

Syllabus

IN THE MATTER OF
THE COOLERATOR COMPANYCOMPLAINT, FINDINGS, AND ORDER IN REGARD TO THE ALLEGED VIOLATION
OF SEC. 5 OF AN ACT OF CONGRESS APPROVED SEPT. 28, 1914*Docket 2770. Complaint, Apr. 16, 1936—Decision, July 10, 1937*

Where a corporation engaged in distribution and sale of non-mechanical or ice refrigerators for resale by retail dealer purchasers thereof, in advertising its said non-mechanical refrigerators through large numbers of booklets and through folders, circulars, and other advertising literature distributed to members of the purchasing public in the various States or furnished to its customers for distribution to such public, and also through advertisements in newspapers and periodicals of general circulation—

- (a) Represented that temperature of from 45 to 50 degrees is established or required standard necessary in all types of refrigerators for most satisfactory preservation of foods, and that in mechanical or electric refrigerators proper temperature for such preservation cannot be maintained without detrimentally disturbing natural composition of air and natural composition of food in the refrigerator, and that foods kept therein dehydrate to such an extent that their nutritive properties are impaired, whereas foods kept in the other do not, to any extent whatever, dehydrate, and that only with ice is it possible to produce proper temperature control of foods without disturbing natural composition of air or food;

Facts being, among others, there is no such established or required standard temperature necessary for satisfactory food preservation in all types of refrigerators, temperature range is not limited to that between 45 and 50 degrees, but food can properly be preserved at lower temperatures, maintained temperature of 50 degrees or lower is generally accepted by experts as adequate for proper preservation of perishable foods in edible condition for normal length of time in domestic refrigerators, proper temperatures for satisfactory preservation of usual foods in mechanical refrigerators for domestic use can generally be maintained without detrimentally disturbing natural composition thereof, foods stored therein for ordinary length of time do not dehydrate to such extent as to impair their nutritive properties, and while foods kept in non-mechanical refrigerators dehydrate to some extent, depending upon various factors, it is possible, through use of refrigerants other than ice, as well as ice, to produce proper food temperature control without disturbing natural composition of air or food in the refrigerator to any harmful extent, and representations hereinabove set forth were, as thus indicated, too general, lacking in specific limitation, misleading, and, in some instances, not true;

- (b) Represented that various gases used in electric refrigerators as part of refrigerant escape from coils in which contained, permeate food chamber, and have a deleterious effect on and taint foods contained in refrigerator, and that certain poisonous gases, such as sulphur dioxide and chlorine, are formed from decay of food stored in such refrigerators in such quantities that they have a harmful effect in tainting foods and reducing nutritive value thereof, whereas in non-mechanical refrigerators

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any poisonous gases formed from decay of foods are entirely absorbed by water from melting ice and carried away through drain pipes thereof, as contrasted with other in which they are not absorbed but remain in the ice cubes made in such refrigerators, and that gelatinous matter found in drain pipes of non-mechanical refrigerators is formed by absorption of gases emanating from food contained therein and carried away by water from the melting ice, and that in electric refrigerators ice cubes frozen therein contain same matter as is contained in drain pipe of the non-mechanical products;

Facts being, among others, that while there have been instances in which mechanical or electric refrigerating units have developed defects and refrigerant has escaped into food chamber and tainted food contained therein, such cases are relatively very infrequent, and various gases used as aforesaid do not generally escape from the coils as above set forth, there is generally no substantial decay or decomposition of foods stored in refrigerators holding a maintained temperature of 50 degrees or lower under usual conditions, type of refrigeration used has no bearing on formation of gases formed by decay and decomposition, it does not appear to have been scientifically established to what extent such gases are soluble in water, if at all, or to what extent they may be thus absorbed and carried away in drain pipe of the non-mechanical product, or be absorbed by water in ice cube trays or frost on cooling unit of the mechanical refrigerator, such gases do not form to any substantial or noticeable extent when temperatures are maintained at a point sufficient to inhibit bacterial growth and activity, and under such circumstances have no harmful effect in tainting foods or reducing their nutritive value, and it has not been scientifically determined to what extent contents of drain pipe of non-mechanical refrigerator are made up of gases and odors from food or from growth of bacteria, algae and molds in the pipe itself, and representations to effect that such matter may be found in ice cubes frozen in mechanical refrigerator are untrue and deficient in specific limitation; and

- (c) Represented that users of electric refrigerators would not be able to eat food therefrom without tasting other foods stored in refrigerator at same time;

Facts being, that if two types of food are placed in refrigerator at the same time, namely, type of foods having characteristic and inherent odors constantly thrown off, irrespective of any process of decomposition or decay, and type of foods which, upon coming in contact with air, absorbs odors already contained therein, transference of odors from former to latter will take place to such extent that person consuming same may taste odor of the other, irrespective of type of refrigerator used, and it has not been scientifically determined to what extent such transference takes place in a non-mechanical or in a mechanical refrigerator, users of latter product will be able to consume food therein without tasting other foods therein stored, except as hereinabove noted, and many foods which do not absorb odors from others may be consumed by users of the electric or mechanical product without tasting others stored therein at same time;

With tendency and capacity to confuse and mislead public with respect to true facts as to the relative merits and operating factors of non-mechan-

ical refrigerators and mechanical refrigerators, and into erroneous and mistaken beliefs that latter are undesirable and ineffective in use and harmful and dangerous to users thereof, and into purchase of its said non-mechanical product by reason of such beliefs thus induced, and thereby to unfairly divert trade to it from its competitors who do not make use of similar statements; to the injury of competition in commerce:

Held, That such acts and practices were to the prejudice of the public and competitors and constituted unfair methods of competition.

Before *Mr. John J. Keenan*, trial examiner.

Mr. J. T. Welch for the Commission.

Belt & Wallace, of Chicago, Ill., for respondent.

