Sept. 21, 1948. J. V. MESITE 2,449,709

REFRIGERATOR DEFROSTING DEFLECTOR

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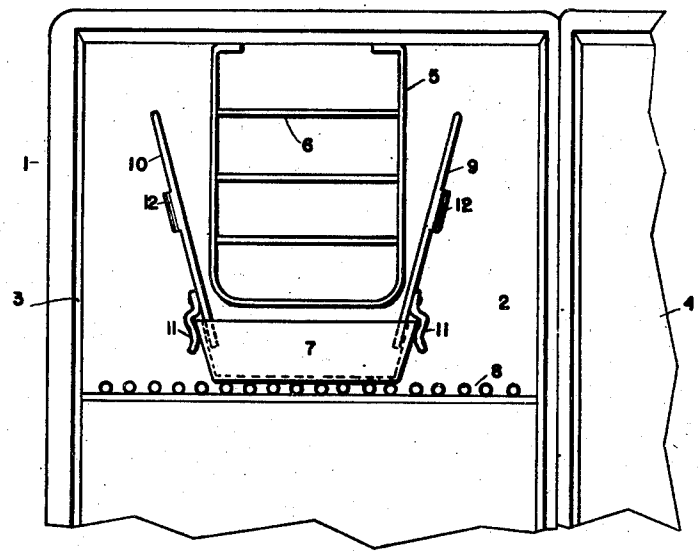


FIG. 1.

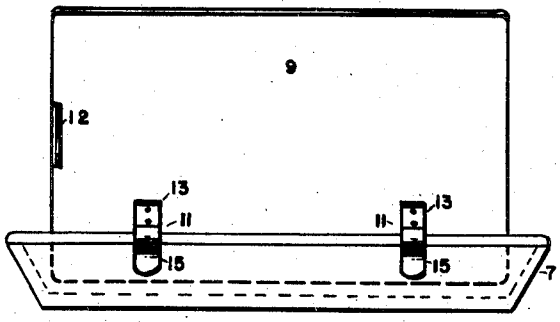


FIG. 2



FIG. 3.

INVENTOR.
JAMES V. MESITE,
BY
Henry Heyman
his attorney.

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REFRIGERATOR DEFROSTING DEFLECTOR

James V. Mesite, Baltimore, Md.

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5 Claims. (Cl. 62—1)

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This invention relates to a device for use in domestic refrigerators to prevent water and ice from dripping into the food compartment. It especially relates to a pair of deflector plates or baffles arranged to be removably supported on the customary drip tray.

The external surfaces of the evaporator or cooling unit of a refrigerator are subject to the deposit thereon of ice, and unless the refrigerator is defrosted quite frequently, this ice attains a considerable depth and often overhangs the drip tray. When the refrigerator is defrosted, the ice melts and frequently drops water in the food storage compartment. Also, pieces of ice become detached from the evaporator in large pieces which either fall outwardly away from the evaporator so as to miss the drip tray entirely, or if large pieces fall to the drip tray they sometimes tumble out. This falling of water and ice into the food compartment is not only a matter of inconvenience, but is also a source of damage to food stuffs stored in the refrigerator.

It is the purpose of my device to completely prevent the uncontrolled falling of either water or ice into the food storage compartment.

Further objects and advantages of my invention will become apparent as the following description proceeds and the features of novelty which characterize my invention will be pointed out with particularity in the claims.

For further explanation of my invention, reference is made to the accompanying drawing in which Figure 1 is a fragmentary front elevational view of a household refrigerator embodying the principles of my invention; Figure 2 is a side view of my device attached to a drip tray; and Figure 3 is a vertical end view of my device.

I have shown a household refrigerator, 1, having a food storage compartment, 2, provided with an opening 3, in the front wall thereof and having a door, 4. Inside the refrigerator there is the usual evaporator, 5, provided with ice tray shelves, 6, and drip tray, 7. The remaining portions of the refrigerator are not shown, but any suitable arrangement may be used. A shelf, 8, is supported in the refrigerator in the customary manner and provides a support for the drip tray, 7. In order to prevent a disproportionate depletion of the food storage space on the shelf, 8, the drip tray, 7, is customarily supplied so as to have a vertical projected area equal to that of the evaporator or a little larger. It is well-known that ice may accumulate on the exterior side walls of the evaporator to a considerable depth so that it overhangs the side walls of the drip tray. It is

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apparent, therefore, that when the refrigerator is defrosted, that is to say, when the cooling medium is no longer applied to the evaporator, the accumulated ice melts and the drops of water and pieces of ice will fall downwardly and frequently miss the drip tray.

