

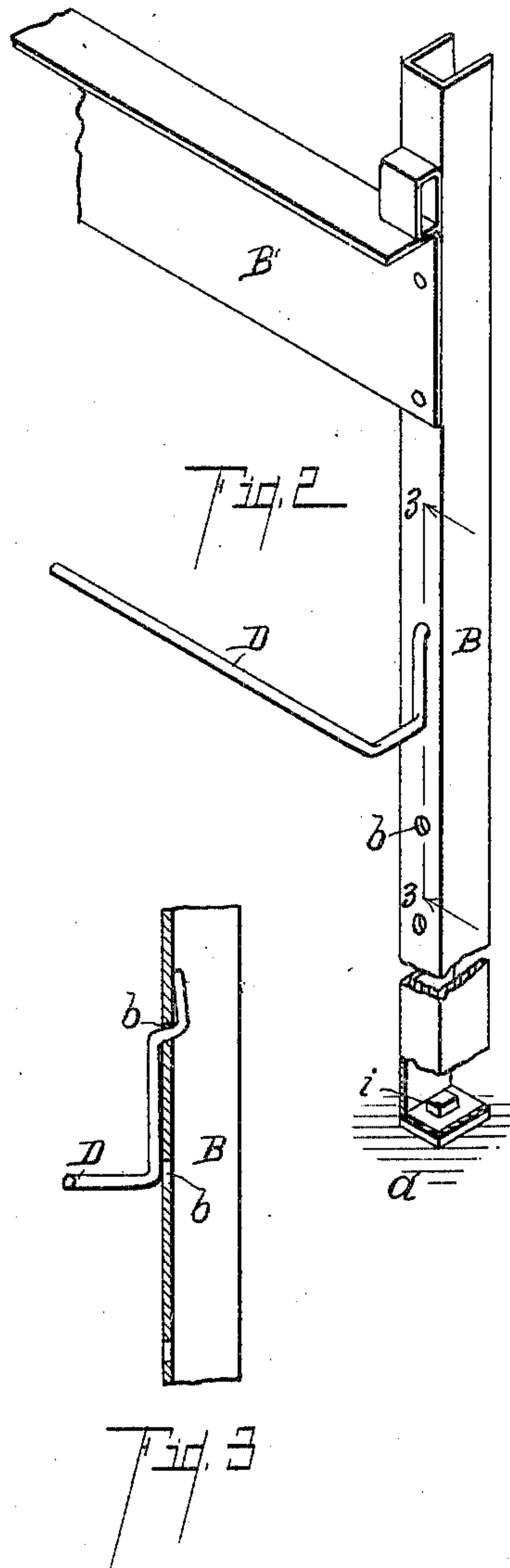