COMPLAINT

Pursuant to the provisions of an Act of Congress approved September 26, 1914, entitled "An Act to create a Federal Trade Commission, to define its powers and duties, and for other purposes," the Federal Trade Commission, having reason to believe that The Coolerator Company, a corporation, hereinafter referred to as respondent, has been and now is using unfair methods of competition in commerce as "commerce" is defined in said act, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, hereby issues its complaint stating its charges in that respect as follows:

PARAGRAPH 1. Respondent, The Coolerator Company, is a corporation, organized, existing, and doing business under and by virtue of the laws of the State of Minnesota, with its principal office and place of business at 50th Avenue W. and Wadena, in the city of Duluth, State of Minnesota. Respondent is now, and has been for some time, engaged in the business of distributing and selling to dealers for resale, in commerce as herein set out, refrigerators using natural or artificial ice as the cooling element therein.

PAR. 2. Said respondent, being engaged in business as aforesaid, causes said refrigerators, when sold, to be transported from its office and principal place of business in the State of Minnesota to purchasers thereof located in various States of the United States other than the State of Minnesota and in the District of Columbia. There is now, and has been at all times since the organization of respondent company, a constant current of trade in commerce in said refrigerators so distributed and sold by the respondent, between and among the various States of the United States and in the District of Columbia.

PAR. 3. Certain persons, partnerships, and corporations have been, and are now, engaged in offering for sale and selling, in commerce as

hereinabove set out, refrigerators that depend for their cooling processes upon the use of ice that is placed therein for that purpose. Such refrigerators have been for many years commonly known in the trade and by the public as "non-mechanical" refrigerators and are generally so designated.

Certain persons, partnerships, and corporations have been, and are now, engaged in offering for sale and selling, in commerce as hereinabove set out, refrigerators that do not depend for their cooling processes upon the use of ice that is placed therein for that purpose. Such non-ice-using refrigerators are commonly known in the trade and by the public as "mechanical" refrigerators and are so designated. One type of such mechanical refrigerators depends for its cooling processes upon certain appliances, attachments, and equipment operated by currents of electricity. Mechanical refrigerators of this type are commonly known in the trade and by the public as "electric" refrigerators and are so designated. In recent years, many electric refrigerators have been sold to the public and are now in use in large numbers by the public. A substantial portion of the public has expressed, and actually has, a preference for such electric refrigerators over any other type of refrigerators and the number of said electric refrigerators in use and operation is rapidly increasing.

In the course and conduct of its said business respondent is now, and has been, in competition, in commerce among and between various States of the United States and in the District of Columbia, with other corporations and with partnerships and individuals likewise engaged in distributing and selling such nonmechanical refrigerators in said commerce and is also in competition in said commerce with corporations, partnerships, and individuals distributing and selling in such commerce said mechanical refrigerators, including said electric refrigerators. All of the sellers of the several types of refrigerators are, and have been, in competition, in commerce as hereinabove set out, between and among themselves as to each and all of said types of refrigerators.

PAR. 4. In such competition between the sellers of nonmechanical refrigerators and the sellers of electric refrigerators, one of the controlling influences upon the purchasing public is the popular opinion as to the comparative desirability, effectiveness, and safety in actual operation of the said two types of refrigerators.

The use of ice in refrigerators has long been practiced and its desirability, effectiveness, and safety, such as it may be, is well-known and understood by the purchasing public. Electric refrigerators were only recently invented and introduced into popular use. The public is not generally so well-informed as to the desirability, effectiveness,

and safety of such electric refrigerators as it is with respect to these qualities in a nonmechanical refrigerator.

Sellers and distributors of nonmechanical, or ice-using refrigerators, are interested in, and engaged in, presenting to the purchasing public all available reasons or arguments against, or tending to lessen, the desirability, effectiveness, and safety of said electric refrigerators in actual use.

The use of said electric refrigerators destroys, to the extent of the use thereof, the demand for and sale of ice for use in refrigerators. The increasing sale of electric refrigerators has caused the sellers of nonmechanical refrigerators and the sellers of ice for use therein to attempt to create public sentiment adverse to the use of said electric refrigerators.

PAR. 5. To meet the needs of its customers, the same being sellers of non-mechanical refrigerators and sellers of ice for use therein, respondent has compiled, printed, and published a certain booklet of propaganda against the desirability, effectiveness, and safety of electric refrigerators. Said booklet purports to state certain facts which respondent claims to have discovered which, it represents, demonstrates that electric refrigerators are in actual use undesirable, ineffective, and unsafe in their effect upon food kept therein and upon persons eating such food. Respondent names and designates such booklet as "Why Ice is Best for Refrigeration." In order to make such propaganda effective in behalf of sellers of non-mechanical refrigerators and sellers of ice for use therein, respondent furnishes copies of said booklet to its customers to be placed by them, in such ways as they deem most effective, in the hands of members of the purchasing public so as to influence public opinion and create sales resistance against such electric refrigerators and to promote and increase the sale of said non-mechanical refrigerators. Respondent also causes the distribution of said booklet direct to the members of the purchasing public.

Practically all of the purchasers of non-mechanical refrigerators from the respondent are manufacturers or distributors of natural or artificial ice, who resell said refrigerators in connection with their sale of ice for use therein. In some instances, several manufacturers and distributors of ice have organized sales agencies, which agencies purchase said refrigerators from the respondent and resell them to the public for use.

The said booklet is furnished by the respondent to said purchasers, same being manufacturers or distributors of ice, and their respective sales agencies. As furnished to said purchasers, the booklets sometimes do not have imprinted thereon the respondent's name and

address but do have imprinted the name and address of the respective purchaser who actually distributes the booklet to members of the public and actually sells respondent's refrigerators to members of the public.

In the ways hereinabove indicated and by reason of the facts above alleged, sellers of ice for use in non-mechanical refrigerators, as well as sellers of such refrigerators, have an interest adverse to the sale of electric refrigerators and are in practical effect in competition with such sellers of electric refrigerators along with the sellers of non-mechanical refrigerators. The purpose and effect of said booklet is the dissemination of misleading and disparaging propaganda in aid of the sale of non-mechanical refrigerators and of ice therefor.

