

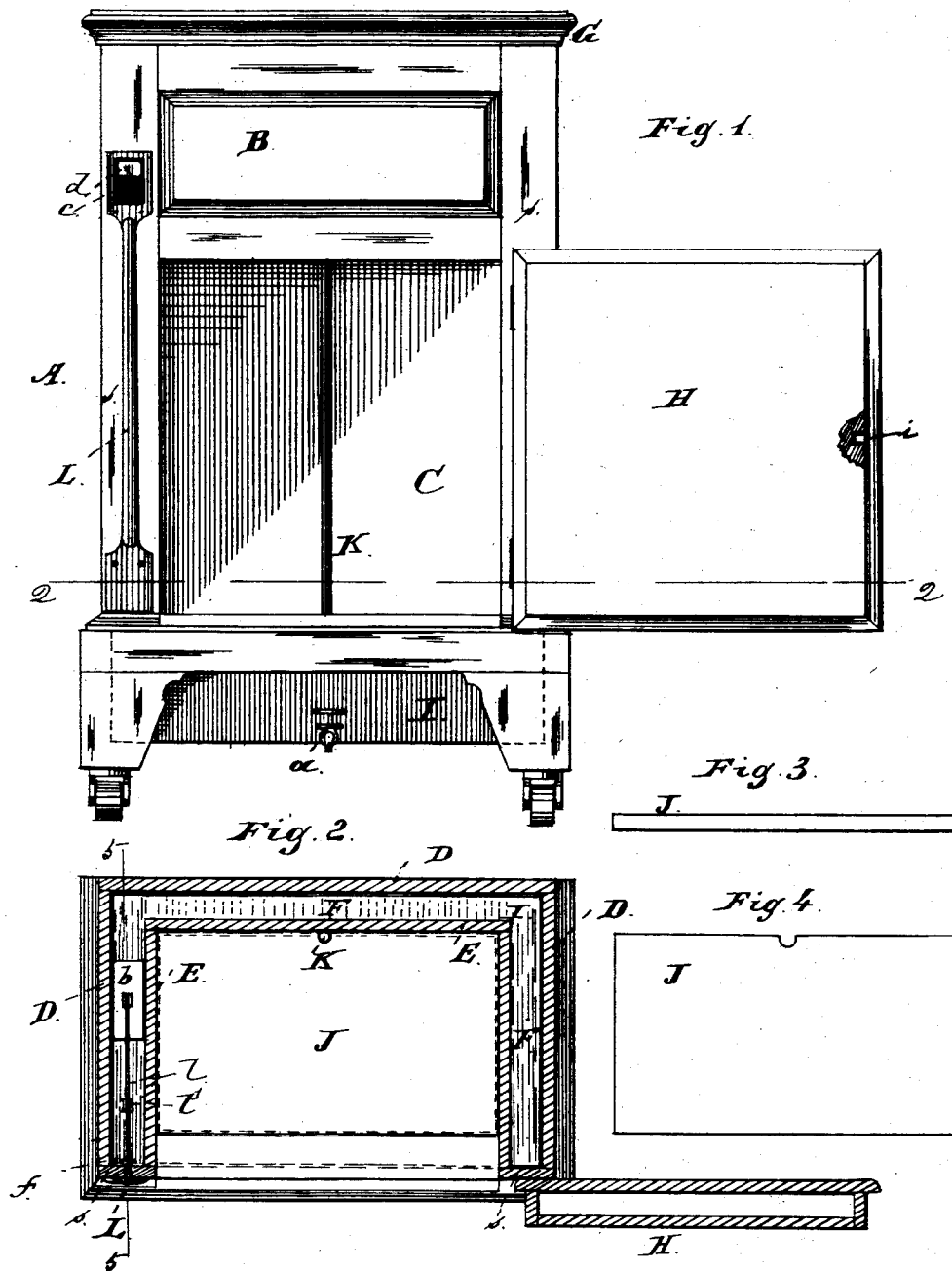
(No Model.)

2 Sheets—Sheet 1.

F. SCHUBERTH.
FLOAT FOR REFRIGERATORS.

No. 525,668.

Patented Sept. 4, 1894.



Witnesses
Thos. Kandler.
Wm. Arends.

