

No. 846,873.

PATENTED MAR. 12, 1907.

E. C. STRAYER,
REFRIGERATOR.

APPLICATION FILED SEPT. 6, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

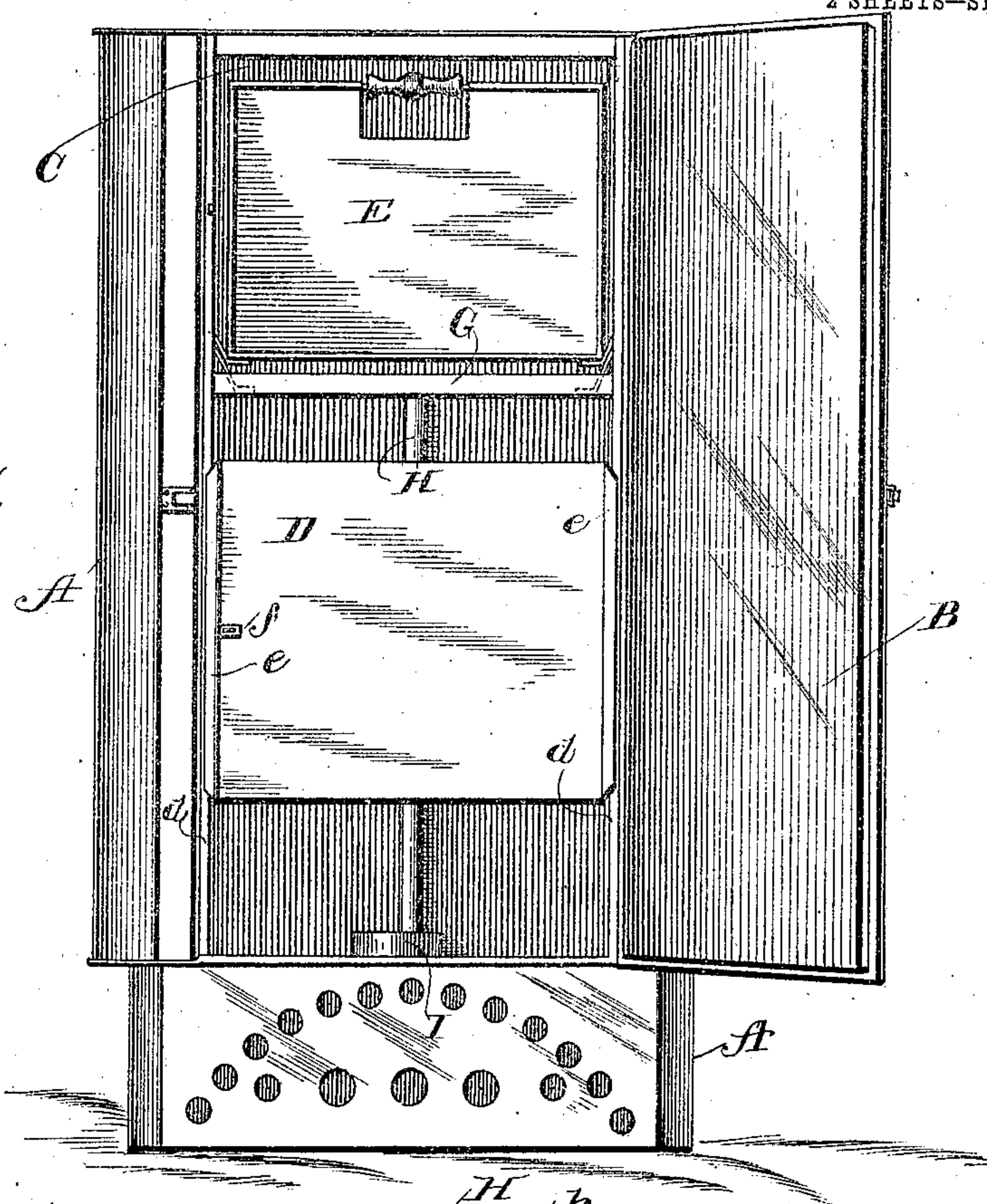
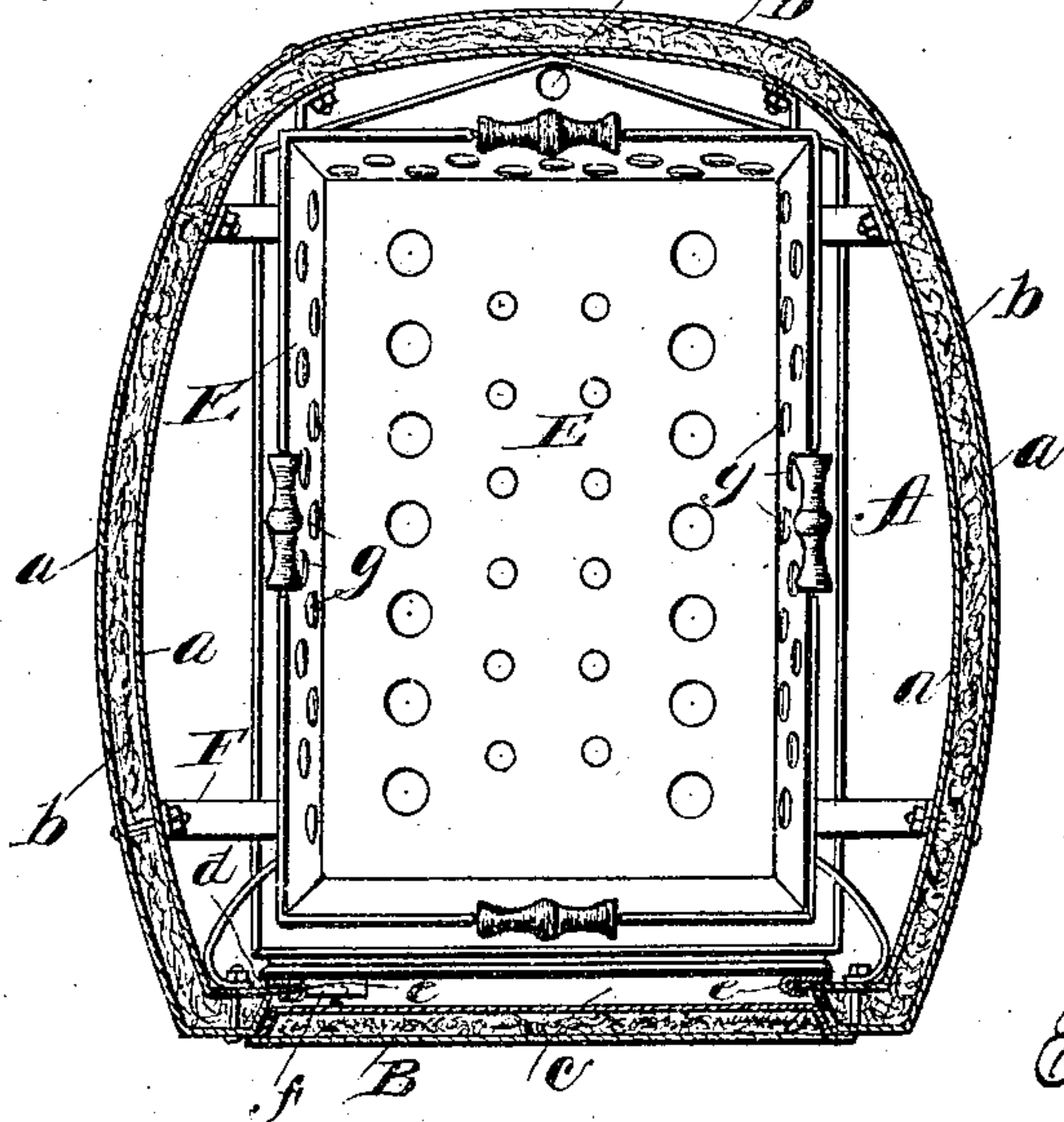