PAR. 6. For the purpose and intent, and with the effect of disparaging electric refrigerators sold in commerce, as hereinabove set out, and for the purpose and with the intent and effect of promoting the sale in commerce, as aforesaid, of non-mechanical refrigerators and the sale of ice for use therein, the respondent in such booklet, designated as "Why Ice is Best for Refrigeration," by use of false and misleading statements or representations, has falsely represented, directly and by implication and inference, among other things:

1. That a temperature of from 45 to 50 degrees is the established or required standard temperature necessary to be obtained in all types of refrigerators for the most satisfactory preservation of foods;

2. That in mechanical or electric refrigerators the proper temperature for the preservation of foods cannot be maintained without detrimentally disturbing the natural composition of the air in the refrigerator and the natural composition of the food;

3. That the various gases used in electric refrigerators as part of the refrigerant escape from the coils in which they are contained, permeate the food chamber and have a deleterious effect on and taint the foods contained in said refrigerator;

4. That foods kept in electric refrigerators lose water, or dehydrate to such an extent that their nutritive properties are impaired, destroying essential parts of the chemical combination of various foods in their natural state;

5. That foods kept in non-mechanical refrigerators do not dehydrate or lose water, to any extent whatever.

6. That it is possible only with ice to produce the proper temperature control of foods without disturbing the natural composition of the air or food in the refrigerator, and that similar or comparable results can not be obtained by use of electric refrigerators;

7. That certain poisonous gases, such as sulphur dioxide and chlorine, are formed from the decay of foods stored in electric refrigerators in such quantities that said gases have a harmful effect in tainting foods and in reducing their nutritive value;

8. That in non-mechanical refrigerators any poisonous gases formed from decay of foods are entirely absorbed by the water from the melting ice and are carried away through the drain pipes thereof, but that in electric re-

refrigerators such poisonous gases are not absorbed, and said gases remain in the ice cubes made in said refrigerator;

9. That the gelatinous matter found in drain pipes of non-mechanical refrigerators is formed from gases emanating from food contained therein being absorbed and carried away by the water from the melting ice, and that the ice cubes frozen in an electric refrigerator contain the same matter as is claimed to be contained in the drain pipe of a non-mechanical refrigerator; and,

10. That the users of electric refrigerators will not be able to eat food therefrom, without tasting other food that was stored in the refrigerator at the same time.

PAR. 7. In truth and in fact a temperature of from 45 to 50 degrees is not an established or required standard temperature for the preservation of goods. Foods are generally better preserved at a temperature of from 40 to 45 degrees. In truth and in fact it is possible and practical to use electric refrigerators in such a manner that the proper temperature for the preservation of foods can be maintained without detrimentally disturbing the natural composition of the air in the refrigerator or the natural composition of the food therein. The various gases and liquids used as refrigerants in electric refrigerators do not escape from the coils in which they are contained, do not permeate the food chamber and do not have a deleterious effect on or taint the foods contained in electric refrigerators. In truth and in fact foods kept in electric refrigerators, and in the proper appliances and attachments furnished therewith, do not lose water or dehydrate to such an extent that their nutritive properties are impaired or that essential parts of their chemical combination in the natural state are destroyed. A great number of foods, when kept in an electric refrigerator, do not dehydrate to any noticeable or harmful extent. Foods kept in non-mechanical refrigerators do dehydrate or lose water to a certain extent. A proper temperature control of foods can be maintained with refrigerants other than ice, without disturbing the natural composition of the air or of the foods themselves. Poisonous gases, such as sulphur dioxide and chlorine, are not formed from the decay of foods stored in electric refrigerators in such quantities, if at all, that said gases have any harmful effect in tainting foods or have any harmful effect on the eaters of such foods. In truth and in fact no poisonous gases are formed from the decay of foods when the temperature of the refrigerator is properly controlled and such gases as may be formed from the decay of said foods are not harmful in the quantities found, and are not generally absorbed by the ice cubes made in said electric refrigerators. The gelatinous matter formed in the drain pipes of non-mechanical refrigerators is not formed from any gases thrown off by foods contained in said re-

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frigerators. In truth and in fact the ice cubes made in an electric refrigerator do not contain the same gelatinous matter contained in the drain-pipe of a non-mechanical refrigerator. The users of electric refrigerators are able to eat food therefrom without tasting the other foods stored therein.

PAR. 8 The aforesaid false, misleading and disparaging representations so made in respondent's booklet, "Why Ice is Best for Refrigeration," as above alleged, have had, and now have, the tendency and capacity to mislead and deceive a substantial portion of the purchasing public into the false and erroneous beliefs that said statements are true and that electric refrigerators are undesirable, ineffective, and harmful in the ways alleged and are dangerous to the eaters of food kept in said refrigerators, and that the statements and representations made by respondent with reference to non-mechanical refrigerators and the results to be obtained from a use thereof are true. Further, said false and misleading statements and representations have the tendency and capacity to, and do, divert trade to the sellers of non-mechanical refrigerators, including the respondent and its customers, from sellers of electric refrigerators and induce the public to purchase non-mechanical refrigerators and ice to be used therein, in and because of such erroneous beliefs brought about as hereinabove set out. As a result thereof, substantial injury has been, and is now, being done by respondent to substantial competition in commerce among and between various States of the United States and in the District of Columbia.

PAR. 9. The above and foregoing acts, practices and representations of the respondent have been, and are, all to the prejudice of the public and respondent's competitors, as aforesaid, and have been, and are, unfair methods of competition within the meaning and intent of Section 5 of an Act of Congress approved September 26, 1914, entitled "An Act to create a Federal Trade Commission, to define its powers and duties, and for other purposes."

REPORT, FINDINGS AS TO THE FACTS, AND ORDER

Pursuant to the provisions of an Act of Congress approved September 26, 1914, entitled "An Act to create a Federal Trade Commission, to define its powers and duties, and for other purposes," the Federal Trade Commission on April 16, 1936 issued and served its complaint in this proceeding upon respondent, The Coolerator Company, charging it with the use of unfair methods of competition in commerce in violation of the provisions of said act. After the issuance of said complaint, and the filing of respondent's answer

thereto, testimony and other evidence in support of the allegations of said complaint were introduced by J. T. Welch, attorney for the Commission, before John J. Keenan, an examiner of the Commission, theretofore duly designated by it, and in opposition to the allegations of the complaint by William O. Belt and Robert K. Belt, Charles Aaron, and Franklin Raber, and Jay P. Taggart, attorneys for the respondent; and said testimony and other evidence were duly recorded and filed in the office of the Commission. Thereafter, a stipulation was entered into whereby it was stipulated and agreed that a statement of facts signed and executed by the respondent's counsel and W. T. Kelley, Chief Counsel for the Federal Trade Commission, subject to the approval of the Commission, may be taken as facts in this proceeding in addition to the testimony theretofore taken and that the said Commission may proceed upon such statement of facts and upon the evidence and testimony theretofore taken to make its report, stating its findings as to the facts and its conclusion based thereon and enter its order disposing of the proceeding without the presentation of argument or the filing of briefs. Thereafter, the proceeding regularly came on for final hearing before the Commission on said complaint, the answer thereto, the testimony and other evidence and said stipulation as to the facts, said stipulation having been approved and accepted by the Commission, and the Commission having considered the same and being fully advised in the premises finds that this proceeding is in the interest of the public and makes this its findings as to the facts and its conclusion drawn therefrom:

