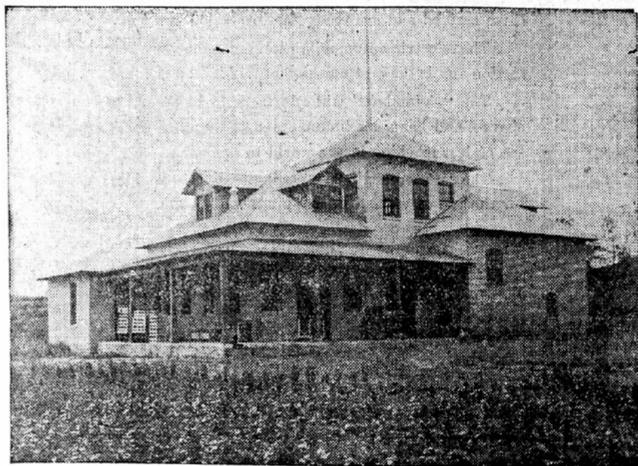
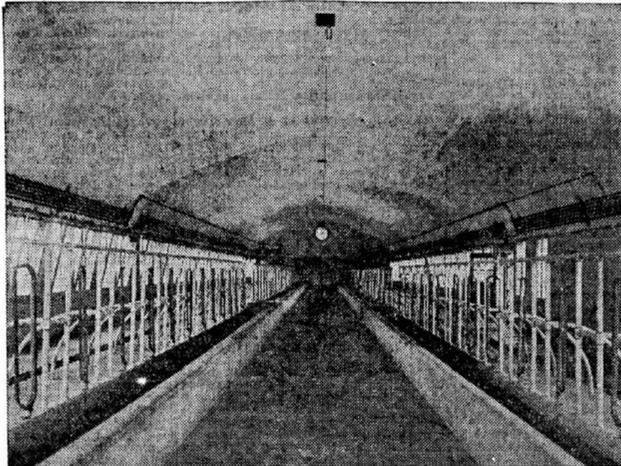


WOODEND DAIRY FARM, LOCATED ON THE SHORE OF LAKE MINNETONKA

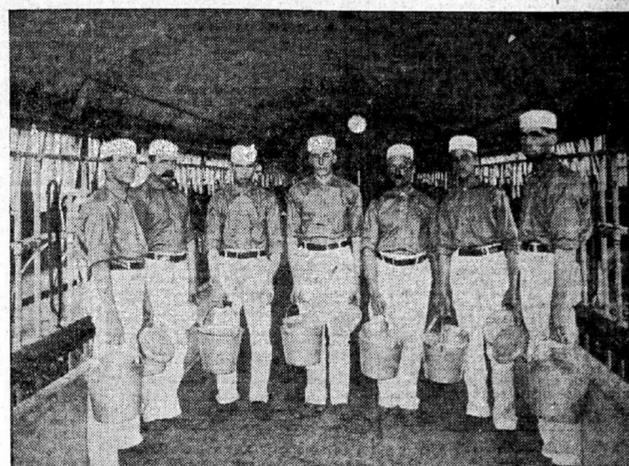
Milk from Thoroughbred Guernsey and Holstein Cows That Is Absolutely Pure—Acres of Alfalfa Furnish the Food—A Porcelain-Finished Dairy; Cement Floors and Sides in the Cow Barn—Scientific Care Bestowed on the Cows and Milk—Albert C. Loring's Beautiful Place Near the Site of the Old Hermitage.



THE DAIRY BUILDING.



THE COW BARN, 175 FEET LONG, CEMENT FLOORS AND WALLS. NO POSTS.



THE MILKERS.

THRU the dense timber which fringes the upper end of Lake Minnetonka along the south shore there winds an Indian trail as distinct today as when trodden years ago by the moss-matted feet of the red men. At the upper edge of Woodend farm near the former site of the quaint old Halsted hermitage it is now a common thoroughfare for those who pass that way on foot. Where it begins in the far north no man knows. Its southern end is lost in a labyrinth of cross-country roads and plowed fields. When Captain Frank W. Halsted, the gentle hermit, who preferred the depths of the forest to the haunts of men, came there in 1855 to erect his modest cabin, the Sioux Indians were still using the trail, and not until they turned their guns upon the white settlers of northern and southwestern Minnesota in 1862-3 was it deserted.