Fig. 2.



Witnesses
R. C. Wilson
T. E. Turpin

By

Inventor
E. C. Strayer
James Phuhly
Attorney

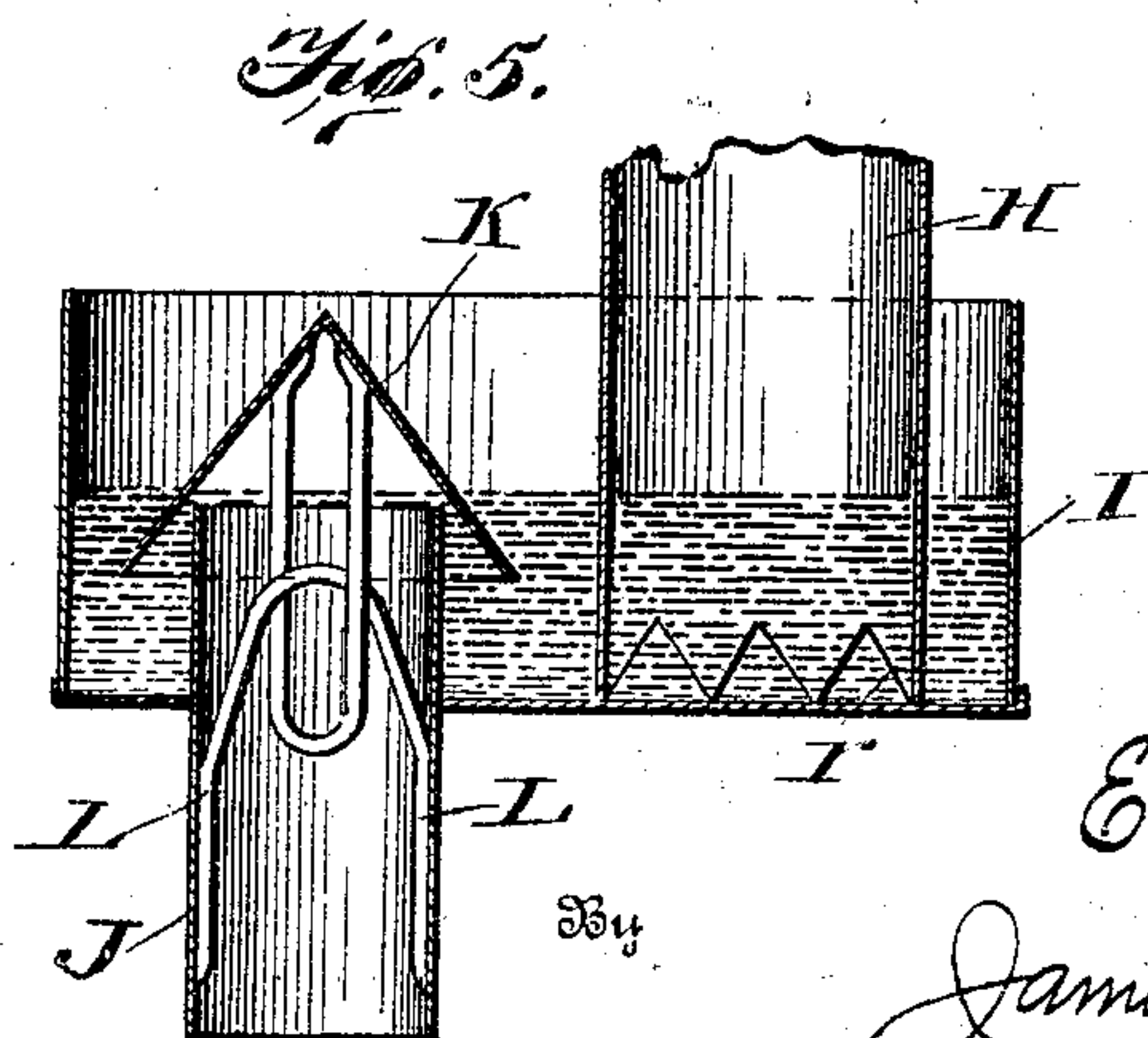
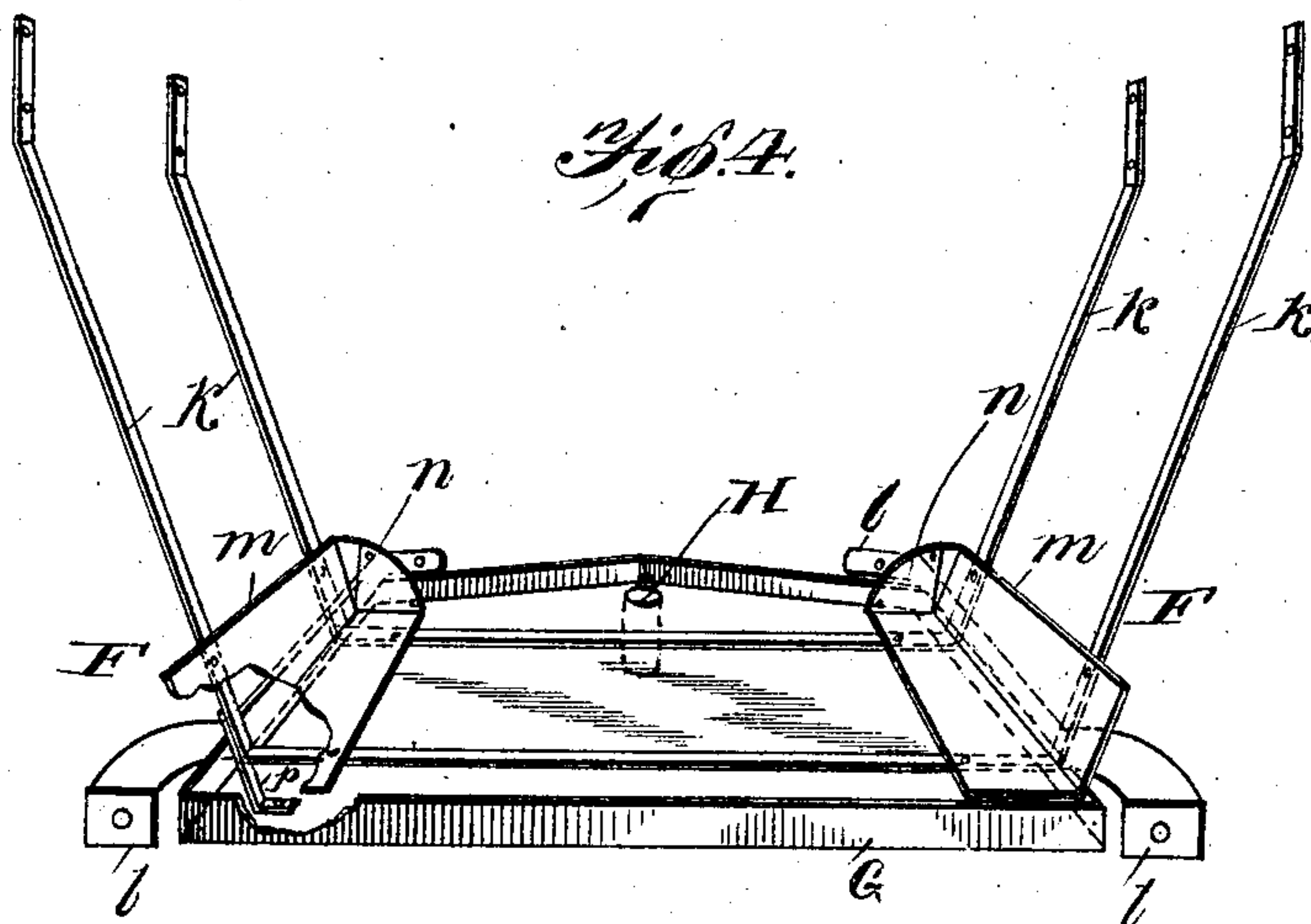
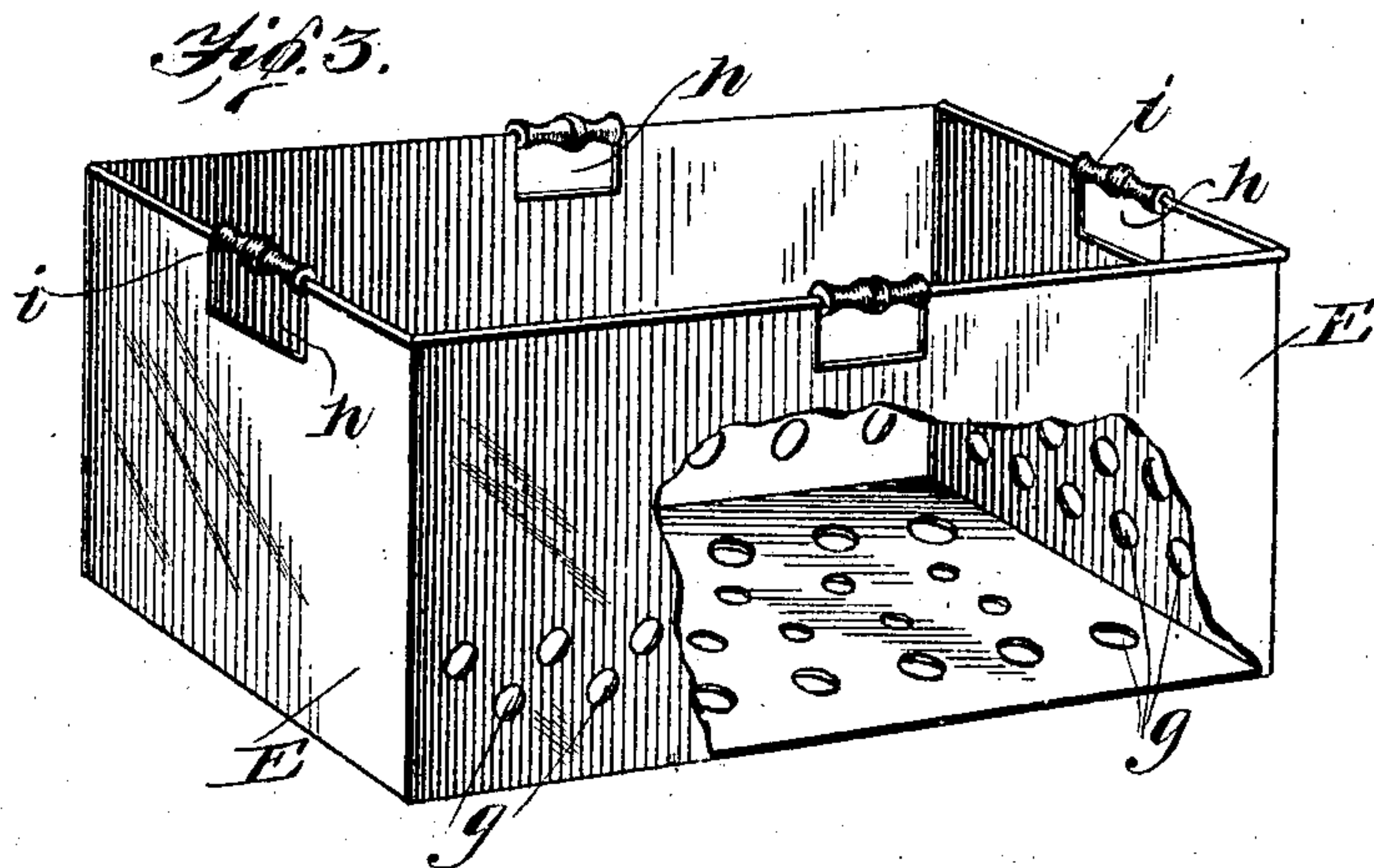
No. 846,873.

