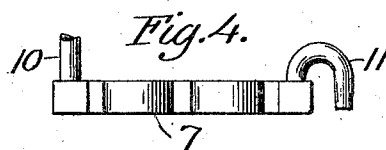
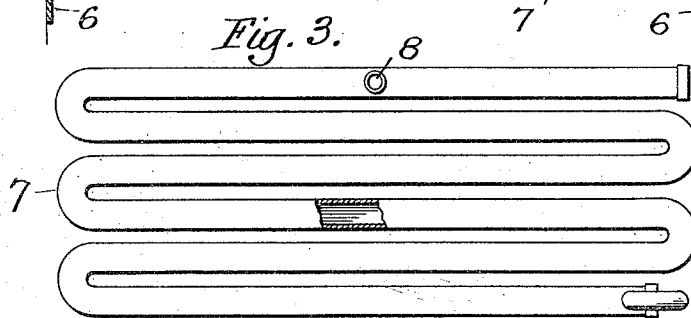
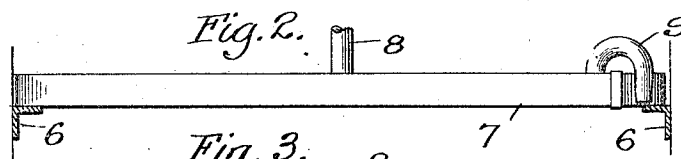
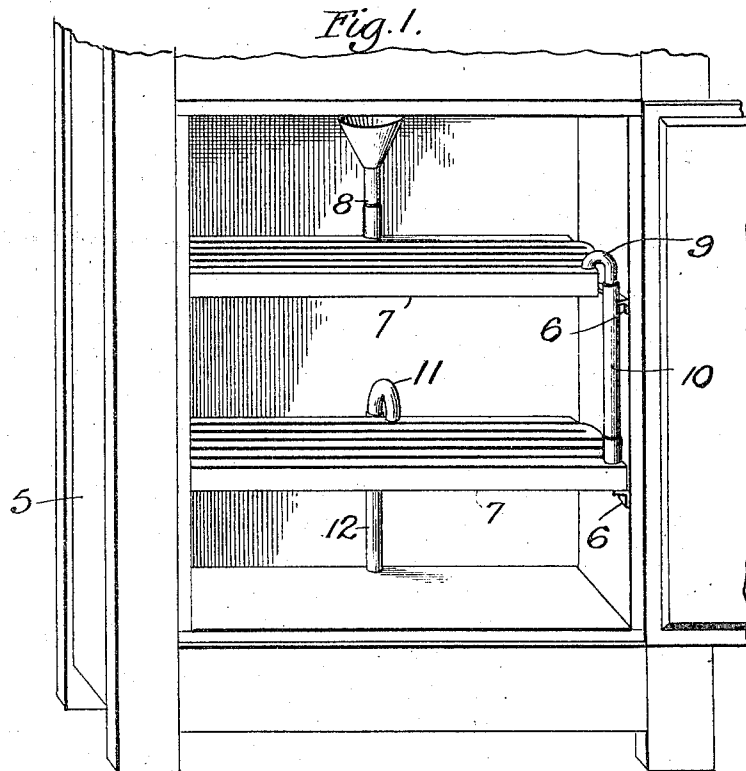


F. P. & H. D. LAYMAN.
REFRIGERATOR ATTACHMENT.

APPLICATION FILED AUG. 25, 1911. RENEWED JULY 22, 1913.

1,090,925.

Patented Mar. 24, 1914.



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REFRIGERATOR ATTACHMENT.

1,090,925.

Specification of Letters Patent.

Patented Mar. 24, 1914.

Application filed August 25 1911, Serial No. 645,998. Renewed July 22, 1913. Serial No. 780,574.

To all whom it may concern:

Be it known that we, FLORENCE P. LAYMAN and HIRAM D. LAYMAN, citizens of the United States, residing at Hoboken, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Refrigerator Attachments, of which the following is a specification.