FINDINGS AS TO THE FACTS

PARAGRAPH 1. Respondent, The Coolerator Company, is a corporation, organized in 1928 under the laws of the State of Minnesota as The Duluth Refrigerator Company. Its corporate name was subsequently changed to The Coolerator Company. Its principal office and place of business is located at Fiftieth Avenue, West and Wadena in the city of Duluth, State of Minnesota. Since its incorporation, it has been, and now is, engaged in the business of distributing and selling to retail dealers for resale refrigerators using natural or artificial ice as the cooling element therein.

PAR. 2. The Coolerator Company causes said refrigerators, when sold, to be transported from its office and principal place of business in the State of Minnesota, or from one of its warehouses, to purchasers thereof located in various States of the United States other than the State of Minnesota or other than the State of the origin of said shipment and in the District of Columbia. Respondent's cus-

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tomers are located in every State of the Union and in many foreign countries. The purchasers of said refrigerators in turn sell them to the members of the purchasing public for commercial and domestic use. The Coolerator Company has, at all times since its incorporation, maintained a constant current of trade in said refrigerators so distributed and sold by it in commerce between and among the various States of the United States and in the District of Columbia. In the year 1932, it sold approximately 9,000; in 1933, approximately 15,000; in 1934, approximately 35,000; in 1935, approximately 70,000; and from October 1, 1935 to July 1, 1936, approximately 85,000. The retail sale price of respondent's refrigerators designed for domestic use ranges from \$30.00 to \$175.00 per unit.

PAR. 3. There are two distinct types of refrigeration: one known as ice or non-mechanical refrigeration and the other as mechanical refrigeration. The refrigerators employing these two types of refrigeration are respectively referred to hereinafter as non-mechanical and mechanical refrigerators. In both types, the refrigeration is accomplished by use of an insulated cabinet in which the refrigerant is installed. In a non-mechanical refrigerator either natural or artificial ice is placed in a compartment known as the ice chamber. The melting of the ice absorbs the heat from the air as it circulates past the ice and through the food chamber. In a mechanical refrigerator, an apparatus known as a cooling unit or coil is installed in the food chamber and refrigeration is obtained by forcing a volatile gas under pressure through the coil. As this gas passes through the coil, it absorbs the heat from the air in the food chamber that comes in contact with the coil. Although mechanical refrigeration is a comparatively recent invention and has been in use a comparatively short period of time, it has developed in popularity and is widely used throughout the United States as a method of refrigeration. The manufacture and sale of various types of mechanical refrigerators has developed into a large industry. One type of such mechanical refrigerators depends upon certain appliances, attachments and equipment operated by electricity for its cooling processes.

PAR. 4. Other corporations have been, and are now, likewise engaged in offering for sale and selling refrigerators that depend upon the use of ice for their cooling processes and which retail for approximately the same amount as respondent's refrigerators. Among such are: Raney Refrigerator Company, Ice Cooling and Appliance Corporation, Progress Refrigerator Company, Tennessee Furniture Company, and McKee Refrigerator Company.

Other corporations have been, and are now, engaged in offering for sale and selling, refrigerators that depend upon the use of substances other than ice for their cooling processes and which retail from approximately \$100.00 to \$300.00 each. Among such are: Kelvinator Corporation, Frigidaire Corporation, General Electric Company, and Westinghouse Electric & Manufacturing Company.

The corporations and firms hereinabove named, and others not specifically named, which sell refrigerators, either non-mechanical or mechanical, ship said refrigerators, when orders therefor are received, from their respective places of business or warehouses to the purchasers thereof located in States other than the State in which said places of business or warehouses are located, or other than the State from which the respective shipments originate.

In the course and conduct of its business, The Coolerator Company is engaged in substantial competition, in commerce among and between the various States of the United States and in the District of Columbia, with many corporations and with partnerships and individuals, including those herein named, likewise engaged in distributing and selling non-mechanical refrigerators in said commerce; and is also in substantial competition, in said commerce, with many corporations, partnerships, and individuals, including those herein named, likewise engaged in distributing and selling in such commerce mechanical or electric refrigerators.

PAR. 5. In such competition between the sellers of non-mechanical refrigerators and the sellers of mechanical or electric refrigerators, one of the controlling influences upon the purchasing public is the popular opinion as to the comparative desirability, effectiveness and safety in actual operation of the two types of refrigerators. The use of ice in refrigerators has long been practiced and its desirability, effectiveness and safety as a method of refrigeration are well known and understood by the purchasing public. Because of its comparatively recent invention, the public is not generally so well informed as to the desirability, effectiveness and safety of mechanical or electric refrigerators as it is with respect to these qualities in non-mechanical refrigerators.

PAR. 6. In advertising the non-mechanical refrigerators which it sells, and for the purpose of promoting the sale of said refrigerators by retail dealers, The Coolerator Company has made use of booklets, folders, circulars and other advertising literature, some of which it distributes to members of the purchasing public located in the various States of the United States, and some of which it furnishes to its customers, to be by them placed in the hands of members of the

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purchasing public. It has also made use of advertisements inserted in newspapers and magazines having a general circulation throughout the various States of the United States. It has also, in the past, made use of a certain booklet entitled "Why Ice is Best for Refrigeration." This booklet was first published and distributed by the respondent in the year 1930 and was also published in each succeeding year until 1935. In the fall of 1935, the respondent discontinued the publication of said booklet and since that time no copies have been published by it. The distribution of said booklet was discontinued about the middle of the year 1936 and has not been resumed. Approximately 150,000 copies of this booklet were published and distributed each year.