Inventor
Mark Schulerth
 By *his* Attorney
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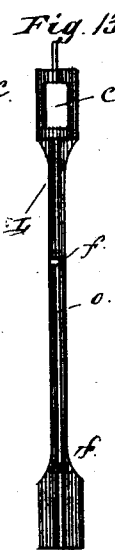
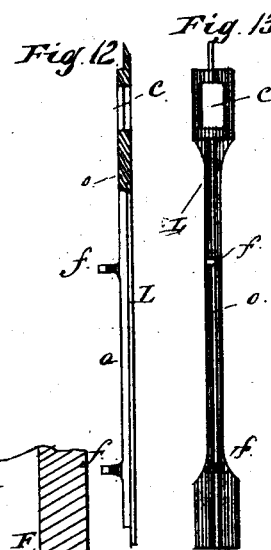
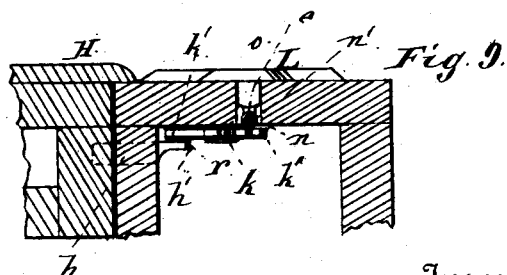
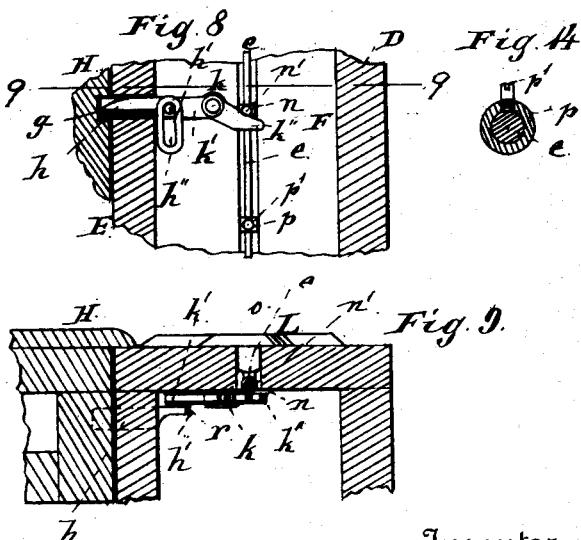
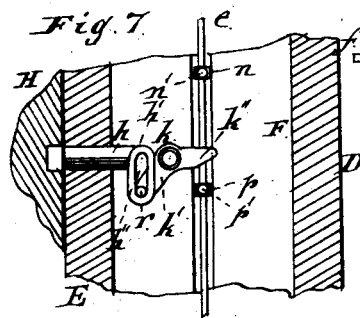
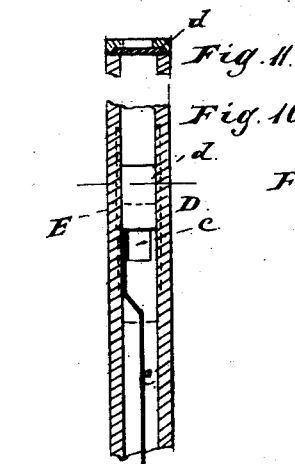
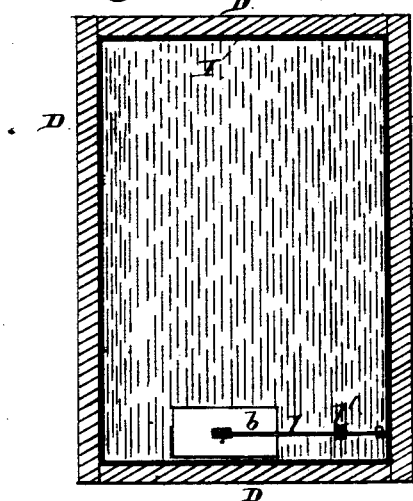
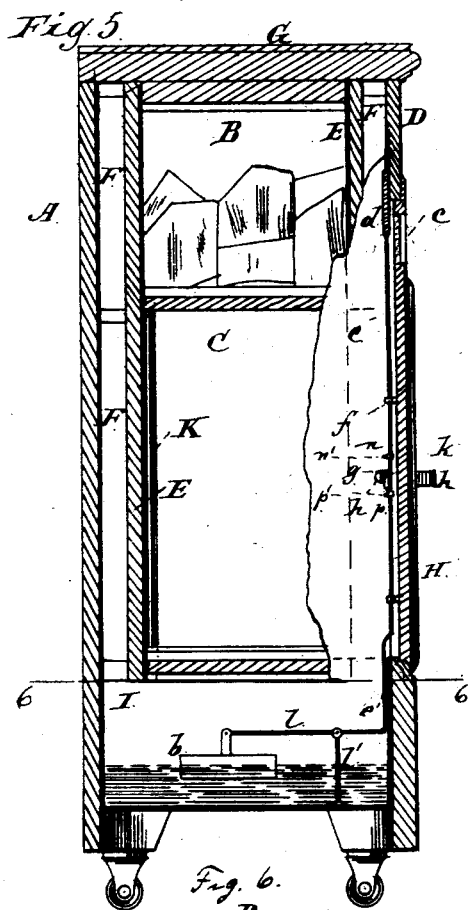
(No Model.)

2 Sheets—Sheet 2.

F. SCHUBERTH.
FLOAT FOR REFRIGERATORS.

No. 525,668.

Patented Sept. 4, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK SCHUBERTH, OF CHICAGO, ILLINOIS.

FLOAT FOR REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 525,668, dated September 4, 1894.

Application filed July 31, 1893. Serial No. 482,026. (No model.)

To all whom it may concern:

Be it known that I, FRANK SCHUBERTH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Refrigerators, of which the following is a specification.

My invention relates to improvements in refrigerators for domestic use. The refrigerators for domestic use when in operation are often the cause of great annoyance and inconvenience, as any overflowing of the water accumulated from the melting ice in the drip-pan, may do considerable damage to the premises by spoiling carpets, ceilings, wall-paper, &c. To avoid this, is the object of my invention. The same will provide means so as always to keep the attendant of the refrigerator in full knowledge as to the quantity of water in the drip-pan, and thus to enable him to withdraw the water in time from the drip-pan by a discharge valve and thus prevent it from flowing over.

To this end my invention consists in firmly securing a drip-pan directly beneath the provision chamber, and in providing the refrigerator with a signal or target indicating the quantity of water in the drip-pan, said signal to be operated by a rod sustained by a float in the water of the drip-pan. And it also consists in providing the refrigerator with an automatic locking device, operated by a rod sustained by a float in the water of the drip-pan. And it further consists in the combination of said automatic locking device and said signal, both operated by a rod sustained by a float in the water of the drip-pan, and in the combination of parts, all of which as hereinafter will be more fully described. I accomplish this by the devices illustrated in the accompanying drawings, in which—

Figure 1, represents a front view of a refrigerator, with the door of the provision chamber open. Fig. 2, is a horizontal sectional view of the same at the line, 2—2, in Fig. 1. Figs. 3 and 4, are an edge and a plan view, respectively, of the cover of the drip-pan, forming at the same time the bottom of the provision chamber. Fig. 5, is a vertical sectional view, at the line 5—5, in Fig. 2, with the wall covering of the ice and provision chamber mostly broken away. Fig. 6, is a

horizontal section at the line 6—6 in Fig. 5. Figs. 7 and 8, are enlarged plan views inside of the refrigerator, showing the locking device. Fig. 9, is a sectional view, at the line 9—9 in Fig. 8. Figs. 10 and 11, are details in section, showing a plan view of the signal and a cross-section thereof. Figs. 12 and 13, are an edge and plan view of a plate, connected with a signal. Fig. 14 is a detail, showing one of the stops of the operating rod.

Similar letters refer to similar parts throughout the several views.

A, represents a refrigerator of any ordinary construction, having the ice chamber B, and the provision chamber C.

D, and E, are the exterior and interior walls, respectively, of said refrigerator and form the hollow spaces F, surrounding the ice chamber B, and provision chamber C.

G, designates the cover of the ice chamber, and H, the door of the provision chamber. They may be of any well known construction and arranged in any suitable manner.

I, is the drip-pan, which is firmly secured to the inside of the exterior walls D, right beneath the provision chamber in any suitable manner, and thus it occupies as to area the largest possible space and is of the greatest possible capacity for the water to accumulate therein from the melting ice in the ice chamber. The drip pan I, in this way, may be made as to capacity fully corresponding to the capacity of the ice-chamber B.

K, is a drip-pipe connecting the ice-chamber B, with the drip-pan I, so that the water from the melting ice passes through said pipe into the drip-pan. Said drip-pipe K, passes down along the rear interior wall of the refrigerator inside of the provision chamber.

J, is the cover of the drip-pan, being removable, and forming at the same time the lower bottom of the provision chamber.

a, is a discharge valve or faucet, with which the drip-pan I, is provided, and b, a float, sustained on the water in the drip-pan.

L, is a plate of metal, longitudinally set into one of the stiles, s, meeting with the opening edge of the door of the provision chamber. The same has at its top an opening c, receiving a glass-pane (see Figs. 12 and 13), and is provided with rib o, fitting into a groove of the stile s to which it is secured.

d, is a slide, sliding up and down, behind the opening *c*. As shown in the drawings (see Fig. 11) it is dove-tailed in the stile, *s*, but it may be arranged in any other suitable manner. It is becoming visible through the glass in the opening *c* and serves then as a signal or target, and is operated by a rod, *e*, at the top of which it is rigidly attached in any suitable manner. This rod *e*, extends down to the float *b*, sustained onto the water in the drip pan and is jointed by a connecting link *e'*, to one end of a lever *l*, having its fulcrum upon an upright or post *l'*, extending up from the bottom of the drip-pan *I*, while its other end is jointed to an ear upon the float *b*. There are guides *f*, on the rib *o*, of the plate *L*.

g, is a hole in one of the interior walls *E*, in which a bolt *h*, rests, and *i*, is a hole in the opening edge of the door *H*, receiving the bolt *h*, when the refrigerator is in a locked condition. The bolt *h*, has an extension *h'*, provided with a slot *h''*. A bell-crank *k*, is pivoted inside of the hollow spaces to one of the stiles, *s*, meeting with the opening edge of the door, at *x*, and has one of its arms *k'*, provided with a pin *r*, working in the slot *h''* of the bolt, while the other arm *k''*, is actuated upon by means of stops on the rod *e*. As shown in the drawings the rod *e*, is provided with collars *n*, and *p*, having pins *n'*, and *p'*. The collars may be adjustable by said pins *n'* and *p'*, serving thus as set-screws and stops (see Fig. 14).

By the foregoing description, it will readily be understood, that according to the rising or falling of the water in the drip-pan the float *b*, will rise or fall, and thus by means of the rod *e*, connected with the signal and float, as described, will operate said signal, visible through the glass in the opening *c*, and verify the amount of the water in the drip-pan. As shown in Figs. 5, and 7, the slide *d*, closes up about half the opening *c*, and the provision chamber is still accessible the door still being unlocked. But as the water is rising in the drip-pan, the float *b*, is rising, thereby lowering that end of the lever *l*, jointed to the rod *e*, by the connecting link *e'*. Consequently the rod *e* will descend, pulling down the slide *d*, by degrees more and more until covering up the opening *c*, thus notifying, that the water in the drip-pan ought to be

withdrawn. The stop *n'*, may be so set, after said warning or signal is given, and the drawing off the water by the discharge valve *a*, is neglected, as to actuate upon the arm *k''*, of the bell-crank, *k*, thereby pushing the bolt *h*, into the opening or hole *i*, in the door *H*, thus locking the door to the provision chamber. Now, as the drip-pan will be of such capacity as to warrant a reasonable time, say a day, during which access to the provision chamber may be required, necessity compels the attendant to let the water off by the discharge valve *a*, it being the only relief allowing access to the provision chamber; for when the water is falling in the drip-pan, the float will go down and the rod *e*, ascend, and the stop or pin *p'*, will strike the arm *k''*, of the bell-crank *k*, from below, and by lifting the same disengage the bolt *h*, and hole *i*. If desirable a scale by degrees indicating the accumulation of the water in the drip-pan, may be arranged immediately near to the opening *c*, in front of the refrigerator.

The advantage of a refrigerator provided with my invention is obvious.

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

1. The combination with the door of a refrigerator, of a lock connected thereto, a drip pan within the refrigerator provided with an escape cock leading outside the refrigerator, a float within the pan, and a rod connecting the float with the lock bolt, so that the door is locked when the water rises in the pan, all substantially as described.

2. The combination with a refrigerator, of a drip pan, a float within said pan, an indicating signal connected to said float, and a lock operating to fasten the door of the refrigerator and operatively connected to the float, all substantially as described.

3. The combination with the inclosing casing of a refrigerator, of a door, a lock controlling the opening of said door, a drip pan within the refrigerator, and a float operatively connected to the lock of the door and in position to be raised by water in the drip pan, all substantially as described.

FRANK SCHUBERTH.

Witnesses:

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