Shakopee and his band came and went that way to and from their buffalo hunting grounds and in the timber surrounding the Hermitage killed scores of deer. The red men, the deer, the hermit and the hermitage have all disappeared. Splendid, wide-girthed, full-uddered aristocratic cows now roam where the deer used to browse, and on the plateau overlooking the lake there is a large cluster of buildings, some of them surmounted by towers, which, viewed from a distance, might be mistaken for a college. As a matter of fact it is a sort of a college where Mr. Albert C. Loring and his associates are educating the public along the lines of pure milk production, a herd of registered Guernsey and Holstein cows numbering 150 being important factors in the enterprise. A few years ago Mr. Loring purchased a tract comprising 300 acres of fine hardwood timber land in the district known as St. Bonifacius, which he christened Woodend. It was generally supposed at the time that he was merely preparing a delightful summer home for himself and family in a locality which is conceded to be the most beautiful on the shore of Lake Minnetonka; but as the buildings took shape and increased in number it was seen that this supposition was erroneous. It is the family's summer home and it is something more.

Eventually the public learned that the finest dairy in the northwest and one which should have no peer in the United States, was being built and equipped there. The full realization of the magnitude of the enterprise and its possible effect on the local and general milk supply became apparent a few months ago, when the product of the dairy first reached the homes of several hundred consumers. Many Journal readers who "live at the lakes" in the summer have already enjoyed the pleasure of visiting Woodend Farm, but the great majority have not. This large constituency, all of whom are interested in pure milk, cannot, perhaps, visit in person, but by means of the photographs herewith presented and

the description appended, can get a fairly comprehensive idea of the splendid work being done at Woodend Farm in providing absolutely pure milk for those who wish to buy it. In the first

When the cows come in from the pasture the doors of the big barn, one story high, 175 feet long, and 50 feet wide inside, open and each cow takes its place in the stalls. The floors,

khaki and white duck, before they begin milking. The pails are emptied into sterilized cans in an adjoining room, fastened to a trolley wire and sent over to the dairy, where in the

bottling process and keep an eye on the operators. From the second story the milk, rich in cream, and free from bacteria, flows down into the bottling-room over a cooler—seen in one of the pictures—and is received in a large pan from

A small portion of the milk—the capacity of the farm is 1,000 quarts a day—goes thru the separator, the cream from this being bottled in the same manner as the milk, but in this case the separated milk is fed to the thro-

delivered from the Woodend farm is known as "certified milk"—that is, milk certified by the Hennepin County Medical society to be absolutely pure.

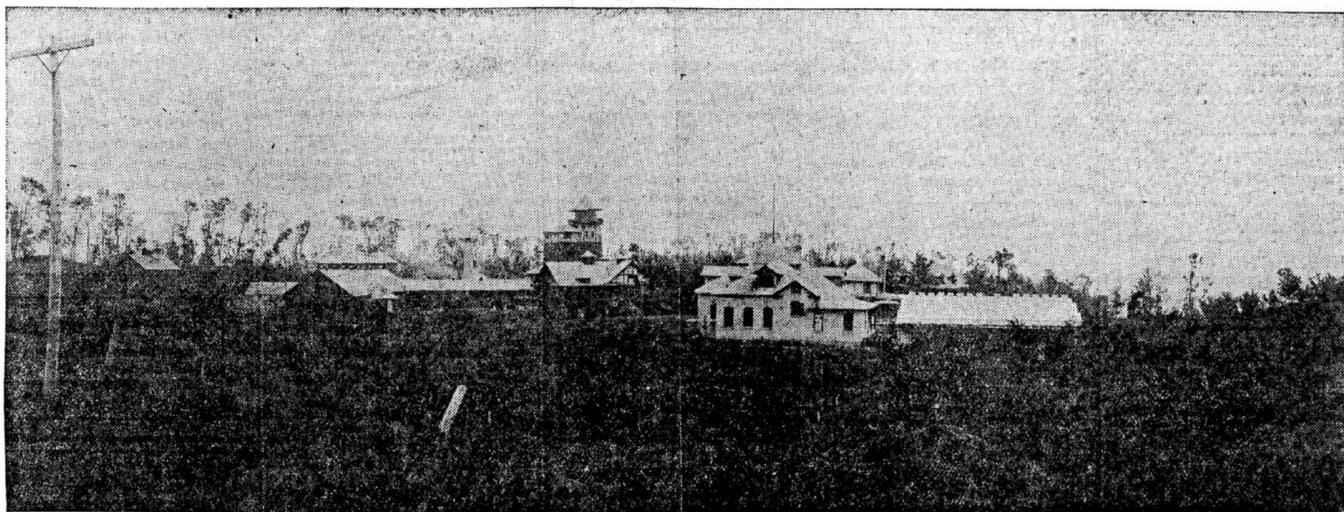
Members of that society, well-known bacteriologists, whenever they feel so disposed, secure samples of the milk and test it, and as long as the milk maintains its purity this certification remains in force. The requirements in this state in this respect are three times as strong as in the state of New York. The preparation of prescription milk is a specialty at the Woodend Farm, the term "prescription" being synonymous here with "modified" in the eastern states. The bacteriologist in his room in the dairy prepares this milk according to formulae furnished by physicians, the result being a modified milk for each patient, just alike each day, and easily assimilated. Prescription milk is a boon to infants of weak digestion.