In said booklet entitled "Why Ice is Best for Refrigeration," the respondent, by direct statement and by implication, made the following representations:

1. That a temperature of from 45 to 50 degrees is the established or required standard temperatures necessary to be obtained in all types of refrigerators for the most satisfactory preservation of foods;
2. That in mechanical or electric refrigerators the proper temperature for the preservation of foods cannot be maintained without detrimentally disturbing the natural composition of the air in the refrigerator and the natural composition of the food;
3. That the various gases used in electric refrigerators as part of the refrigerant escape from the coils in which they are contained, permeate the food chamber and have a deleterious effect on and taint the foods contained in said refrigerator;
4. That foods kept in electric refrigerators lose water, or dehydrate to such an extent that their nutritive properties are impaired, destroying essential parts of the chemical combination of various foods in their natural state;
5. That foods kept in non-mechanical refrigerators do not dehydrate or lose water, to any extent whatever;
6. That it is possible only with ice to produce the proper temperature control of foods without disturbing the natural composition of the air or food in the refrigerator, and that similar or comparable results can not be obtained by use of electric refrigerators;
7. That certain poisonous gases, such as sulphur dioxide and chlorine are formed from the decay of foods stored in electric refrigerators in such quantities that said gases have a harmful effect in tainting foods and in reducing their nutritive value;
8. That in non-mechanical refrigerators any poisonous gases formed from decay of foods are entirely absorbed by the water from the melting ice and are carried away through the drain pipes there-

of, but that in electric refrigerators such poisonous gases are not absorbed, and said gases remain in the ice cubes made in said refrigerators;

9. That the gelatinous matter found in drain pipes of non-mechanical refrigerators is formed from gases emanating from food contained therein being absorbed and carried away by the water from the melting ice, and that the ice cubes frozen in an electric refrigerator contain the same matter as is claimed to be contained in the drain pipe of a non-mechanical refrigerator;

10. That the users of electric refrigerators will not be able to eat food therefrom, without tasting other food that was stored in the refrigerator at the same time.

Certain other advertising literature distributed by the respondent in commerce among and between the various States of the United States contains language which may serve as representations to the same effect as some of the representations hereinabove set out.

PAR. 7. A temperature of from 45 to 50 degrees Fahrenheit is not the established or required standard temperature necessary to be obtained in all types of refrigerators for the most satisfactory preservation of food and those temperatures have not been established as a standard in the industry or among doctors and food experts generally. At this time, there appears to be no established or required standard temperature necessary to be maintained in all types of refrigerators for the most satisfactory preservation of food. Doctors and food experts are not now entirely in accord on the question of the temperatures required in order to most satisfactorily preserve food stored in refrigerators. Such temperatures as will produce the desired preservation of food are not limited, however, to the range between 45 to 50 degrees Fahrenheit and food can properly be preserved at temperatures lower than 45 degrees Fahrenheit. The temperature necessary to preserve food depends, in part, upon the character of the food and the length of time it is to be preserved. Some foods will keep longer under a given temperature than other foods. It is generally understood and agreed by experts that a maintained temperature of 50 degrees Fahrenheit or lower will properly preserve perishable foods in an edible condition for the length of time that such foods are ordinarily kept for human consumption in a domestic refrigerator. Spoilage of food, so far as its edibility is concerned, takes place when it is dehydrated to such an extent that it becomes desiccated, or when there is excessive bacterial growth in or on the food. The rate and extent of dehydration, as well as of bacterial growth, depend upon the character of the food, the temperature, the relative humidity and the length of time the food

is kept. A maintained temperature of 50 degrees Fahrenheit or lower is generally sufficient to retard the growth of bacteria and preserve perishable foods in an edible condition for the length of time that such foods are ordinarily kept for human consumption in a domestic refrigerator. The representation to the effect that a temperature of from 45 to 50 degrees is the established or required standard temperature necessary to be obtained in all types of refrigerators for the most satisfactory preservation of food is susceptible of the mistaken meaning that those temperatures have been established as a standard in the industry and that a temperature of 45 degrees is the minimum temperature at which foods may properly be preserved in a refrigerator contrary to the facts.

PAR. 8. The natural composition of air is a mixture of nitrogen, oxygen, carbon dioxide, certain rare gases and water vapor. The water vapor or moisture content is the only factor involved in this proceeding. Air containing the maximum amount of moisture it can hold at a given temperature is said to be saturated or at 100% relative humidity. Air containing less moisture than it is capable of holding is unsaturated. Its degree of saturation at a given temperature is expressed by the ratio of its actual moisture content to its maximum possible moisture content divided by 100 and is expressed as percent relative humidity.

The quantity of water vapor or moisture content in the air is variable, depending upon the temperature of the air, the amount of available moisture and the temperature of the surrounding medium with which the air comes in contact. Until air reaches the saturation point, it has a tendency to absorb moisture from any moisture laden substance with which it comes in contact if the temperature of the substance is at the temperature of the air or at a higher temperature than the air. The higher the temperature of the air, the greater its capacity to hold moisture. Further, at any temperature, liquid water if it is at the same temperature or warmer than the surrounding air can evaporate into the surrounding air mixture until such air becomes saturated. Such process of taking up moisture by air is generally known as dehydration since this is the effect on the substance from which the water is taken. For the purpose of determining moisture loss the temperature of the air in a refrigerator is principally controlled by the temperature of the cooling medium, the temperature of the food and the temperature of any air coming into the refrigerator when opened. The cooling medium of a refrigerator, being colder than the air which passes it, chills the air and in so doing reduces its capacity to hold moisture. The air leaving the cooling element is at or near saturation (100% relative humidity) but it

carries less moisture than it did before contacting the cooling element because it is at a lower temperature. The surplus moisture is condensed on the surface of the cooling element (as water when ice is used or as water or frost when a mechanically cooled coil is used).

As the air passes through the refrigerator, it warms up. In so doing it regains its capacity to carry moisture and its relative humidity decreases. As this air passes over foods containing moisture, it picks up moisture in an amount which is dependent upon its relative humidity, the difference between the temperatures of the substances it contacts and the type and area of the substances or food surfaces exposed. Wet surfaces and leafy foods such as lettuce or celery give up moisture readily while foods protected by rinds or heavy skins give up moisture slowly.

