

# Bar Harbor's Splendid New Dairy Plant Will Begin Operation June 1st

## Mount Desert Island Dairies, Inc. To Give This Section Brand New Type Of Service

The thoroughly modern, sanitary and efficient new \$30,000 plant of the Mount Desert Island Dairies Incorporated opens June 1st, to form another chapter in Bar Harbor's business history. The story of this infant of industry and the events that have led up to its birth are not just traditional, cut and dried facts for the ledger and records. It is not just another business, it is something new and daring and different.

The dairy and pasteurizing plant is a combined effort and initiative of a group of business men who have dared to go ahead and improve in spite of a worldwide talk of entrenchment, conservatism and waiting.

In an interview with Percy Kief, president of the Corporation, who has a farm at Salisbury Cove, Maine, he learned of the plans of the organization and of the effort being made to increase the delivery service of dairy products in this vicinity, including Northeast and Seal Harbors.

The story of the new plant leads back through many years, according to President Kief. For a long time many leading milk dealers have shared all tried to establish a dairy until last winter did not see their efforts fruitful.

Previous to the first official meeting of the milk dealers at the Town Hall in January, Mr. Kief had been in Portland investigating the various and their methods of operation in that city. He had been assisted by Professor R. E. Atterton, Co-Operative Extension Economist of the University of Maine in this work and received much valuable advice and assistance.

Julien Emery, retired farmer and chairman of the Board of Selectmen, headed at the winter meeting. Many dealers were present and later with interest to Mr. Kief's report of his findings in other sections. Many discussions ensued and after a long, thorough get-together the appointing of a committee to investigate the dairy more was the satisfactory result. The committee consisted of Mr. Kief, Clarence Alley, Fred Sawyer, Henry Sweet and Harry Woods. Two men were instructed to hold meetings and investigate the ways of having and organizing a corporation to build a dairy plant.

The committee called upon Prof. Atterton who volunteered his time and energy to helping the cause along. He gave many interesting and helpful hints to the committee and showed how others have put similar propositions over.

After thoroughly investigating the matter the committee reported back to the interested group and a corporation was formed with the following officers: Percy Kief, president; Clarence Alley, vice-president and general manager; Henry Sweet, treasurer; George Fogg, clerk. The officers to serve with Fred Sawyer comprise the board of directors.

The Corporation capitalized for \$30,000 and issued both common and preferred stock. Members of the Corporation are the officers and directors.

**TO INVITE PUBLIC**  
The date of an official public reception of the new dairy will be announced shortly. General Manager Alley states that although operations will start June 1st every feature will not be finally completed until a later date.

## NOTED EXPERT TELLS VALUE OF PASTEURIZATION

By GEORGE W. PUTNAM

Nearly seventy years have elapsed since Pasteur performed his classic experiments on preventing the "sour" of wine. In 1869 to 1874 he found that heating wine for a few moments to from 122 to 140 degrees killed bacteria and yeasts causing abnormal fermentation and souring. Later, in 1876, he extended his experiments to beer with similar results in destroying organisms causing souring. The application of this process to milk was probably first recommended as a health measure by Jacobus of New York in 1878, when he advised heating milk for infant feeding momentarily to the boiling point. Thus we may say that the heat treatment of milk has been known to scientists for some 50 years.

Early progress in the use of this process to safeguard milk was slow. The construction of a small apparatus for sterilizing milk in baby bottles in the home by Soxhlet in Germany in 1886 was a real milestone. Callie, in 1888, and Jacob, in 1889, both recommended the use of Soxhlet home sterilizer for infant feeding in New York City. It remained for Nathan Straus to make the first real demonstration of the practicability of pasteurization. Starting in 1893, he made pasteurized milk available to infants in New York City. From 34,000 bottles distributed in that year, this great philanthropy increased until in 1906, 17 Straus stations dispensed over 3,000,000 bottles and 1,000,000 pounds of pasteurized milk. Coincident with this, the death rate of children under five years in New York City dropped from 96 to 65 per 1,000 (1890-1906). Similarly, the death rate during the summer months fell from 136 to 62 per 1,000. In 1906 this decrease in rate meant a saving of over 100,000 babies that year.

Commercially, milk which had been heated in bottles was distributed in Germany in 1880 by a few small firms. The development of a continuous milk heater in Denmark furnished the first machine making pasteurization of large volumes of milk practicable. This machine momentarily heated the milk to 185° F., which is known as flash pasteurizing. Momentary heating in this manner at 185 to 185 degrees F. was widely adopted by American dealers between 1900-1906. The shortness of the heating period and frequent large variations in temperature by this method did not inspire the confidence of the medical and health authorities until Park and Holt, in 1903, showed that the infant diarrhea and mortality of tenement house babies led on this pasteurized milk was greatly reduced over those fed raw milk.

In 1907, the first equipment for pasteurizing on a commercial scale by the holding method was installed under the supervision of North in New York City, in which the milk was heated to 140-150 degrees F. and held for 35 to 45 minutes. The holding method was then gradually adopted everywhere in the United States for pasteurizing milk.

From this brief historical outline, we see that commercial pasteurization in the United States has been practiced in some measure for 25 years. What are the real facts now as to its value and need?

**Pasteurization Needed to Prevent**  
The early work of Straus, Park, Holt and the New York Milk Commission demonstrated beyond a question of doubt that pasteurization of

the building housing the plant of the Mount Desert Island Dairies, Inc. is a two-story building of stucco construction, 82x42 feet, facing Main Street.

As one enters the building from the rear he finds himself in the garage where the trucks are to be kept. The floors, walls and ceilings of the garage are finished exactly the same as the rest of the building. At the rear of the garage is the loading and unloading platform, four feet higher than the floor of the garage so that milk cans and cases may be rolled off the trucks without the necessity of carrying them up a flight of stairs.

