

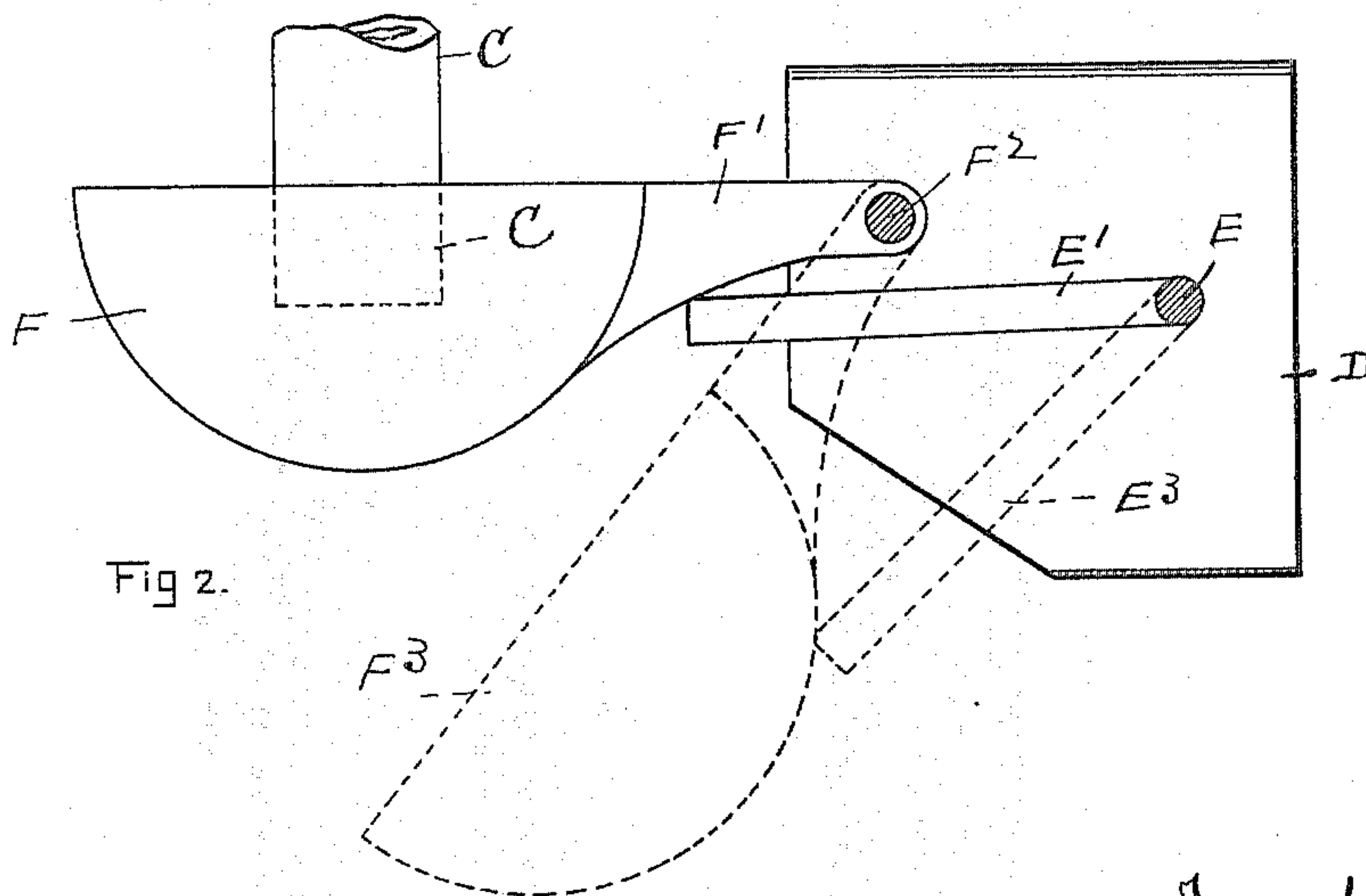
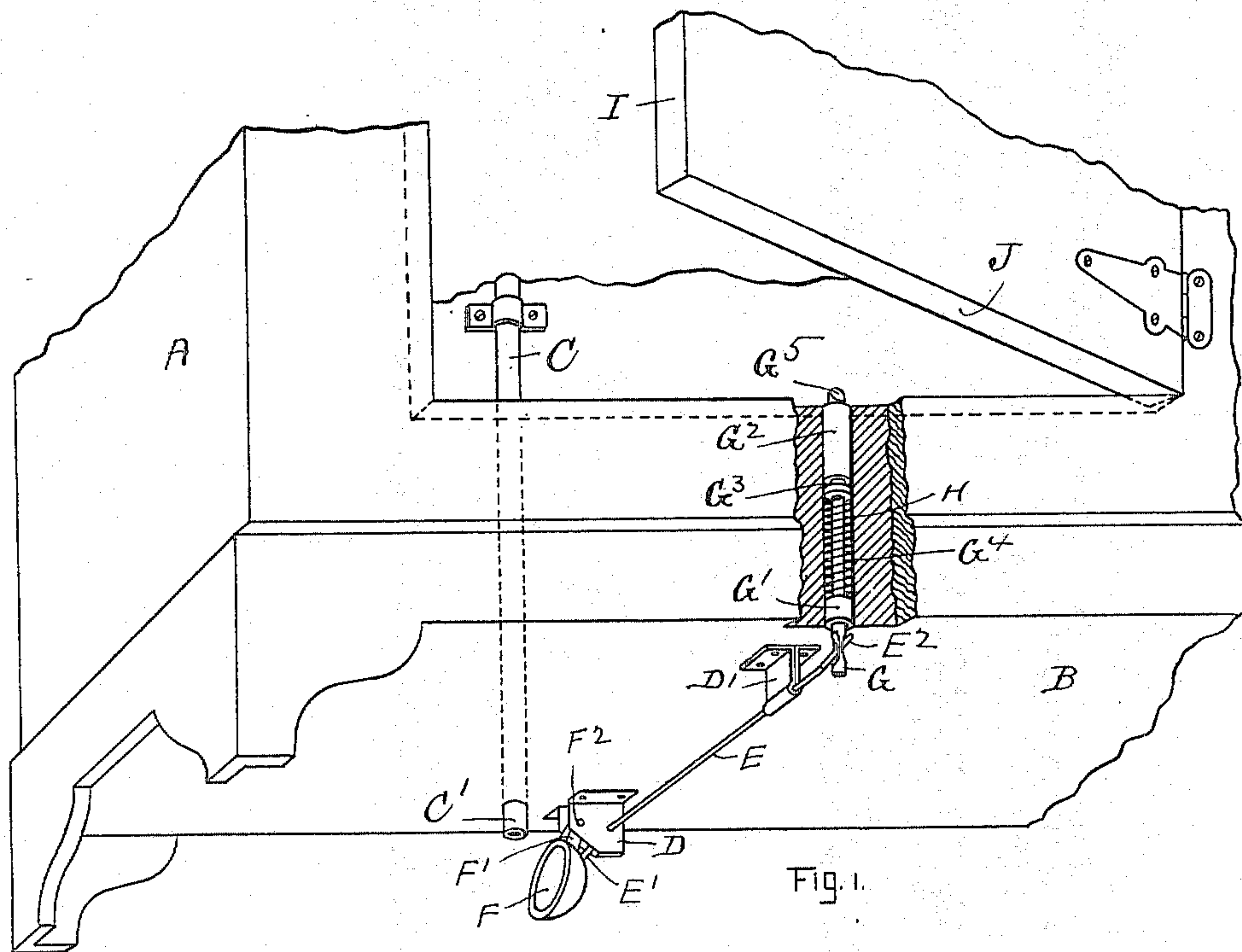
No. 640,486.