Air at any given temperature requires a greater quantity of water to raise it from any given degree of saturation (percent relative humidity) to any other given degree of saturation than does air at any lower temperature and the same degree of saturation. For example: At a temperature of 40 degrees Fahrenheit and 40% relative humidity, air can hold approximately 0.002 lb. of water per lb. of dry air. At saturation point air at the same temperature can hold approximately 0.00525 lb. of water per lb. of dry air. In raising the relative humidity from 40% to saturation, 0.00325 lb. of water per lb. of dry air must be added.

At a temperature of 50 degrees Fahrenheit and 40% relative humidity, air can hold approximately 0.0031 lb. of water per lb. of dry air. At saturation air of the same temperature can hold approximately 0.00765 lb. of water per lb. of dry air. In raising the relative humidity from 40% to saturation, 0.00455 lb. of water per lb. of dry air must be added. By increasing the initial relative humidity of the 50 degrees Fahrenheit air to 50%, we find that the air can hold 0.0038 lb. of water per lb. of dry air. In raising the relative humidity from 50% to saturation, 0.00385 lb. of water per pound of dry air must be added. Thus, air at 50 degrees Fahrenheit and 50% relative humidity requires more water to raise it to saturation than does air at 40 degrees Fahrenheit and 40% relative humidity. The amount of water foods in a refrigerator can lose depends also upon how fast the water is evaporating from the foods (rate of evaporation) and the length of time the foods are kept in the refrigerator. The rate of evaporation from a substance depends principally upon the difference between the vapor pressure of the water in the substance and the vapor pressure of the moisture in the air. The vapor pressure of the water in the substance is generally the same as the temperature of the substance. The vapor

pressure of the air is its saturation moisture content (dew point temperature). When foods are placed in a refrigerator for a sufficient time to cool down to the temperature of the air, the vapor pressure of the water in the substance and the vapor pressure of the moisture in the air become substantially equal.

Because of the operation of the foregoing principles, the amount of moisture that can be taken up to bring air from any degree of saturation to its saturation point depends on the temperature of the air, its relative humidity and the rate of evaporation. In view of the foregoing, under certain conditions, there will be no greater dehydration in a mechanical refrigerator than in a non-mechanical refrigerator even though the relative humidity of the air therein is lower, because the differences in the vapor pressures of the substances and the vapor pressures of the air in the two types of refrigerators will be substantially equal.

Dehydration of food takes place in both mechanical or electric refrigerators and non-mechanical or ice refrigerators to a varying amount, depending upon the various factors herein set out. Excessive dehydration of food affects its appearance and its texture, and makes it less appetizing, even though it does not affect its nutritive properties. In an effort to overcome the factor of dehydration, manufacturers of mechanical or electric refrigerators have provided covered containers which are placed in the food chamber. These containers are not, however, standard equipment in all makes or types of mechanical or electric refrigerators. Foods that are readily susceptible to dehydration, like leaf vegetables, are placed in these covered containers, when provided, so that the air as it circulates in the food chamber does not come in direct contact with that food. By the use of these covered containers the dehydration of foods stored therein has been practically eliminated, and the dehydration that takes place in food stored in covered containers is substantially less than it would be if the same foods were stored in the open food compartments of a mechanical or electric refrigerator, or a non-mechanical or ice refrigerator. Such containers may also readily be used in non-mechanical or ice refrigerators with comparable results.

The representations of the respondent set out in sub-sections 2, 4, 5, and 6 of paragraph 6 hereof are too general, are lacking in specific limitation, are misleading and, in some instances, are not true. Proper temperatures for the satisfactory preservation of foods usually kept in mechanical refrigerators for domestic use can generally be maintained without detrimentally disturbing the natural composition of the food. Foods stored in mechanical refrigerators for the

length of time that foods are ordinarily and customarily stored in refrigerators when intended for domestic use do not dehydrate or lose water to such an extent as to impair their nutritive properties or to destroy the essential parts of the chemical combinations thereof. Foods kept in non-mechanical refrigerators do dehydrate or lose water to some extent, depending upon the factors herein set out. Refrigeration by use of ice as a refrigerant or by use of other refrigerants does disturb the natural composition of the air in a refrigerator. The extent of this disturbance depends upon the variable factors above referred to, but in refrigerators of both types, the extent of this disturbance is not generally sufficient to affect the natural composition of the food stored in the refrigerator to such an extent as to make it undesirable for human consumption. It is possible by use of refrigerants other than ice, as well as by use of ice, to produce the proper temperature control of foods without disturbing the natural composition of the air or the food in the refrigerator to any harmful extent.

The refrigerants most commonly used in mechanical or electric refrigerators are: sulphur dioxide, SO_2 , dichloro diflura methane, CCl_2F_2 , commonly known as Freon or Freon₁₂, dichlorotetra fluor-ethane, $\text{C}_2\text{Cl}_2\text{F}_4$, or certain derivatives, and dichloro methane DH_2Cl_2 , commonly known as Carrene. The refrigerant most commonly used is sulphur dioxide which is a corrosive and suffocating gas. However, in recent years, certain of the manufacturers of mechanical or electric refrigerators have used and are now using Freon, or other derivatives, and Carrene, none of which are corrosive or suffocating gases, as refrigerants. These refrigerants, when placed in the refrigerating unit of a mechanical or electric refrigerator, are under pressure as they pass through the cooling unit on the inside of the food chamber and if there is any defect in the tubing or in the connection from carelessness or misuse, these refrigerants may be forced out into the food chamber. There have been instances in which mechanical or electric refrigerating units have developed defects either as a result of construction or of improper use and in which the refrigerant has escaped into the food chamber and tainted the food contained therein. Such cases, however, are very infrequent considering the number of units in use.

The various gases used as refrigerants in mechanical or electric refrigerators do not generally escape from the coils into the food chamber and taint the foods contained therein.

The representation stating or implying that the various gases used as refrigerants in mechanical or electric refrigerators escape from the coils into the food chamber and taint the foods contained therein

is too general and is deficient in specific limitation as to the conditions under which the refrigerant may escape.