Dust, which plays havoc with milk on most farms, and in the majority of dairies, is regarded on Woodend farm as something to be avoided. As a precautionary measure the heating plant is placed some distance from the barn and about 500 feet from the dairy. The entire plant is lighted by electricity, and electricity is the power employed at the dairy and creamery. Instead of straw, the bedding generally employed, shavings is substituted in the cow barns and in the stables, because it is more sanitary. Water from an artesian well is piped all over the premises. The cows, as has been shown, are groomed every day and clipped frequently and are given more care at all times than the average human receives. Back of each cow is a screened window which opens so as to admit plenty of air, but no draft.

The ventilation of the barn is called the "King system." The men employed in the barns and dairies were required to pass a medical examination before they were accepted, and are more intelligent than the average farm hand, many of them having taken a course at the Minnesota agricultural college. The man in charge of the barns is a graduate of Wisconsin agricultural college. The situation of Woodend farm is ideal. It slopes gradually from the shore of Minnetonka to a considerable height and is almost surrounded by water, Halstead's Bay bounding it on the northwest, Crane, Eagle and Wawatosa islands lie southeast of it.

The physical aspect of the farm was materially changed last year by the cyclone which destroyed most of the timber and injured some of the buildings. It is pointed out by the lake captains as one of the show places of the upper lake and is regarded as a model by all the farmers living near. A large number of the lake dwellers are regular customers of the dairy, but the larger part of the product is delivered in Minneapolis, the depot for general distribution being at No. 1530 1/2 Nicollet avenue.

The average Minnesota cow produces less than 160 pounds of butter fat in a year. None of the cows in the Woodend herd produces less than 300, and some run to over 600 pounds. There are at least a dozen yielding between four and five hundred pounds each. As might be expected, the milk is higher in price than the average lactated fluid, but when one considers the extreme care necessary to produce it, and its absolute purity, the price ought not to cut much of a figure in the transaction. A pure milk supply is of more vital consequence to the people of Minneapolis than is a pure water supply. The enterprise is deserving of the highest praise and a liberal patronage. One thousand quarts of milk per day would not go very far in the domestic economy of the city of Minneapolis.



BIRDSYE VIEW OF WOODEND DAIRY, ST. BONIFACIUS, LAKE MINNETONKA.

place, the cows, half of them Holsteins and the other half Guernseys, are registered thoroughbreds of the purest blood, each tuberculin tested. No other cows are allowed on the farm under

stalls, feeding troughs, and sides of the room are of cement; the ceiling is curved and there is not a post in the entire structure. The milkers assemble the cows and as soon as they are

second story they are received by the man there in a sterilized room and emptied. Every milker, by the way, is required to wash his hands after milking each cow. While the milkers have thus been occupied the men in the dairy, which is isolated from the other buildings, being 400 feet away from any of them, have been just as busy.

