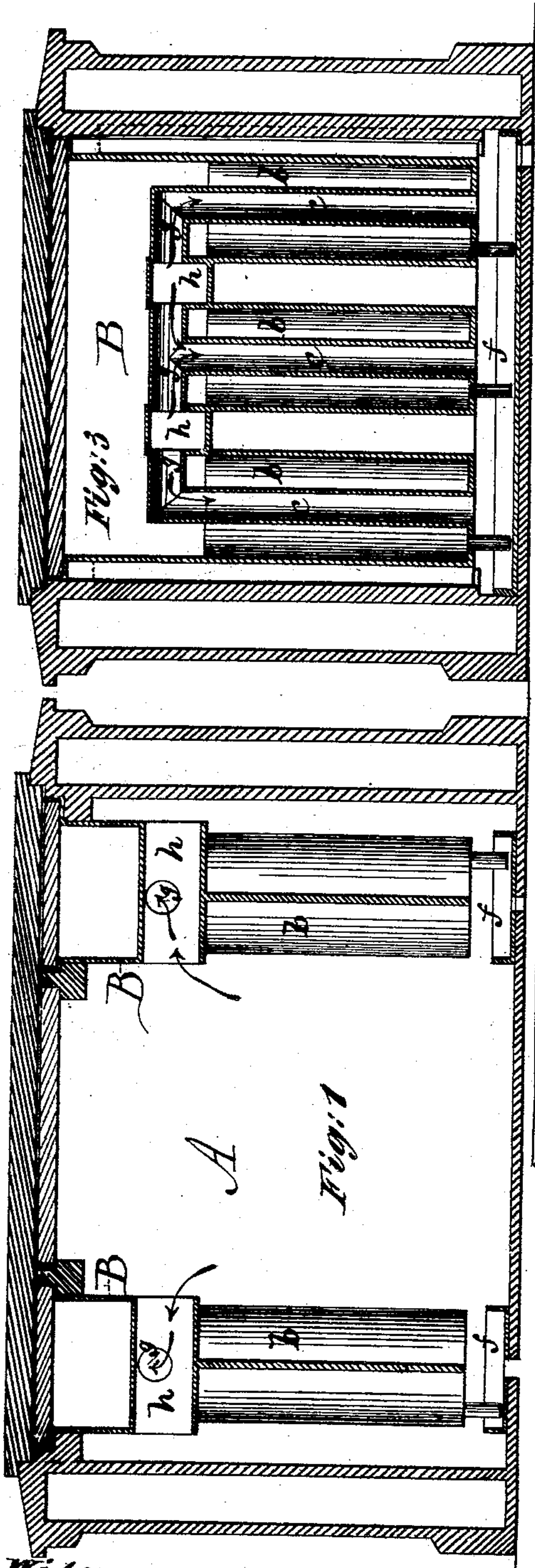


J. K. MILLS.
Refrigerators.

No. 157,019.

Patented Nov. 17, 1874.



Witnesses:
Michael Ryan
Fred H. H. H.

J. K. Mills
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

JOSEPH K. MILLS, OF DENVER, COLORADO TERRITORY.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **157,019**, dated November 17, 1874; application filed March 26, 1874.

To all whom it may concern:

Be it known that I, J. K. MILLS, of Denver, in the county of Arapahoe and Territory of Colorado, have invented certain Improvements in Refrigerators, of which the following is a specification:

My invention consists in the combination, with a chest or refrigerator, of an ice-tank of peculiar construction, provided with air-tubes surrounded by receptacles for the ice, whereby a current of cold air is kept in circulation through the tank and the chest or apartment in which it is placed.

In the accompanying drawing, Figure 1 is a longitudinal vertical section of a refrigerator with one of my improved ice-tanks at each end. Fig. 2 is a top view of the same. Fig. 3 is a central vertical section through one of the tanks.

The chest or apartment A may be of any suitable form and dimensions, and may contain two tanks, one at each end. The tank B is divided into three or more chambers, *b*, in each of which is a pipe, *c*, connected at the upper end with a transverse pipe communicating with the chest or refrigerator outside of the tank. The chambers *b* may be of cylindrical or other suitable form, extending downward to within a short distance of the bottom of the chest A, and are provided with waste pipes for carrying off the drippings from the ice, which waste-pipes communicate with

a pan, *f*. The lower ends of the pipes *c* pass through the bottoms of the chambers *b*, so as to communicate with the chest or refrigerator below said chambers, and their upper ends communicate with each other by means of a pipe, *g*, running longitudinally of the tank. Transverse pipes *h* pass from one side of the tank to the other, communicating with the chest A outside of the tank, and also with the longitudinal pipe *g*. The ice is placed in the upper part of the tank, resting upon the pipes *g* *h*. As the air circulates through said pipes it is cooled by the ice, and, as it has free communication with the chest outside of the tank, the tendency is to reduce the temperature of all the air in the chest. The drippings from the tank flow into the pan *f*, from whence they are carried off by a waste-pipe.

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

In a refrigerator having a tank divided into compartments, the combination of the pipe *g* communicating with the vertical pipes *c*, with the pipes *h* communicating with the chest A, and the pipes *g*, all arranged to operate substantially as described, for the object specified.

JOSEPH K. MILLS.

Witnesses:

T. A. GREATORREX,
WM. D. TODD.