PAR. 9. There is generally no substantial decay or decomposition of foods that are stored in refrigerators holding a maintained temperature of 50 degrees Fahrenheit or lower when such storage is for the relatively short period of time usually encountered in the use of refrigerators for domestic use. At maintained temperatures below 50 degrees Fahrenheit, bacterial growth and activity are generally inhibited and the lower the temperature, the greater the capacity to inhibit such activity. Bacterial growth or activity is the primary cause of the decay or decomposition of food and various gases are formed by such decay and decomposition. The type of refrigeration used has no bearing on the formation of such gases. The extent to which these gases may be formed depends on the length of time the food has been separated from its source, upon the temperature at which it has been preserved, and upon the relative humidity of the air. Some of these gases are poisonous. The nature of the gases thus formed depends on the type of food and the type of bacteria involved. Such gases as may be formed from the decay or decomposition of food do not include sulphur dioxide or chlorine though they may include hydrogen sulphide and various chlorides and some, though not all of them, may be partially soluble in water. When food decays or decomposes, the gases thus formed may be given off into the air and be absorbed to a certain extent by other foods. In a non-mechanical refrigerator, a certain portion of those gases which may be soluble in water may be absorbed by the water from the melting ice as the air passes it and then carried down the drain pipe. In mechanical refrigerators, except as herein later discussed, a certain portion of those gases which may be soluble in water may be absorbed by the water in the ice cube trays and the frost on the cooling unit. It does not appear to have been scientifically established to what extent such gases as may be formed from food decay are soluble in water, if at all, and to what extent they may be absorbed by the water and carried away in the drain pipe of a non-mechanical refrigerator, or to what extent they may be absorbed by the water in the ice cube trays or the frost on the cooling unit of a mechanical refrigerator.

The representations by the respondent set out in sub-sections 7 and 8 of paragraph 6 hereof are deficient in specific limitation, indefinite, exaggerated and untrue in the particulars above set out.

Such gases as may be formed from the decay or decomposition of foods are not formed to any substantial or noticeable extent when temperatures are maintained at a point sufficient to inhibit bacterial

growth and activity and under such circumstances do not have any harmful effect in tainting foods or in reducing their nutritive value.

PAR. 10. The gelatinous mass sometimes found in the drain pipe of non-mechanical refrigerators is made up of gases and odors emanating from food and from the growth of bacteria, algae and mold in the drain pipe itself. It has not been scientifically determined to what extent the contents of the drain pipe of a non-mechanical refrigerator are made up from gases, odors and bacteria emanating from the food or to what extent the contents are made up of growth of bacteria, algae and molds taking place in the drain pipe itself. The gelatinous matter found in a drain pipe of a non-mechanical refrigerator will not be found in ice cubes frozen in a mechanical refrigerator. The growth of bacteria, algae and molds which may take place in the drain pipe of a non-mechanical refrigerator cannot take place in the cube trays or on a cooling unit of a mechanical refrigerator under normal operating conditions.

The representations to the effect that the gelatinous matter found in the drain pipes of non-mechanical refrigerators may be found in ice cubes frozen in a mechanical refrigerator are untrue and are deficient in specific limitation.

Many mechanical refrigerators are equipped with covers over the cube trays or with doors to the cube tray compartment of the cooling units as standard equipment. Some mechanical refrigerators do not have such equipment. In those types of mechanical refrigerators which do have such equipment, there is, for all practical purposes, no flow of air from the food chamber through the cube compartment of the cooling unit that can come in direct contact with the water in the cube trays. For that reason, there is, for all practical purposes, no absorption by the water in the cube trays of gases that may be formed from the decay or decomposition of foods in the food chamber or of any food odors.

PAR. 11. There are certain foods that have characteristic and inherent odors which are constantly being thrown off into the air, irrespective of any process of decomposition or decay. There are certain other foods which upon coming in contact with air will absorb odors already contained therein. If these two types of foods are placed in a refrigerator at the same time, the foods which have a tendency to absorb odors will absorb such odors of the other food to such an extent that a person eating such foods may taste the odor of the other foods. This transferring of odors from one food to another will take place in refrigerators of any type to a certain extent. It has not been scientifically determined to what extent this takes place in a non-mechanical refrigerator or in a mechanical refrigerator.

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Users of mechanical or electric refrigerators will be able to eat the food stored therein without tasting other foods that were stored in the refrigerator at the same time except as to the type of food in which such transference of odors does actually take place. Many foods, however, do not absorb odors from other foods and as to those foods, users of electric or mechanical refrigerators may eat said foods without tasting other foods that were stored in the refrigerator at the same time.

PAR. 12. The aforesaid acts and practices of the respondent in making the representations hereinabove detailed, in selling and promoting the sale of its non-mechanical refrigerators, have had, and now have, a tendency and capacity to confuse and mislead the public with respect to the true facts as to the relative merits and operating factors of non-mechanical refrigerators and mechanical refrigerators and into the erroneous and mistaken beliefs that mechanical refrigerators are undesirable and ineffective in use and are harmful and dangerous to the users thereof, and into the purchase of respondent's non-mechanical refrigerators on account of said beliefs induced as aforesaid. As a result thereof there has been, and is, a capacity and tendency to unfairly divert trade to the respondent from its competitors who do not make use of similar statements, to the injury of competition in commerce among and between the various States of the United States.

CONCLUSION

The aforesaid acts and practices of the respondent, The Coolerator Company, are to the prejudice of the public and of respondent's competitors, and constitute unfair methods of competition in commerce, within the intent and meaning of Section 5 of an Act of Congress, approved September 26, 1914, entitled "An Act to create a Federal Trade Commission, to define its powers and duties, and for other purposes."

ORDER TO CEASE AND DESIST

This proceeding having been heard by the Federal Trade Commission upon the complaint of the Commission, the answer of respondent, testimony and other evidence taken before John J. Keenan, an examiner of the Commission heretofore duly designated by it, in support of the allegations of said complaint and in opposition thereto, and a stipulation as to the facts executed by W. T. Kelley, Chief Counsel of said Commission and the respondent, and the Commission having made its findings as to the facts and its conclusion that said respondent has violated the provisions of an Act of Congress approved September 26, 1914, entitled "An Act

to create a Federal Trade Commission, to define its powers and duties, and for other purposes."