PATENTED MAR. 12, 1907.

E. C. STRAYER.
REFRIGERATOR.

APPLICATION FILED SEPT. 5, 1906.

2 SHEETS—SHEET 2.



Witnesses
R. C. Wilson.
T. E. Turpin

By

Inventor
E. C. Strayer.
James J. Shuck
Attorney

UNITED STATES PATENT OFFICE.

EBER C. STRAYER, OF CRESCO, IOWA.

REFRIGERATOR.

No. 846,873.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed September 5, 1906. Serial No. 333,387.

To all whom it may concern:

Be it known that I, EBER C. STRAYER, a citizen of the United States, residing at Cresco, in the county of Howard and State of Iowa, have invented new and useful Improvements in Refrigerators, of which the following is a specification.

My invention relates to improvements in refrigerators; and it has for one of its objects to provide a refrigerator embodying a construction that will permit of the ice-receptacle being readily removed from and replaced in the refrigerator-body, this in order that the supply of ice in said receptacle may be quickly and conveniently replenished when necessary.

Another object of the invention is the provision of a refrigerator embodying a trap calculated to permit water to freely pass from the interior of the refrigerator, while precluding the possibly of air gaining access to such interior through the drain-conduit.

Other novel and advantageous features of my invention will be fully understood from the following description and claim when the same are read in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of the refrigerator constituting the present and preferred embodiment of my invention as the same appears when the main door is opened and the door of the ice-compartment is slid down to permit of the ice receptacle or drawer being removed from and replaced in the ice-compartment. Fig. 2 is a horizontal section taken in a plane above the ice receptacle or drawer and illustrating both doors as closed. Fig. 3 is a broken perspective view of the ice receptacle or drawer removed. Fig. 4 is a detail broken perspective view illustrating the frame for supporting the ice-receptacle and the drip-pan attached to said frame. Fig. 5 is a vertical section of the trap for preventing air from entering the refrigerator through the door-conduit.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is the body of my novel refrigerator, which preferably comprises inner and outer metallic walls *a* and packing *b*, interposed between said walls, and is provided with a front opening *c* extending throughout its height and also with vertical flanges *d* at opposite sides of the opening *c*, the said

flanges being preferably in line with the inner wall *a*, as best illustrated in Fig. 2, for a purpose which will presently be pointed out.