To prevent this occurrence, I provide the detachable deflector elements, 9 and 10, having clips 11 near the lower edge thereof for attachment to the side walls of the drip tray. The deflector elements are preferably attached only during defrost periods so that interference with air circulation during cooling periods is avoided.

Referring to Figure 2, the deflector element is shown as having a length substantially equal to that of the drip tray bottom which is slightly longer than the evaporator. The deflectors may have any convenient height, although I prefer a height of about three-fourths that of the evaporator.

On the front end of each of the deflectors, that is to say, that end which is to be gripped in placing each deflector in position and removing the same, I provide a handle portion 12.

The clips 11 have a base portion 13, an upstruck spacing portion 14, and a drip tray engaging flange 15. The upstruck portion 14 is made sufficiently long so that a channel space is provided between the flange 15 and the deflector surface to accommodate a side wall of a drip tray. The clip element 11 may be of any suitable material though I prefer that it be somewhat resilient in order that I may upset the end of the flange portion 15 toward the deflector surface so that it will firmly engage the side wall of a drip tray to which attached. The handle portion secured to the front end of the deflector may be a portion struck out of the same blank as the deflector itself or it may be a separate piece suitably fastened to the deflector portion 9.

It is accordingly seen that I have eliminated an inconvenience incidental to the usual household refrigerator in a very simple and efficacious manner.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a household refrigerator having a plurality of walls for enclosing a food storage space therein, an evaporator supported thereon from a top wall thereof; a shelf supported from the lateral walls thereof; a drip tray having a bottom and side walls supported on said shelf beneath the evaporator; a pair of shield elements one for each lateral surface of the evaporator, each comprising a substantially planar sheet hav-

ing proximate the lower edge thereof and secured thereto a plurality of clip elements for attachment to the side walls of the drip tray, said clip elements having a base portion, an upstruck spacer portion, and a flange portion, whereby a channel is provided between the flange portion and the opposed portion of the shield surface for the reception of said walls of the drip tray.

2. A pair of shield members for use in a refrigerator having a food compartment, a cooling unit, and a drip tray therein, comprising a first planar member having clip elements attached to the right lateral surface proximate the lower edge thereof for attachment to the right side wall of the drip tray, and a second shield member having clip elements attached to the left lateral surface proximate the lower edge thereof for attachment to the left side wall of the drip tray whereby said shield members are adapted to be supported by the drip tray and to deflect water and ice falling from said evaporator into the drip tray.

3. In a refrigerator having a food compartment and a cooling unit, a drip tray therein having a bottom and side walls; a first and a second shield element each having a length substantially equal to the length of the bottom of the drip tray and having a height substantially three-fourths the height of the evaporator and adapted to be supported so that the lower portions thereof extend into the drip tray; the first shield element being supported on the right side of the evaporator and having clip elements attached proximate the lower edge thereof to the right lateral surface thereof for attaching the shield to the right lateral wall of the drip tray, and the second shield element being supported on the left side of the evaporator and having clip elements secured to the left lateral surface proximate the low edge thereof for attaching the shield to the left lateral wall of the drip tray.

4. In a refrigerator having a food compartment and a cooling unit, a drip tray therein having a bottom and side walls; a first and a second shield element each having a length substantially equal to the length of the bottom of the drip tray and having a height substantially three-fourths the height of the evaporator and adapted to be supported so that the lower portions thereof extend into the drip tray; the first shield element being supported on the right side of the evaporator and having clip elements attached proximate the lower edge thereof to the right lateral surface thereof for attaching the shield to the right lateral wall of the drip tray, and the second shield element being supported on the left side of the evaporator and having clip elements secured to the left lateral surface proximate the lower edge thereof for attaching the shield to the left lateral wall of the drip tray, said right shield member having a finger grip portion on the front vertical edge thereof projecting normal thereto toward the right and the second shield element having a finger grip portion secured to the front vertical edge thereof projecting normal thereto toward the left.

5. In combination with a refrigerator evaporator and a drip tray, a right hand and a left hand shield element adapted to be supported adjacent the right side and the left side respectively of the evaporator to deflect water and ice into the drip tray; the shield elements each being a substantially planar sheet of substantially rigid material and having a length substantially equal to the evaporator and having a height not exceeding the height of the evaporator and having attached to the lower outside surface thereof clip elements to provide attaching means adapted to secure said shield elements to the lateral side walls of the drip tray to thereby effectively deflect ice and water into the drip tray.

JAMES V. MESITE.

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