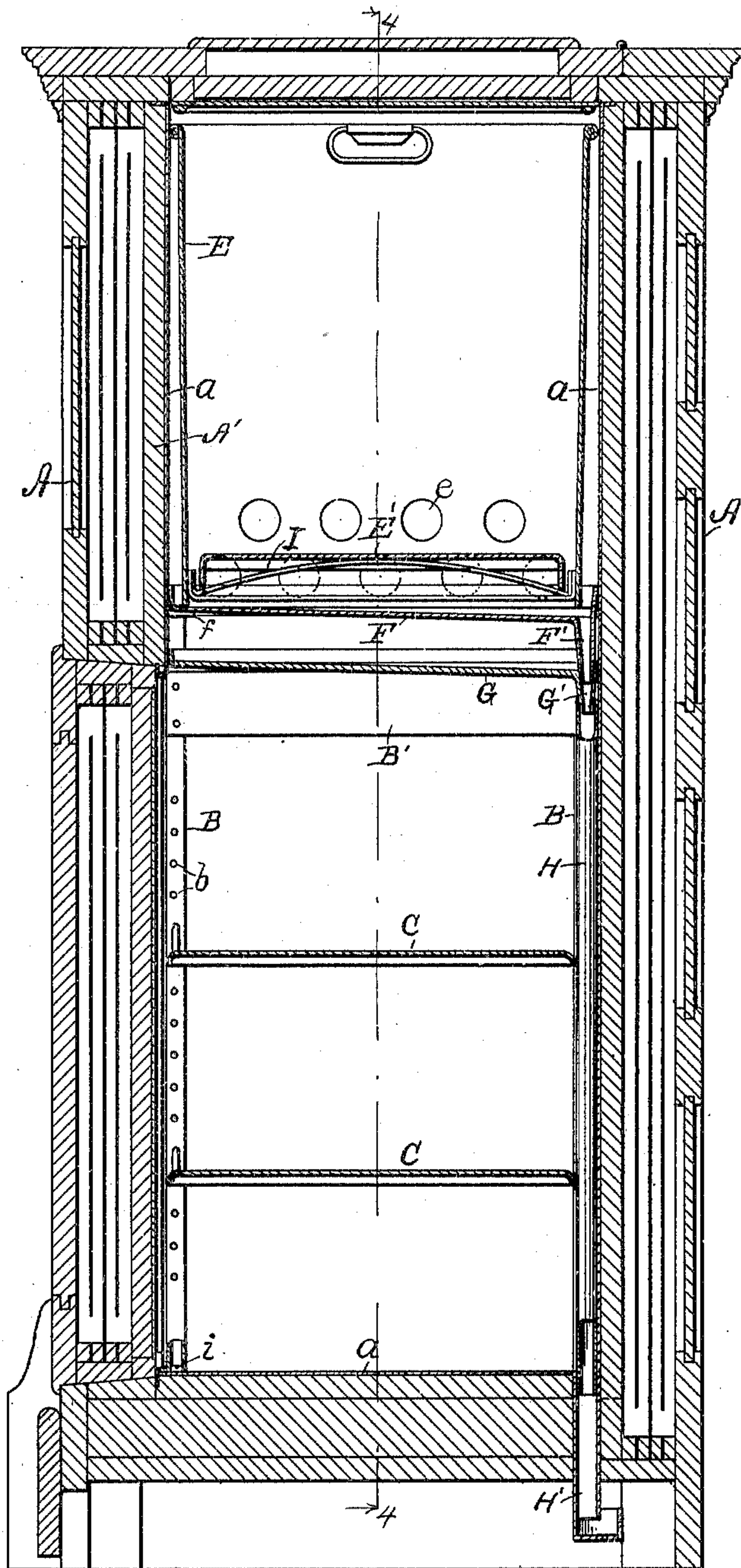
No. 817,136.