## New Building, Two Stories Of Stucco Construction, Measuring 82x42 Feet, Facing Main Street

The building housing the plant of the Mount Desert Island Dairies, Inc. is a two-story building of stucco construction, 82x42 feet, facing Main Street.

**Office**  
The office is located in the front of the building and in the center and the main entrance on Main street leads in to this room.

**Bottle Washing Room**  
Going through the office and passing through another door one is again in the processing room. Just to the right of the cooler is the door leading to the bottle washing room where all the washing of bottles will be done entirely separate from the processing room.

**Loft**  
Located in the front of the bottle washing room is a flight of stairs leading to the second floor where a large space has been provided for the storage of bottles, cans, cases, cartons containing cartons of bottle caps and can caps. Other supplies will also be stored in the loft which may also be reached by means of an elevator located near the unloading platform. A shipment of an entire cartload of bottles has been received and have been stored in the loft. At the foot of the stairs is located the wash room and coat room for employees. Another wash room is also provided for, off the office.

**Receiving Room**  
Next one goes up a flight of steps and upon opening a door finds himself in the receiving room where are located the weigh rack, receiving tank and the can washer. Also in this room is the milk pump used for pumping the milk to the pasteurizing tanks.

**Processing Room**  
Going through the receiving room a door opens into the processing room. Here are installed the two pasteurizing tanks, the cooler, the bottle and filler, the cream separator and cooler, the cheese vat, the butter churn, the combination ice cream freezer and the ice cream box.

A few steps back from the bottle and filler one's a large door and finds himself in the spacious refrigerating room, 16 feet by 17 1/2 feet. At the back end of the refrigerating room is also another door which leads to loading and unloading platform.

**Sales Room**  
Stepping back again into the processing room and continuing toward the front of the building a door enters

a room where display cases and shelves are to be installed. This room has an entrance on Main street making it convenient for customers.

**Sanitation Emphasized**  
Throughout the planning of the building and its construction, sanitation has been emphasized. In addition to being laid out so that various pieces of apparatus soon finds its way to a drain and the amount of water on the floors at any one time is reduced to a minimum.

**MEET THE FOREMAN!**  
Officials of the new dairy corporation consider themselves fortunate in having secured the services of R. B. Hammond, for many years in the business, to act as foreman of the plant. Mr. Hammond, who resigned from a position as head of the Pine Tree Dairy in Gardiner to take up his new duties has had much experience with some of the largest concerns in New England, including the H. B. Hood Company of Boston and the Turner Cough Corporation.

Mr. Hammond is entirely familiar with every department of the dairy business and has recently perfected a milk formula which is finding its way to the market. He has specialized much in the cheese and ice cream lines.

## Building On Main Street Practically Completed And Machinery Is Now Being Moved In

Quicker and more complete service to the consumer is to be offered by the new dairy management. President Kief states that by combining their resources and equipment under one head the producers of dairy products, serving Bar Harbor and vicinity believe that their efforts will be appreciated and worthy of appreciation.

A fleet of closed trucks will make deliveries in Bar Harbor and at North Seal and Seal Harbors. The product taken fresh from the dairy each morning will have had the care of complete management and a thoroughly modern plant.

The equipment being installed at the plant of the Mount Desert Island Dairies, Inc. is of the most modern dairy equipment and is the work of leading dairy engineers. The plant is especially well designed and was laid out by engineers of the Creamery Package Manufacturing Company.

**Milk Pump**  
From the receiving tank, the milk flows by gravity to the milk pump. This type of pump installed was designed and constructed so that it is perfectly sanitary. It can be quickly taken apart and the pump chamber thoroughly cleaned and sterilized. For the reason, it will pump milk or cream without contaminating it, rapidly and efficiently.

**Filter**  
Before entering the pasteurizing tanks, the milk passes through a vertical filter. With the clean milk being produced by the members of the company, this filter may seem like an unnecessary piece of apparatus. The producers all realize that it is more important to keep dirt out of milk than it is to strain it out after it once gets in. In other words, a clean milk is much more preferable than a "cleaned" milk.

**Pasteurizing Tanks**  
The milk is pumped to the pasteurizing tanks which are of the latest type. Each tank has a capacity of 100-gallon capacity have been installed. The tanks are constructed of cast-iron, lined with a special enamel coating. The fine glass covering of the highest quality. It is provided with ordinary commercial construction and is not affected by strong acids and for this reason can be readily and thoroughly cleaned and sterilized. The glass is thoroughly fitted to the metal.

**Can Washer**  
When all the cans on the truck have been emptied they will be immediately washed and sterilized and placed aside protected from contamination until the time arrives for the truck to make the next collection at the farms. A "one man" automatic rotary can washer will be used for washing and sterilizing the cans. The cans are placed in a compartment, carried over and under a series of jets and brought back to the original position for removal.

Clean cans are very essential for the successful operation of a modern dairy. Investigators have shown that the improperly washed and inadequately sterilized can is the cause of much of the bacterial contamination in milk and cream.

Heat given in the washing is slow and expensive and except in very small dairies is impractical. The mechanical hand washer or power washer is the most thorough treatment possible. No part of the process of pasteurizing, washing, rinsing, sterilizing or drying is neglected. The cans and covers as well, go in dirty and come out clean, dry, and practically sterile.

Two thermometers are installed on each tank, one an indicating mercury in glass thermometer, and the other of the recording type. At the beginning of each day's operation, a new chart is placed on each recording thermometer upon which is automatically recorded in indelible ink, the temperature inside the pasteurizing tank during the entire 24 hours.

These charts are dated and the local health department regulations require that they be kept on file of the plant for a year. Health officials and others interested that have a right of checking up on them, are notified.

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