B is the main door of the refrigerator, which is hinged at one side to the body A, so as to control the opening *c*.

C is an ice-compartment provided in the upper portion of the body A, and D is a vertically-sliding door for closing said compartment. The said door D is preferably of galvanized iron or other suitable metal, and is provided at its side edges with vertical grooves *e*, which receive the flanges *d*, Fig. 2, whereby it will be seen that the door may be readily moved down to open the ice-compartment and up to close said compartment. The door D is provided at *f* with a suitable bolt, which when the door is in its raised position is designed to be positioned in a keeper in the body A, with a view of retaining the door in its raised position.

E is the removable ice-receptacle of the refrigerator and F is the frame for supporting said receptacle. As best shown in Fig. 3, the receptacle E is provided with lower openings *g* and upper openings *h* for the circulation of air, and it is also provided at its opposite ends with handles *i* to permit of its being conveniently carried and moved into and out of the compartment C. The supporting-frame F for the ice-receptacle E is, as best shown in Figs. 2 and 4, made up of hangers *k*, connected at their upper ends to the body A, horizontal brace-bars *l*, connected to the lower portions of the hangers *k* and also connected at their rear ends to the rear wall of the body A and at their forward ends to the front wall of said body A, and guides *m*, of angular form in cross-section, connected to the hangers *k*, so as to receive the receptacle E between them, and having stops *n* at their inner ends designed to limit the inward movement of the said receptacle E.

In virtue of the construction described it will be apparent that when the door D is unfastened and lowered the receptacle E may be readily drawn out of the compartment C to be filled with ice, and it will also be apparent that after the receptacle E is filled it may be conveniently replaced in compartment C, after which the door D may be moved to and fastened in its closed position to prevent undue escape of cold air from the said compartment C when the main door B is open.

Below the frame F is located a drip-pan G,

the office of which is to catch the water that drops from the ice-receptacle E. This drip-pan G is connected to the hangers *k* and brace-bars *l* of the frame F through the medium of straps *p*, as best shown in Fig. 4.

H, Figs. 1, 4, and 5, is a conduit which is designed to receive water from the pan G and extends from said pan down to a point adjacent to the bottom of the refrigerator-body and has its lower end notched, as indicated by *r*.

I is a pan which receives the lower end of the conduit H and is designed to contain water.

J is a discharge-pipe which extends from a point within the pan I down through the bottom thereof, and K is a cap which rests over the upper end of pipe J with its edge disposed in the water and is removably connected to said pipe and supported above the same by the resilient legs L, which rest within the pipe K, as shown, and exert pressure against the same.

The parts just described constitute the air-trap of my refrigerator, and it will be apparent that the said trap is highly efficient in preventing air from reaching the interior of the refrigerator through the pipe B. It will also be apparent that because of the manner in which the cap K is connected to the pipe J said cap may be quickly and easily removed when the same is necessary incident to cleaning of the refrigerator.

The construction herein illustrated and described constitutes the preferred embodiment

of my invention; but I desire it understood that in practice such changes in the form, construction, and relative arrangement of parts may be made as fairly fall within the scope of my invention as claimed.

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

A refrigerator comprising a body containing an ice-compartment and having a front opening and also having vertical flanges at opposite sides of said opening, a main door controlling the opening, a vertically-sliding door having grooves receiving the flanges of the body and arranged in one position to close the ice-compartment, hangers arranged in the ice-compartment and connected at their upper ends to the body, guides, of angular form in cross-section, arranged on and connected to said hangers and having stops at their inner ends, brace-bars connected to the hangers and fixed to the rear and front walls of the body, a drip-pan arranged below and connected to the hangers and brace-bars and having a discharge-pipe, and an ice-receptacle removably arranged in the ice-compartment and on and between the said angular guides.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

EBER C. STRAYER.

Witnesses:

GEORGE A. BARKER,
A. L. WHITE.