PATENTED APR. 3, 1906.

G. W. WALLICK.  
REFRIGERATOR.

APPLICATION FILED FEB. 19, 1903.

2 SHEETS—SHEET 1.



Witnesses:

*Otto A. Earl*  
*Ernest A. Teller*

Inventor,

*G. W. Wallick*  
By *Fred L. Chappell*  
Att'y

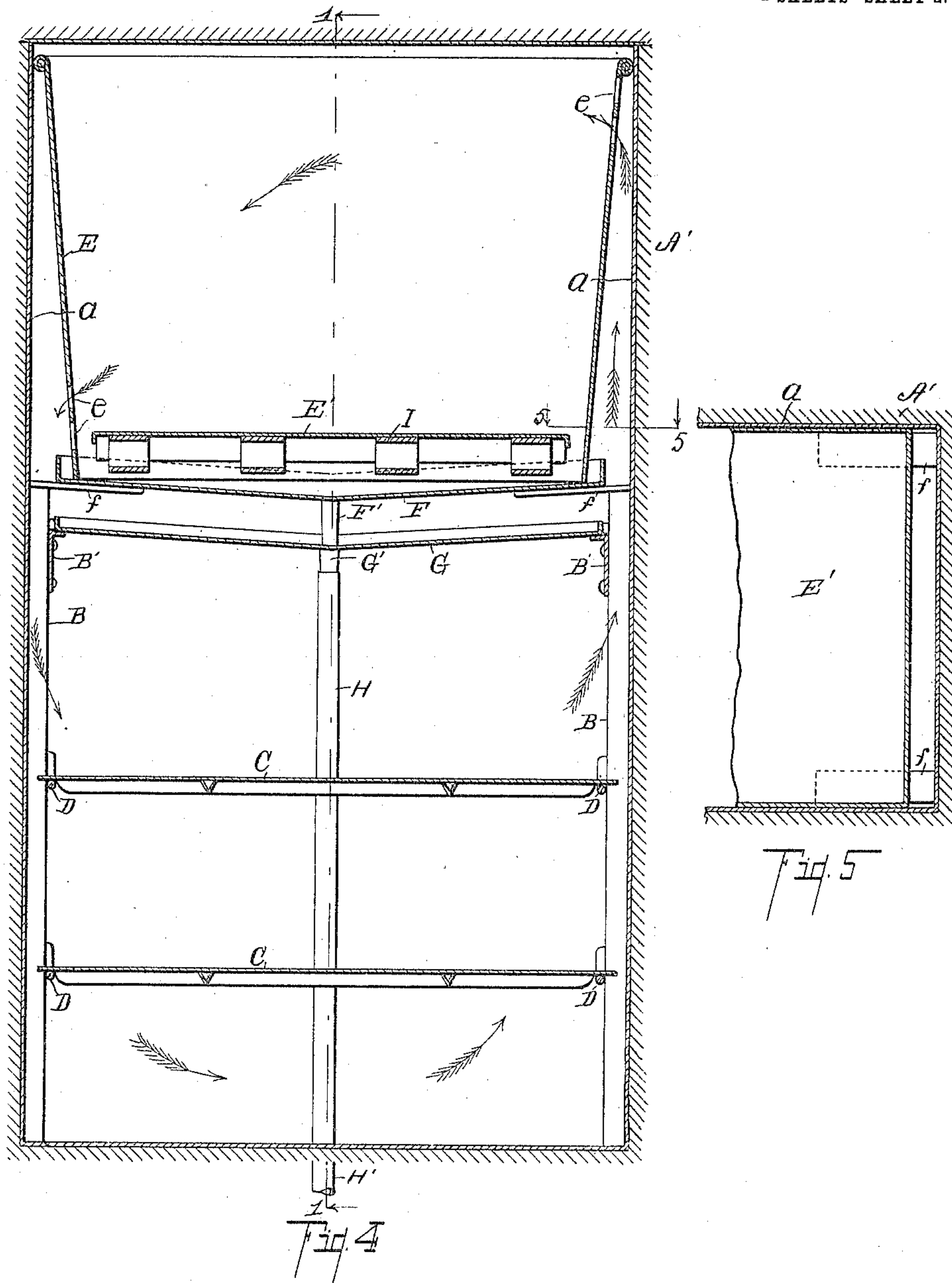
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*Otto A. Earl*  
*Ethel A. Fuller*

Inventor,

*George W. Wallick*  
By *Frederick L. Chappell*  
Att'y.



# UNITED STATES PATENT OFFICE.

GEORGE W. WALLICK, OF STURGIS, MICHIGAN.

## REFRIGERATOR.

No. 817,136.

Specification of Letters Patent.

Patented April 3, 1906.

Original application filed November 6, 1902, Serial No. 130,274. Divided and this application filed February 19, 1903. Serial No. 144,068.

*To all whom it may concern:*

Be it known that I, GEORGE W. WALLICK, a citizen of the United States, residing at the city of Sturgis, in the county of St. Joseph and State of Michigan, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification.

This invention relates to improvements in refrigerators.

The objects of the invention are, first, to provide an improved interior construction of refrigerator in which the parts may be readily and separably assembled, whereby the whole can be perfectly cleansed with a minimum amount of labor; second, to provide improved supporting means for the various parts of the interior of refrigerators; third, to provide an improved construction and arrangement of the ice-supporting rack, drainage means, and traps for a refrigerator; fourth, to provide an improved means of distributing or circulating the air within the refrigerator.

Further objects will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly described, and pointed out in the claim.

A structure embodying the features of my invention is fully illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a detail vertical sectional view from the front to the rear of a refrigerator embodying the features of my invention, taken on a line corresponding to line 1 1 of Fig. 4, showing the details of arrangement of the parts, construction of the drainage, and the trap. Fig. 2 is an enlarged detail perspective view of one of the supporting-standards within the refrigerator, the flange for the ice-rack and upper parts appearing above with my adjustable shelf-support appearing below. Fig. 3 is a detail vertical sectional view taken on a line corresponding to line 3 3 of Fig. 2, showing the details of arrangement of the connecting means for my improved shelf-support. Fig. 4 is a detail vertical sectional view taken on a line corresponding to line 4 4 of Fig. 1, the exterior casing being indicated in conventional form. Fig. 5 is a detail view taken on line 5 5 of Fig. 4 to show the relation of the parts.