Each of them must, before he begins his work, enter from one of the outside doors into a bathroom and take a shower-bath—this process is gone through with twice a day. He then dresses in a sterilized white duck suit and can then enter the room where the milk is bottled. Meantime other men in one of the outer rooms have washed the bottles, arranged them in galvanized iron boxes, and put bottles, boxes and the trucks on which they stand into a sterilizer and turned on the steam. A second door in the sterilizer opens into a room next to the bottling room, and through this the truck and its contents go to the bottling room after going through a refrigerator used only for that purpose. The milk is not allowed to stop in transit between the cows and the bottlers. It may be well to state just here that the dairy, which contains fifteen rooms, is built of cement and lined throughout with white porcelain finish, seven coats of this material covering walls and ceiling. There are no square corners in it, each room is sterilized once a day.

On all sides of the bottling-room are plate-glass windows, the largest being on the side toward the superintendent's office. Thru this he can watch the

with ice, and removed to waiting wagons which convey them to the near-by stations. The cold temperature of the milk is maintained until it is taken out of the box at the home of the consumer.

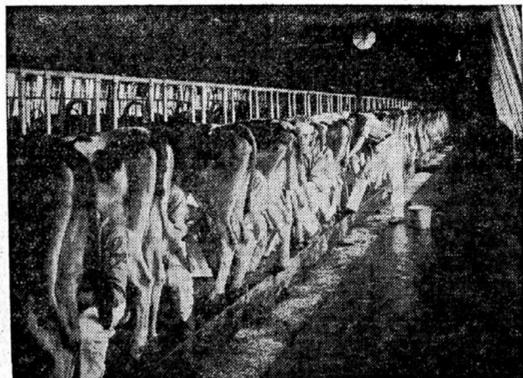
bred Berkshire hogs which occupy a part of the 300-acre farm, their quarters being half a mile distant from the dairy. On the second floor of the dairy is a fully equipped bacteriological laboratory in charge of a skilled bacter-



WASHING AND CLIPPING THE COWS.

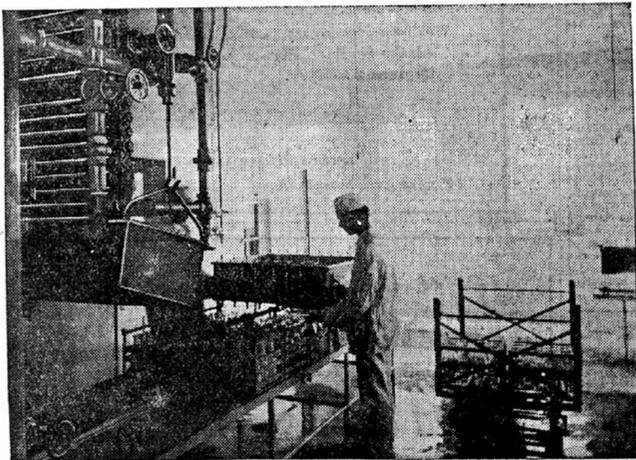
any circumstances. Forty acres of alfalfa, from which three crops a year are cut, furnish green feed in summer and the hay in winter, which constitutes the largest part of their rations.

settled in their places each animal is washed and then dried with a sterilized towel—one towel for each cow. The milkers, after taking a bath, put on a sterilized suit, a combination of



MILKING THE GUERNSSEYS.

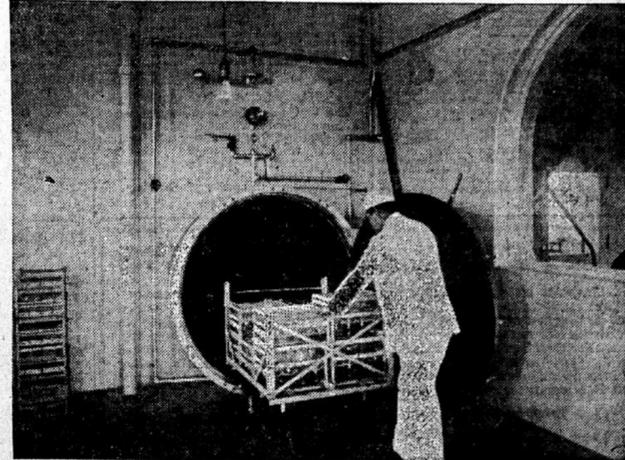
logist, who for six years was head modifier in a laboratory in New York city. Every day he tests the milk from each cow and makes a report of its condition to the general superintendent, Mr. B. D. White. The milk



BOTTLING THE MILK.



A TYPICAL REGISTERED GUERNSSEY COW—ONE OF THE HERD.



STERILIZING THE BOTTLES.