The Father of Modern Refrigeration.

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Pack mules in old Rome and camel caravans in the Far East in early days bore compressed snow long distances from the mountain tops to cool the wine at banquets of the millionaires of the time. Some hundreds of years later scientists labored in their laboratories to devise chemical means for producing ice to cool wine in summer. There was no other evident need for artificial cooling, and even when ice-making had become a fairly well recognized industry in the United States ice was practically a byproduct of the brewery. Man's eternal thirst might have been the underlying cause of the invention of ice-making and refrigeration by mechanical means had not Dr. John Gorrie, of Charleston, S. C., and Apalachicola, Fla., been actuated by a higher and nobler purpose.

At the World's Congress of the Refrigerating Industries held in Paris from October 5th to 10th the specialists in refrigeration from all over the world discussed the growth of the science of refrigeration, its marvelous influence on the transportation of perishable food products and wonderful contribution to the comfort of mankind. This was the first international gathering of the men who have created the mechanical refrigerating industry, the first recognition of its place among the world's great activities. All the leading governments sent distinguished official delegations and the scientific bodies were well represented.

At the Paris Congress the name of Edmond Carre was spoken with due reverence as the inventor of the first ice-making machine that was a commercial success. M. Carre should be honored as a pioneer, but to Dr. Gorrie,

South Carolinian by birth and Floridian by adoption, the glory really belongs. M. Carre sought to produce the *carafes frappes,* water bottles with chunks of ice frozen inside, that are inseparable adjuncts to the tables of Parisian cafes, providing a cold chaser for wine. Dr. Gorrie wrought to cool the rooms of a hospital where fever patients were confined to grilling beds with the mercury near the century mark and no ice nearer than New England. M. Carre has been getting the glory because France decorates and pensions her servants to make their fame and existence sure. Dr. Gorrie made ice as early as 1845 while M. Carre was not successful until ten years later.

It was never Dr. Gorrie's purpose to perfect a process for making ice, but all his energies were bent on air-cooling, primarily for hospitals where fever cases were being treated. At that time Apalachicola was the most important Florida seaport, being the outlet for all the cotton grown in the Chattahoochee Valley in Georgia and Alabama. The greatest drawback to the growth of the town was the prevalence of fever in summer. In his large practice Dr. Gorrie found it almost impossible to treat successfully violent cases of fever in the hot months. He first evolved the theory of controlling fever by cooling the patient by external means and it is fully set forth in the newspaper and scientific print of the day. He was almost fifty years in advance of his profession along this line, but to-day the medical world recognizes the value of his teachings without always recognizing whence they originally came.

While pursuing his experiments in air-cooling, Dr. Gorrie produced small blocks of ice, about the size of the ordinary building brick. His process was the precursor of the compressed-air ice-making machine almost universally used now on shipboard. A French cotton-buyer, M. Rosan, residing in Apalachicola during the shipping season, saw the machine in operation and induced the inventor to give a public demonstration at the Mansion

House, the leading hotel, in the summer of 1850. The machine was placed on the table in the dining hall, ice was made and served to the banqueters. The news of the event caused great interest throughout the country.

After the patent covering ice-making and refrigerating machinery was granted to Dr. Gorrie the New York and New England newspapers decried and ridiculed the utility of the invention to such an extent that he was unable to get financial backing and there was never a Gorrie ice-making machine built for commercial purposes, nor did the inventor receive a penny for his work. The Frenchman who induced the public demonstration soon returned to Paris, and Florida visitors to that city later reported that he was a friend and associate of M. Carre whose process was perfected several years afterward. There is every evidence that M. Carre profited by the reports brought him of Dr. Gorrie's successful experiments.

Dr. Gorrie's claim to fame does not rest on his production of ice by mechanical means. However, his machine was commercially practicable and his process of refrigeration underlies the entire fabric of the great cold storage industry of to-day. No man who examines the claims made in his application for letters patent will dispute his right to the title of Father of Mechanical Refrigeration. He prophesied the application of refrigeration to the preservation of foodstuffs and to many other uses now commonly known. His claim for air-cooling in hospitals, dwellings and warehouses put him in the front rank of American inventors, and no invention held greater possibilities for human comfort than his.

Dr. John Gorrie was born in Charleston, S. C., in 1803 and received a thorough literary and medical education in the best schools of the day. His successful career as a physician in Apalachicola made him known as one of the foremost medical practitioners in the South, and his contributions to medical literature extended his fame abroad. It is recorded that he was far in advance of his time in many other lines besides refrigeration. He died at Apalachicola June 18, 1855, after a short illness.

The disappointments that had attended his efforts to interest capital and develop his invention along commercial lines keenly affected him and contributed materially to weaken his constitution.

The Boston newspaper that said he was a crank for trying to make ice, shot a poisoned dart into a man who knew he was working for the health and comfort of millions who had not the ice facilities that Boston possessed.

Dr. Gorrie's body was buried in the beach cemetery. Many years later it was disinterred and reburied in the present municipal cemetery where it rests to-day.

The wonderful contribution made to industrial science by the great Floridian was almost overlooked by the South for a long time. In a few technical works due credit was given him for his invention, but so far as the public was concerned he was forgotten until Captain George H. Whiteside, of Apalachicola, launched a movement to erect a monument to his memory.

By personal solicitation Captain Whiteside induced the ice manufacturers of the South to donate the proceeds of one ton of ice from each plant to the fund, and this together with small contributions from other sources were used to purchase an unpretentious but dignified monument of gray bronze. This stands to-day in a prominent position in the little Florida seaport where the great refrigerating industry had its birth.

It is a wonderful industry that has sprung from the discoveries of the obscure Southern physician.

Refrigeration plays an all-important part in many industries far removed from ice-making. It enters into the making of dynamite and the refining of oil and the brewing of beer among other unique and little known applications. Likewise nearly everything perishable is carried in cold storage under refrigeration at some time or place, ranging from furs to fruit trees and from chicken to chocolate.

There is under way in Florida now a movement to place a statue of Dr. Gorrie in one of the niches in the

National Hall of Fame allotted to that State. It should succeed without opposition, for neither Florida nor the South has produced a son more worthy of the honor than the gentle physician who in his efforts to alleviate human suffering laid the foundation for a world-wide industry and made existence in summer more tolerable for all dwellers in lands where no ice crop is gathered and stored for use in the heated term. Dr. Gorrie did a real service for mankind.