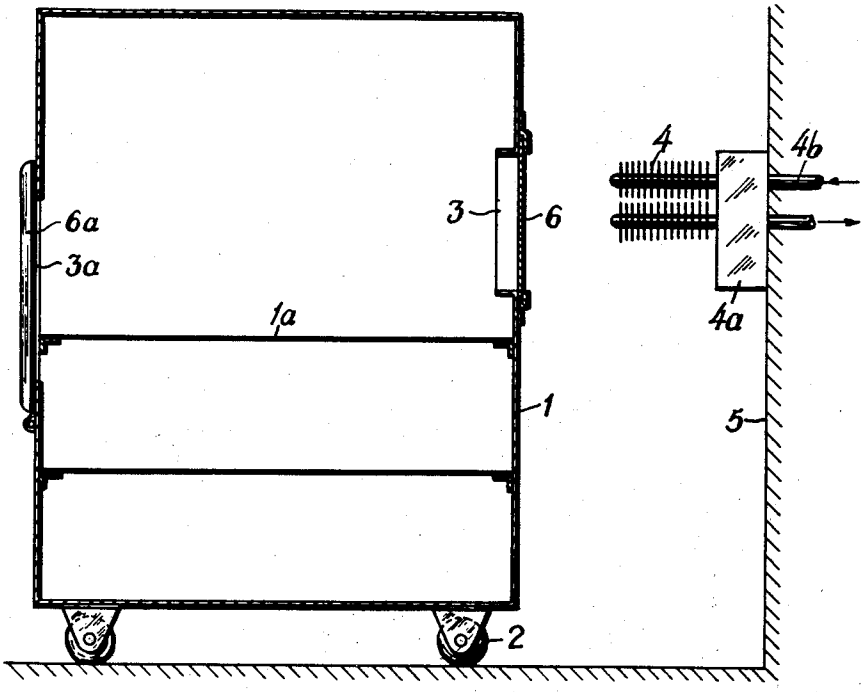
Aug. 4, 1953 F. R. CARLSSON 2,647,376

REFRIGERATOR WITH DEFROSTING ARRANGEMENT

Filed Feb. 11, 1952



Inventor
Filip Reinhold Carlsson,

By

Pierce, Scheffler & Parker,
Attorneys.

Patented Aug. 4, 1953

2,647,376

UNITED STATES PATENT OFFICE

2,647,376

REFRIGERATOR WITH DEFROSTING ARRANGEMENT

Filip Reinhold Carlsson, Eskilstuna, Sweden

Application February 11, 1952, Serial No. 271,053
In Sweden March 2, 1951

1 Claim. (Cl. 62—117.2)

1

This invention relates to a device for eliminating the drawbacks in refrigerators, occurring on defrosting the cooling elements.

As is well known, a substantial drawback in refrigerators is caused by the cooling elements having often to be defrosted, that is the ice-layer formed on the cooling element, which deteriorates the cooling effect of the element has to be removed. If this does not occur sufficiently often the quality of the goods will be deteriorated that is ice crystals will be formed on it. Moreover the refrigerator will work uneconomically as by the increase of the ice layer the effect becomes lower. On removing the ice layer the temperature of the element is increased so as the ice melts and consequently the temperature in the refrigerating box increases. This involves a substantial loss in the cooling effect and besides that there is danger, that the goods placed in the refrigerating box will be damaged during the melting.

One object of the invention is to provide a method for eliminating the aforesaid drawbacks in a refrigerator consisting of a refrigerator box and a cooling element, by removing the cooling element from the refrigerator box without taking out the goods to be refrigerated closing the box in order to substantially maintain the temperature of the goods and inserting the defrosted cooling element in the refrigerator box.

Another object of the invention is to provide a device consisting of a refrigerator box and a cooling element which have a changeable position relatively to each other in order to remove the cooling element during operation, the box being provided with an opening for the cooling element, which opening when the element is inserted in the box is closed by a packing around the element while in defrosting position it is closed by a cover. Through such a device a refrigerated goods of excellent quality is obtained and the used effect will become low.

The invention is shown by way of illustration in the accompanying drawing according to which a refrigerator box 1 is provided with rollers or wheels 2 for facilitating the removal of same. The refrigerator box is provided with shelves 1*a* for the goods to be refrigerated and with an opening 3*a* for inserting and removing the goods and another opening 3 for the cooling element. A

2

cooling element 4 is mounted on a wall or stand 5 by means of a housing 4*a* which fits into the last-mentioned opening 3 for closing the same and encloses a connection between the element 4 and a conduit 4*b* for the cooling fluid. The element 4 is adapted to extend within refrigerator box during operation. The opening 3*a* is provided with a cover 6*a*. The drawing shows the device in the position where the defrosting occurs, the opening 3 being covered by a heat isolating cover 6 which prevents the inner temperature of the refrigerator box to change substantially while the cooling element is outside of the refrigerator box. Defrosting of the cooling element occurs in ordinary manner, whereupon the cover 6 is removed and the refrigerator box is displaced in such manner that the cooling element is extending again in the freezing box and by a packing 4*a* closes the opening 3.

It is evident that also the freezing box can be stationary and the cooling element transportable if it is more suitable for the construction but it is understood that various changes may be resorted to within the scope of the appended claim.

What I claim is:

The combination of a refrigerator box and a cooling element adapted to be removably positioned therein, said cooling element being fixedly mounted on a wall or the like, roller means supporting the box to permit the displacement of the box from a cooling position, in which the cooling element is positioned within the box, to a defrosting position, in which the cooling element is positioned outside the box, said box having an opening for the cooling element, and a lid for closing said opening when the box is displaced away from the cooling element, said opening and said cooling element having cooperating surfaces adapted to close said opening when the cooling element is positioned within said box.

FILIP REINHOLD CARLSSON.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,949,663	Sellman	Mar. 6, 1934
2,433,655	Di Zoppola	Dec. 30, 1947