This invention relates to refrigerators and more especially to shelving and similar attachments for refrigerators which are adapted to receive and carry the waste water resulting from the melting ice that is generally at a temperature much lower than the atmosphere and which may circulate through the shelving in order that the low temperature may be utilized for refrigerating as will be more fully described in the following specification, set forth in the claim and illustrated in the drawings, wherein,

Figure 1 is a view of the lower part of an ordinary refrigerator showing the attachment applied thereto. Fig. 2 is a side view of one of the sections of the attachment. Fig. 3 is a plan view of same. Fig. 4 is an end view of one of the sections.

The attachment is adapted to fit within the lower compartment of an ordinary refrigerator and to receive and utilize the water of the melting ice, but it is obvious that it may be used in other places for the purpose of reducing the temperature by means of the cool water which would otherwise be wasted.

In the lower compartment of the refrigerator 5 and on the usual cleats 6 are located the coils 7. These coils are shown as being square in cross section, but it is obvious that they may be of ordinary round pipe, or any other shape which may be found desirable. The flat surface of a square pipe, however, affords better opportunities for cooling the bottom of plates and dishes and the square construction is more readily manufactured. The ends of the coils are bent as shown but it is obvious that they may connect by other forms at each end, but it is preferable, however, to have the coils constructed so as to form one continuous pipe or tube, that the water which is received at the inlet pipe near one end may circulate through the entire pipe before reaching the outlet near the other end. The tubular shelves, coiled pipes or

other receptacles are of two or more types, one, having the inlet near its back and where a funnel or inlet 8 may be provided to receive the drippings from the usual outlet in the ice box above. After circulating the upper shelf, the water passes out by means of an overflow pipe 9 but only when the coil or shelf is filled to overflow. The overflow pipe 9 is tapered as shown in Fig. 2 and delivers the water into an upright pipe 10 into which its tapered end closely fits so as to prevent the release or leakage of cold water, and through the pipe 10 the water is conducted to the lower coil through which it circulates and finds an outlet by means of the overflow pipe 11, from which it is delivered into the outlet pipe 12 and drained off to any desired point. The outlets being lower than the stationary inlets, leakage or overflow is obviated and attachment and detachment is made easy and safe. On this principle any desired number of shelves may be arranged having their outlet through the overflow pipe 9 and inlet connections by means of the funnel or pipe 8 and connecting pipes 10 so that a greater or less number of shelves may be provided through which the cold water may circulate to cool the food, or other compartments of the refrigerator, ice box or other receptacle.

It is usual for the water to drip into the waste pipe and immediately pass out, without being held within the compartment to absorb heat from the food, the refrigeration simply resulting from the cool air which falls from the ice box above. This invention in no way interferes with the reception of the cold air as it may fall through the usual opening and distribute itself while the water passes into the funnel 8.

The loose joints permit of the immediate detachment of the shelves or other incase-ments, or their immediate location within the refrigerator, ice box or other receptacle for cold air. They may be instantly removed for cleaning or repairs and when placed in the cold air box they take up little more room than the shelf provided for this purpose.

These attachments may be stood upright at the back or the sides of the refrigerator, ice box or other receptacle so that the water may circulate through same, while the ordinary shelves are in use, and it is obvious that their construction and arrangement

may be otherwise modified without departing from the essential features above described.

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

In combination, a refrigerator having an ice box, a cold water drain pipe leading from said ice box, a series of shelves formed of coils disposed under the ice box and removably supported in place thereunder, and inverted U-shaped pipes connecting said

coils to each other and forming an outlet for the lowermost coil and having loose connection with said coils.

In testimony whereof we affix our signatures in presence of two witnesses.

FLORENCE P. LAYMAN.
HIRAM D. LAYMAN.

Witnesses:

JAMES P. DUHAMEL,
CHARLES LA RUE.