It is ordered, That the respondent, The Coolerator Company, a corporation, its officers, servants, employees, agents, and representatives, in the course of the sale and distribution in interstate commerce of non-mechanical, or ice refrigerators, cease and desist from representing:

1. That a temperature of 45 to 50 degrees Fahrenheit is the established or required standard temperature necessary to be obtained in any or all types of refrigerators for the most satisfactory preservation of food; provided that the respondent is not hereby prohibited from representing that a maintained temperature of 50 degrees Fahrenheit, or lower, in a domestic refrigerator is a generally satisfactory temperature for the preservation of perishable foods usually kept in refrigerators for domestic use;

2. That in mechanical refrigerators a proper temperature for the preservation of foods cannot be maintained without detrimentally disturbing the natural composition of the air in the refrigerator or the natural composition of the food; provided that the respondent is not hereby prohibited from representing that the natural composition of air in both non-mechanical and mechanical refrigerators, except the air in hydrators or covered containers, is changed to the extent that its moisture content is diminished in the process of refrigeration and that the natural composition of certain foods stored in all refrigerators is affected to the extent to which moisture is absorbed by the air coming in contact with said foods;

3. That the various gases used in mechanical refrigerators as part of the refrigerant escape from the coils in which they are contained, permeate the food chamber and have a deleterious effect on and taint the food therein; provided that the respondent is not hereby prohibited from representing that sulphur dioxide is one of the gases commonly used as a refrigerant in stated or specified mechanical refrigerators; that it is a poisonous gas and that if it should escape from the coil in the refrigerating unit, it might permeate the food chamber and have a deleterious effect on and taint the foods contained therein;

4. (a) That foods kept in mechanical refrigerators lose water or dehydrate to such an extent that their nutritive properties are impaired and essential parts of the chemical combinations of various foods in their natural state destroyed; and (b) that foods kept in a non-mechanical refrigerator do not dehydrate or lose water to any extent whatever; provided that the respondent is not hereby prohibited from representing to what extent, under stated conditions,

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certain specified foods kept in a non-mechanical refrigerator dehydrate or lose water and to what extent, under the same conditions, the same specified foods kept under comparable conditions in a mechanical refrigerator dehydrate or lose water;

5. That sulphur dioxide or chlorine is formed from the decay of foods contained in mechanical refrigerators;

6. That poisonous or other gases are formed from the decay of foods stored in mechanical refrigerators in such quantities that they have a harmful effect in tainting said foods and in reducing their nutritive value;

7. (a) That in a non-mechanical refrigerator, such poisonous or other gases as may be formed from the decay of foods are entirely absorbed by water from the melting ice and are carried away through the drain pipe thereof, but that in mechanical refrigerators such poisonous or other gases as may be formed from the decay of foods remain in the ice cubes made in said refrigerators and are not absorbed and carried away; and (b) that the gelatinous matter found in the drain pipe of a non-mechanical refrigerator is formed solely and entirely or principally from gases emanating from foods contained therein being absorbed and carried away by the water from the melting ice and that the ice cubes frozen in a mechanical refrigerator contain the same matter contained in the gelatinous matter found in the drain pipe of a non-mechanical refrigerator;

8. That the users of mechanical refrigerators will not be able to eat the food therefrom without tasting such other food that was stored in the refrigerator at the same time; provided that the respondent is not hereby prohibited from representing what foods, under stated conditions, give off odors and what foods will absorb such odors and to what extent such transferring of odors from one food to another will take place.

It is further ordered, That the respondent shall, within 90 days after service upon it of this order, file with the Commission a report in writing setting forth in detail the manner and form in which it has complied with this order.

Syllabus

IN THE MATTER OF
ROGERS CANDY COMPANYCOMPLAINT, FINDINGS, AND ORDER IN REGARD TO THE ALLEGED VIOLATION
OF SEC. 5 OF AN ACT OF CONGRESS APPROVED SEPT. 26, 1914*Docket 2834. Complaint, June 4, 1936—Decision, July 14, 1937*

Where a corporation engaged in manufacture and sale of so-called "draw" or "deal" assortments of candy, sale and distribution of which type candy by retailers by lot or chance has capacity and tendency to, and does, decrease sale of candy sold by many manufacturers without any sales plan or device involving lottery or game of chance, i. e., the "straight" goods, and sale of which type, providing, in connection with its sale to public, means or opportunity of obtaining a box of candy as a prize or becoming a winner by lot or chance, teaches and encourages gambling, and is in violation of various municipal ordinances and regulations and State statutes and constitutions, and provides retail merchants with a means of violating the laws of the several States, and sale of which candy, so packed and assembled as to enable retail dealers, without alteration, addition, or rearrangement, to resell same to consuming public by lot or chance, is contrary to public policy—

Sold, to wholesale and retail dealers, certain assortments of candy which were so packed and assembled as to involve, or were designed to involve, use of a lottery scheme when sold and distributed to consumers thereof, and several of which were composed of a punchboard, together with a number of boxes of candy and other articles of merchandise, exceeding in value five cents each, for sale and distribution to consuming public under a plan, and in accordance with said board's explanatory legend, by which purchaser received, for five cents paid, one of said boxes of varying size, or one of said other articles of merchandise, or nothing other than privilege of making a punch, dependent upon number punched by chance, and purchaser of last punch was entitled to specified prize; so assembled and packed that such assortments might be, and were, exposed and sold to purchasing public, in accordance with aforesaid sales plan, by retail dealer purchasers thereof, and with knowledge and intent that such assortments could and would thus be used by retail dealer for distribution and resale to purchasing public by lot or chance, without alteration or rearrangement, in competition with many who do not make and sell "draw" or "deal" assortments, but sell their "straight" goods in interstate commerce in competition with the others;

With result that competitors who refused to, or do not, sell candy so packed and assembled that it can be resold to public by lot or chance, were put to a disadvantage in competing with it and with others employing methods similar to those described herein, trade was diverted to it and others using similar methods from those who do not use same, by reason of attraction to customers of so-called "draw" or "deal" assortments, there was diversion of trade to it from its said competitors, and a restraint upon and a detriment to the freedom of fair competition in trade concerned; to the prejudice and injury of the public and of competitors: