

ORIGIN AND DEVELOPMENT OF THE ICE CREAM INDUSTRY

Paper Read by Frank M. Buzzell at the Annual Meeting
of the Michigan Association of Ice Cream Manufacturers

From motives of comfort and health, the instinct of man in all ages and climates has been to maintain his physical (if not his mental) being at a temperature as nearly normal as possible. Thus we find the natives of Iceland and other very cold climates living upon heat-producing foods, fats, tallow candles, and such delicacies, while the South Sea Islander lunches on a little fruit or cereal, or other food producing a minimum of bodily heat. This rule applies also to liquid refreshment. Hot weather creates a demand for cooling drinks, and vice versa. And we, in our day, when we sit in the coolest spot to be found on some sweltering August night, and sip our favorite cold drink, are actuated by the same motive which has influenced our ancestors from the more recent past back to the days of Job and Solomon the Wise. For the Bible tells us indirectly that the people of Palestine knew and appreciated the refreshing quality of snow in time of harvest. The Jews, the ancient Greeks and Romans were all accustomed to the use of snow for cooling wines and other beverages, and it is to-day used in this way in certain parts of Spain and Turkey.

Only those southern localities which were favored with the proximity of snow-capped mountains could enjoy the luxury of a snow-cooled beverage or dessert. Where snow was not obtainable, liquids were, and still are, cooled in porous jars and urns exposed to cool breezes, or, in lack of a breeze, swung about to create a current of air. The principle is a familiar one. The most common method of preserving snow was to saturate it with water, having packed it closely into some receptacle, of considerable size probably, and allowing it to freeze into a kind of porous ice, from which blocks could be cut as required for use. To chill a dessert or a liquid, the dish containing it was imbedded in a larger vessel partly filled with snow and particles of ice, and the open space closely packed with it. It was then allowed to stand until it had become as cold as possible or as desired.

Alexander the Great is said to have been very fond of iced beverages, and one of our modern varieties, the Macedoine, it is said, was named for the great Macedonian. Snow and ice were used at table in the court of Henry III. of France in the hot summer months. The Italians, it is claimed, made the first improvement in the original method of cooling, which improvement was to dissolve saltpetre in water and pour a little of the solution in with the snow and ice surrounding the dish to be cooled. Later it was found that better results were attained by dropping the saltpetre directly into the snow and ice, and at the same time revolving the vessel containing the substance to be chilled. By this means the mixture in the vessel could be brought to a fairly solid state. Wines were commonly iced in this way, then water, sweetened and flavored with

various fruit juices or other flavorings, was made into a sort of water ice. Water ices and such refreshments are still the rule in the Orient, while ice cream, as we know it, is rare.

There is no reliable record of the first water ices. Dates and places are either lacking altogether in the vague allusions made to them or are so indefinite as to be of no value. It is probable that they were brought to France from Italy by Catherine de Medici, who, preferring cookery to which she was accustomed, brought her staff of cooks with her. The date is given as about 1550. Water ices are said to have been made by Contreaux, an Italian who established a famous café in Paris. Lemonade was invented about 1630; to whom the credit belongs is not known. From water ices to mixtures containing milk or cream and eggs, was apparently a logical progression, but history is vague on the question of who first made ice cream.

It is recorded that in Rome, a certain Quintus Maximus Gurges, nicknamed "The Glutton," a well-known writer of those times on subjects pertaining to the table, wrote a recipe in one of his books for a dish that somewhat resembled ice cream. The name ice cream is one of modern origin, the original terms being butter ice, or cream ice, the latter being to-day favored in England. The earlier forms, after the ices containing milk or cream, which were really the first ice creams known, were called butter ice probably because of their rich butter-like consistency, being made from rich cream and spaddled. Cream ice is said to have been known in Paris in 1774. Recipes for water ices and milk ices, it is claimed, were brought from Asia by Marco Polo, who visited Japan in the fifteenth century. Cream ice is mentioned in an account of a banquet given by Charles I. of England. The dish was made by a French cook named De Mireo, and it is related that the king was so well pleased with the "frozen milk," as he called it, that he pensioned the cook with twenty pounds a year on condition that he would not divulge the secret of making the dessert, nor make it for anyone but him. Another account says that the first ice cream was set before the Duc de Chartres on a hot day in August, 1774, by his chef, who had depicted the duke's coat-of-arms on the cream. Again we find in an account of an entertainment given by Louis XIV. of France, that "toward the end of the feast, his chef caused to be placed before each guest, in silver gilt cup, what was apparently a freshly laid egg, colored like those of Easter, but, before the company had time to recover from their surprise at such a novelty at dessert, they discovered that the supposed eggs were a delicious sweetmeat, cold, and compact as marble." It is also claimed that a certain Carlo Gatti first introduced cream ices into England.

A French cook, Clermont, residing in London, gave instructions for making sweet ices in a book he pub-

lished in 1776. English cook books one hundred and fifty years old give recipes for cream ices in which cream and milk, sugar, eggs, arrowroot or flour and flavoring were used. Recipes have always varied according to the whim or desire of the maker, and there is no similarity in the amounts of cream or milk to be used, and consequently in the butter-fat contents. It has remained for the modern food control official to say how much fat ice cream must contain to be properly so called.

It is a question whether Germany or England first made ice cream, but it is generally conceded that the Germans led the English in making fancy moulded creams.

We deduce from the foregoing bits of narrative that ice cream was not apparently discovered, but rather was the result of a slow process of evolution or development, which was taking place in different localities at about the same time. History states that ice cream was first sold in New York by a Mr. Hall, at 75 Chatham street, now Park Row. Ice cream is mentioned in an account of a ball given by a Mrs. Johnson December 12, 1789, and was introduced to the city of Washington by Mrs. Alexander Hamilton at a dinner at which President Jackson was present. She had become familiar with the dish in New York. The first advertisement of ice cream appeared in a New York paper, the "Post Boy," dated June 8, 1786, and reads as follows: "Ladies and gentlemen may be supplied with ice cream every day at the City Tavern by their humble servant, Joseph Crowe." A negro, one Jackson, who had worked at the White House in Washington after Mrs. Hamilton introduced ice cream to President Jackson, learned the recipe and started a confectionery. He sold his cream readily at one dollar per quart. Others imitated him, but Jackson held his custom and prospered by making the best goods and died wealthy.

Jacob Fussell is admitted to be the father of the wholesale ice cream business. The year 1851 found him in the milk business at Baltimore. His supply of milk came into Baltimore on the Northern Central Railway from York county, Pa. A few of his customers wanted cream, and finding that satisfactory results were not obtained by ordering cream intermittently to supply an unsteady demand, he made arrangements for a regular shipment. Here again a difficulty presented itself, for at times he found his stock of cream accumulating, which must be disposed of in the best way possible. To utilize this surplus he conceived the idea of making ice cream, the retail price of which at this time by the few confectioners who sold it was sixty cents per quart. The idea proved an inspiration, for the ice cream business soon overshadowed the milk business, which was in time disposed of. Mr. Fussell believed in the value of printers' ink and advertised his new business, and then, as now, intelligent advertising paid. Devoting his entire attention to the ice cream business, he prospered in it, and built up a large business, the success of which has continued through three generations to the present day. In

1852 and 1853 he tried out a scheme for making his ice cream at the source of supply of his raw material, rather than at the distributing point, but it did not prove successful, for while the ice cream was actually produced cheaper in the country, the fact that his own attention was divided between the two establishments, and that the stock at the selling end could not be readily controlled, counteracted the lesser manufacturing cost, and the result was that the project was abandoned and not repeated. In 1856 the Baltimore business was left with a partner and a factory was opened in Washington, D. C. In 1862 Boston was added to the chain of plants. Here a large exporting firm, who had made considerable money shipping ice to London, India and Brazil, saw a new outlet for ice in the ice cream business. They attempted to induce Mr. Fussell to go to Brazil and start a factory there, and offered to back him with the necessary capital if he wanted it, but he was not interested. Failing to get him to send one of his men over, they arranged for one of their own men to learn the art of making ice cream, and paid a modest \$500 for the formula. How the South American venture fared is not recorded. In 1864 the New York house of Fussell was started and continued with the usual success. Here the prevailing price among confectioners was \$1.25 per quart. A Mr. Brazleton, of Iowa, a friend of Mr. Fussell, losing his fortune in the panic of 1857, came to Washington and learned the ice cream business. He went back west and opened a factory in St. Louis, later going to Cincinnati and Chicago.

American enterprise was not long in taking up the new industry, and the growth of the business had commenced. However, the real development, the day of large figures in the business, had its beginning not over fifteen years ago. The brine or refrigerating system of freezing ice cream has been efficiently applied only within the past five years, and has now only fairly begun. And yet we are "going some" at the present, as witness this extract from a paper read before the International Congress of Refrigerating Industries at Paris by S. S. Vander Vaart, of Chicago. He states that the yearly output of ice cream plants already equipped with refrigerating machinery is estimated at fifty million gallons, valued at forty million dollars (saying nothing of the millions of gallons turned out yearly by the ice and salt method, which is still in general use all over the country). Mr. Cutler, commenting editorially on this statement in THE ICE CREAM TRADE JOURNAL, says that the estimate given above is certainly not too high, and is, if anything, too low. He further states that probably one-half of the plants equipped with refrigerating machinery have been so equipped within the last two years, and that installations to be completed within the next six months will exceed in number and in aggregate tonnage the record for any previous twelve months.

The first real progress toward artificial refrigeration is said to have been made by a German in 1867, and it was then used only in breweries, and

to a very limited extent. Ice making by artificial means came next. The use of refrigerating processes for making ice cream was probably begun in a way by chance, for large ice manufacturing establishments put on an ice cream department to utilize the broken or waste ice, and the possibility of applying mechanical refrigeration to the making of ice cream was no doubt thus discovered.

Ice cream is not to-day, as in past years, a luxury. Its lowered cost brings it within reach of the masses; no longer is it something which may be enjoyed only by the rich. It is fairly entitled to a place in the class of necessities. Ice cream is in high favor in England, where the climate favors its use the year through. And it is used by nearly all steamship lines, especially those making long trips in warm climates. The passengers, who do not relish the indifferent quality of most foreign made goods, demand American ice cream. Every express steamer of the North German Lloyd Line leaves New York with not only a supply to care for the wants of its own passengers, but enough to furnish the Japanese, Chinese and Australian service of the company. For the far eastern service the cream is carried in refrigerated compartments to Bremerhaven and there transferred to ships sailing for ports in India, China, Japan and Australia.

It does not seem proper to close this paper without some allusion to our friend of the lawn party, ice cream wagon, and county fair—the ice cream

cone. I have heard that it was introduced in this country at the St. Louis exposition. I have found directions for preparing a freshment called "fried ice cream," sometimes known as "Alaska pie" or "Alaska fritters." The method is, briefly, to dip a cube of hard ice cream into a thin fritter batter and then to plunge it into very hot lard or olive oil. The pastry forms a good protector from the heat and hardens so quickly that the cream is not softened in the least. Another more elaborate form is said to be served in certain New York cafés to-day. The fried ice cream was introduced at the World's Fair in Chicago in 1893. It occurred to me that these freak varieties may have suggested the idea of the ice cream sandwich and ice cream cone. Whatever the origin, we will have to admit that the cone has sold many a gallon of ice cream and made many a dollar for those engaged in the business.

It seems hardly necessary for me to speak further of the present extent of our great industry, the ice cream business. There are men here who can tell me a great deal about it, men who are doing their share in making current ice cream history. And I believe that the future historian of this business, who shall recount the progress of its development during the years from 1900 to 1910, cannot but remark upon that decade as being epoch making in the annals of the trade.

ICE CREAM CAN AND TUB BILL IN NEBRASKA

To Provide for the Marking of Any Receptacle for Ice Cream or Milk or Cream and to Make Wrongful Use of Such Receptacle Unlawful

A bill to prevent the use of ice cream cans, tubs, moulds and other ice cream containers, milk cans, bottles, etc., by any one except the lawful owners thereof has been introduced in the Nebraska Legislature and will probably become a law.

The bill provides that any person, firm or corporation engaged in the transportation or manufacture of any dairy product, or ice cream, or in bottling milk and cream for sale and use may adopt any mark of ownership to be stamped or marked on the can, bottle, cask, keg, barrel or other receptacle used in the handling and transportation of any of the products mentioned, and may file in the office of the Secretary of State a description of the name or mark so used, and the use to be made of any such can, bottle, cask, keg, barrel or other receptacle, and cause the same to be published for two successive weeks in a weekly newspaper published and in general circulation in the State of Nebraska.

The brand or mark so selected and adopted may consist of a name, design, mark or marks, or some particular color of paint or enamel used upon the can, bottle, cask, keg, barrel or other receptacle, or any part thereof.

The bill provides that it shall be unlawful for any person, company or corporation to adopt or use any

brand or mark which has already been designated, appropriated or obtained under the provisions of the act; that it shall be unlawful for any person other than the rightful owner thereof to use any can, bottle, cask, keg, barrel or other receptacle, marked or branded as provided in the act, for any other purpose or for the transportation or handling of any other article or product than that designated or provided for by such branding, and that it shall be unlawful for any person other than the rightful owner thereof to deface or remove any such brand, mark or stamp put upon any such can, bottle, cask, keg, barrel or other receptacle as provided in the act.

The Tri-State Ice Cream Co., incorporated with a capital stock of \$20,000, is successor to Frank Howe, wholesale confectioner and dealer in ice cream supplies. Besides enlarging the old business, the new concern will engage in the manufacture of ice cream and dairy products and bottled beverages of the "soft" variety. A fund of \$10,000 is said to have been set aside for improvements and machinery. The incorporators of the new company are: Frank Howe, John L. Howe, W. N. Bagley, Fred Vinland, Wm. Rosenbloom and R. L. McKenty.