In the drawings, the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, the body of the refrigerator is made up of the outer shell A and the inner shell A', of any suitable lumber or material, the same being separated, so as to form hollow walls. The interior of the refrigerator is suitably lined with zinc, as *a*, perfectly smooth and plain. The cover is also provided with a suitable air-chamber and the usual packings around the same. The door is also made up of outer and inner walls to form an air-chamber within and has a lining to correspond with the inner lining of the refrigerator.

In place of packing the walls of the refrigerator with a mineral material or sawdust or other non-conducting material I especially construct the same to secure the circulation of the cold air within the same to distribute the cold evenly throughout. This I accomplish by dividing the air-spaces within the outer walls and door by a vertical partition half-way between the outer and inner walls A A', which entirely separates the air-space within the hollow walls, making two distinct compartments. I then divide each of these air-spaces by similar vertical partitions half-way between the central partition and the outer and inner walls. These partitions, however, are arranged at the top and bottom to leave an open space, the object of which is to insure circulation. With the air-spaces arranged in this way it is obvious that when the air opposite the ice-box within the air-spaces becomes chilled it will drop to the bottom, and in so doing the warmer air there will be displaced outwardly on the outside of the partition, and consequently a thorough circulation which evenly distributes the cold air is insured. The door is provided with similar partitions within its hollow walls, so that the same circulation occurs there. This insures an even and thorough airing of the whole interior wall of the refrigerator, so that consequently there is no sweating of the interior due to the circulation of air from a warmer part to a colder part, as very often occurs on the inside of refrigerators of the usual construction. This wall or casing structure is fully described and claimed in



my application for patent filed November 6, 1902, Serial No. 130,274, of which this is a divisional application.

Within the casing I provide four standards 5 B with cross-pieces B' to receive and support the drip-tray G, beneath the ice-chamber. The drip-tray F rests upon the strip *f*, projecting from the tops of the standards. The standards engage and are held in position 10 by suitable pins *i'* in the bottom of the refrigerator. Suitable shelves C, preferably formed of sheet metal, are provided. The shelves C are supported on hangers D, made of bent wire, which enter perforations *b* in the 15 standards B and are kinked inwardly and then outwardly to properly engage the same and form effective supports. As many may be provided as desired, two being illustrated in the drawings. The usual trap H' is pro- 20 vided beneath the refrigerator, and a tube H is removably supported at the back of the refrigerator by a downwardly-extending tube G' from the drip-tray G. A suitable ice-pan E is provided which contains perforations *e* 25 at one side and toward its bottom and toward its top on the opposite side to insure circulation of air through the ice-chamber and down through the provision-chamber, the circulation being indicated by arrows in 30 Fig. 1. The bottom E' of the ice-tray is supported by truss-like supports I, (see Figs. 1 and 4,) and the whole is supported or rests in the tray F. The tray F substantially fits the interior of the refrigerator in one di- 35 mension, so that the air is made to circulate

through the openings *e* in the ice-pan down through the provision-chamber. The tray F has a downwardly-extending pipe F' for discharging the water down through the pipe H to the trap H' below. From this it will 40 be readily understood that all of the parts within the refrigerator are removable. The ice-pan can be lifted out by suitable handles. All the other parts merely rest the one upon the other, so that they, including the shelves, 45 can all be removed and thoroughly cleansed and scalded, if desired, when the inside of the refrigerator will be found to be a perfectly-smooth box and can be readily and completely cleansed. 50

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

In a refrigerator, the combination of a box-like structure; removable interior standards 55 retained at their bottoms by suitable pins; detachable shelves on the said standards; cross-bars coupling the tops of said standards together in pairs forming ledges for the drip-trays; an ice-pan supported on said 60 standards, all coacting for the purpose specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

GEORGE W. WALLICK. [L. s.]

Witnesses:

H. W. HAGERMAN,  
E. E. TEALER.