

An ice-house may be made to cost very little or considerable, according to the size of the farmer's pocketbook. A well-constructed ice-house of good material, painted and shingled, would cost from \$50 to \$100 to have built. But it is not necessary to go to this expense. A few old boards and some two by four scantling for the frame, with plenty of sawdust will serve the purpose and an ice-house about 10 feet square and several feet high can be built at very little cost excepting labor. This would hold from five to ten loads of ice, besides the two or three loads of sawdust required to preserve it.

A farmer gives the following plan for building an ice-house eight by twelve feet, to hold twenty tons, and to cost \$50: Use two by six studding, and cut them about ten feet long. On the outside use good, planed siding, and paint it. The inside of the studding can be boarded up with rough, cheap lumber. When boarding up fill in the place between the boards with sawdust, well tramped down. On a building of this kind I would shingle the roof, and put a ventilator in it. I would also put a good wall under the building, and level the bottom by filling in with small stone.

A location for an ice-house should be chosen with good drainage to carry off the water from the melting ice. When filling with ice, the bottom should be covered with straw, and a few inches of sawdust spread over it. The coarser material at the bottom makes the drainage better. Large blocks of ice squarely cut, of uniform size, pack and keep best, and there will be less waste from melting if ice can be obtained from fifteen to twenty inches thick. After putting in a layer the crevices should be filled with broken ice, and the surface kept level by the use of an adz. A space of a foot or more should be left around the outside of the ice to be filled with sawdust; then cover the top with about eighteen inches of sawdust.

Breeders' Meetings

Stockmen should bear in mind the list of breeders' meetings to be held in Toronto next week. These will begin on February 6th, and continue till the evening of February 8th, as follows: *Tuesday*, at 1 p.m., Canadian Holstein-Friesian Association, Albion Hotel; 2 p.m., Dominion Ayrshire Breeders' Association, Shaftesbury Hall; 6 p.m., Dominion Shorthorn Directors, Albion Hotel. *Wednesday*, at 11 a.m. and 2 p.m., Dominion Shorthorn Breeders' Association, Shaftesbury Hall; 8 p.m., Hackney Horse Society, Albion Hotel. *Thursday*, at 11 a.m., Shire Horse Association, Albion Hotel; 2 p.m., Clydesdale Horse Association, Albion Hotel; 6 p.m., Dominion Horse Breeders' Association, Albion Hotel.

Notes from the Vermont Dairy Convention

By Prof. H. H. Dean.

On January 8th, in the evening, your correspondent took train at Guelph for Brattleboro, Vermont, to see what our Yankee dairymen do, and hear what they say, when in convention assembled. After leaving the Province of Quebec the Central Vermont Railway enters a valley lined on both sides by mountain chains, and its feet are washed by many mountain streams which furnish power for driving machinery and water for the dairy cow. No wonder that Col. Hooker, the genial toast-master at the banquet on Wednesday evening, remarked that it was customary for the choir to sing "Shall We Gather at the River" during the funeral service of many a Yankee milkman.

In spite of the restricted area of farming lands along the mountain sides, the Vermont farmers appear prosperous. The creamery has been the salvation of agriculture in these districts. At St. Albans, the home of the largest creamery in the world, Governor Smith and his accomplished and

stately wife, together with a party of friends, joined the conventioners. (I may mention that the Governors, politicians, etc., always make it a point to attend the Dairy Conventions of the State. It is hinted that they are all experts at milking cows.)

The Dairy Association consists of the joint members of the Vermont Dairymen's Association, The Butter and Cheese Makers' Association, and the Women's Auxiliary. No wonder that the meetings were all lively and full of interest.

The President, Mr. G. W. Pierce, made a model chairman, and had his programme go sharp on time, except at one session, when ex-Governor Hoard was the second speaker but could not be found. A committee was appointed to look up the Governor. They found him closeted behind bolted doors with the Ladies' Auxiliary. When at last the Governor appeared he explained matters by relating a circumstance which occurred in his own town, when a couple of ladies said to his wife on one occasion, "Do you know where I saw your husband last?" "No," said his better half, "where was he?" They replied: "We saw him talking to two very beautiful ladies." The Governor says his wife exclaimed, "Thank Heaven, there were two of them!"

It will be impossible to relate all that occurred. I may mention a few things which forcibly struck the writer:

1. The shrewd Vermont farmers appear to have made a very close study of *individual cows* in the herd. Several men told how many cows they kept, how many pounds of milk they produced, what the milk tested, how much butter they made, what the butter sold for, and how much profit they made from each cow and from the whole herd. The ladies were not behind in this respect. Mrs. Nelson, of Ryegate, stated that she averaged $313\frac{3}{4}$ pounds of butter per cow last year, including heifers. She received \$65 per cow for their product. Our Ontario farmers are behind in this respect.

2. A number of these dairymen gave it as their experience that cows testing under 4 per cent. fat were unprofitable as butter producers. They preferred cows testing between 4.5 and 5.5 per cent. fat. Cows testing 6 and 7 per cent. fat were usually not so profitable as those testing about 5 per cent.

3. The model dairy cow for butter-making, according to one speaker, is of Ayrshire form and characteristic, with the Jersey quality of milk.

4. The use of the Babcock test, and scales in the herd was strongly recommended.

5. Private dairying is apparently more profitable to the Vermont butter-maker than sending to the creamery, where he has the necessary skill in manufacturing and marketing his produce.

6. The State requires every operator of a Babcock tester to procure a license from the Agricultural College. One dollar is charged for such a license, and all licensed operators must pass a satisfactory examination. Of those who had applied for a license, 13 per cent. were found incompetent. The State also requires that all apparatus used in the Babcock testing shall be marked "correct" by the Experiment Station. For this work a charge of five cents per article is made. The law is thus self-sustaining.

There were 125 exhibits of butter, and but 13 of cheese at the convention. It will thus be seen that dairying in Vermont is largely on the lines of making butter. The highest scoring package of butter was 98 prints, the lowest 85. The highest scoring butter was made in a private dairy and was certainly of most delicate flavor. I have not before tasted such a delicate flavor in winter butter. There was \$50 divided *pro rata* among 99 exhibitors. When will our people adopt the plan of giving all deserving exhibitors a share of the prize money, instead of going on the old plan of 1st, 2nd, 3rd, 4th, etc.? This system is out of date and it is time for a change. We are too conservative in this respect.

Personally, I found the Vermonters a little cool at first, but after they got "thawed out" they were most cordial and