Patented Jan. 2, 1900.

H. N. PARKER.  
REFRIGERATOR TRAP.

(Application filed June 1, 1898.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## REFRIGERATOR-TRAP.

SPECIFICATION forming part of Letters Patent No. 640,486, dated January 2, 1900.

Application filed June 1, 1898. Serial No. 682,233. (No model.)

*To all whom it may concern:*

Be it known that I, HOMER N. PARKER, a citizen of the United States, and a resident of Winchendon, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Refrigerator-Traps, of which the following is a specification, accompanied by drawings forming a part of the same, in which—

Figure 1 is a perspective view of a portion of a refrigerator, showing my improved trap connected therewith; and Fig. 2 represents, on a larger scale, the end of the refrigerator drip-pipe and water-cup by which the end of the drip-pipe is sealed.

Similar letters refer to similar parts in both figures.

My invention has for its object to provide a trap for a refrigerator drip-pipe which will be automatically emptied by the opening and closing of the refrigerator-door, in order to prevent the accumulation of sediment in the trap and the clogging of the end of the drip-pipe, and it consists in the construction and arrangement of parts as hereinafter described, and pointed out in the annexed claims.

In Fig. 1 I have shown in perspective view so much of a refrigerator as is necessary to illustrate the construction and operation of my improved device, a portion of the front of the refrigerator having been broken away in order to disclose the spring-actuated spindle, which is depressed when the door is closed in order to raise the water-cup into operative position.

Referring to the drawings, A denotes the body of the refrigerator, and B the under side or bottom.

C denotes the drip-pipe, leading from the ice-chamber (not shown) and having its lower end C' projecting through the bottom of the refrigerator. Held in brackets D D', which are attached to the bottom of the refrigerator, is a rod E, capable of rocking in its bearings. Each end of the rod E is bent at right angles, forming radial arms E' E<sup>2</sup>. Beneath the end C' of the drip-pipe C is a water-cup F, having an arm F', which is pivoted at F<sup>2</sup> to the bracket D. The water-cup F is arranged, when raised, in a horizontal position to inclose the end C' of the drip-pipe C, as represented in Fig. 2, in order to hold the water discharged from the

drip-pipe and form a water seal, which prevents air from passing up the drip-pipe to the ice-chamber. The water-cup F is held in a horizontal position by the radial arm E', the outer end of which bears against the under side of the arm F', so that by rocking the rod E to raise the radial arm E' the water-cup F can be lifted and held in a horizontal position, as represented in Fig. 2. The radial arm E<sup>2</sup> at the opposite end of the rod E passes through a hole in the lower end of a vertically-sliding spindle G. The spindle G is held at its upper and lower end in the sleeves G' and G<sup>2</sup>, which are driven tightly into a hole H, bored in the refrigerator-front, so that the sleeves G' and G<sup>2</sup> will be held from longitudinal movement. Attached to the spindle G is a collar G<sup>3</sup>, and between the collar G<sup>3</sup> and the lower sleeve G' is a spiral spring G<sup>4</sup>, which presses the spindle G upwardly. The upper end of the spindle G is beveled at G<sup>5</sup> and projects into the door-opening when the door I is opened. By closing the door I the lower edge J of the door acts upon the beveled end G<sup>5</sup> of the spindle G to push it down against the tension of the spring G<sup>4</sup>, thereby rocking the rod E and raising the radial arm E', which carries the water-cup F into the horizontal position shown in Fig. 2, inclosing the lower end C' of the drip-pipe. When the door I is opened, the spindle G is released, allowing the spring G<sup>4</sup> to press it upwardly, thereby raising the radial arm E<sup>2</sup> and reversing the rocking motion of the rod E, which depresses the radial arm E', carrying it into the position indicated by the broken lines E<sup>3</sup>, Fig. 2, and allowing the water-cup F to fall by gravity into the position shown by the broken lines F<sup>3</sup>, Fig. 2. When the radial arm is depressed, the water-cup F is permitted to fall low enough to empty itself of water or any sediment that may have been accumulated therein. As soon as the door I is again closed the spindle G is pressed downwardly and the water-cup F is again raised into its horizontal position to act as a trap and form a water seal for the end of the drip-pipe. The closing of the door I serves to maintain the water-cup F in operative position as a seal for the drip-pipe, and everytime the door I is opened the water-cup is allowed to fall and empty itself.



I am aware that it is not new to employ a hinged water-cup with connected operative mechanism by which the cup could be emptied by an attendant, and I do not claim such  
5 a device broadly.

In my improved device the water-cup is emptied and brought into operative position again by the action of the refrigerator-door in opening and closing, thereby making the  
10 emptying of the water-cup incidental to the ordinary use of the refrigerator and no special attention by the attendant.

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

15 1. In a refrigerator, the combination with a swinging door, and a drip-pipe having its end projecting beneath the refrigerator, of a hinged water-cup arranged to fall by gravity and empty itself, and when raised in a horizontal position to inclose the end of said drip-  
20 pipe, and actuating mechanism connected with said cup and extending into the path of said swinging door, whereby the closing of said door will raise said cup into a horizontal  
25 position to seal the end of the drip-pipe, substantially as described.

2. In a refrigerator, the combination of a drip-pipe and a swinging door, of a hinged water-cup arranged to fall by gravity and  
30 empty itself and actuating mechanism extending into the path of the door, whereby the closing of the door will raise the water-cup into a horizontal position to seal the end of the drip-pipe and means for reversing said  
35 actuating mechanism when the door is opened and allow said water-cup to fall, substantially as described.

3. The combination with the drip-pipe of a refrigerator, of a hinged water-cup arranged,

when in a horizontal position, to inclose the  
40 end of said drip-pipe and to fall by gravity when released and empty itself, and means actuated by the refrigerator-door by which said water-cup is held in a horizontal position  
45 when said door is closed, substantially as described.

4. The combination with the drip-pipe of a refrigerator, of a hinged water-cup arranged when in a horizontal position to inclose the  
50 end of said drip-pipe and to fall by gravity and empty itself, a sliding spindle held in the refrigerator and provided with a beveled end projecting into the door-opening, a swinging  
55 door arranged, when closed, to strike said spindle and move it longitudinally, connected with said water-cup, and a spring by which said spindle is reversed when the door is opened, substantially as described.

5. In a refrigerator, the combination with  
60 a drip-pipe of a hinged water-cup arranged when in a horizontal position to inclose the end of said drip-pipe and to fall by gravity and empty itself, a rocking rod supported  
65 beneath the refrigerator and having a radial arm supporting said water-cup in a horizontal position, a sliding spindle operatively connected with said rocking rod and provided with a beveled end projecting into the path  
70 of the door in closing, and a spring applied to said spindle to reverse its motion when the door is opened, substantially as described.

Dated this 23d day of May, 1898.

HOMER N. PARKER.

Witnesses:

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