

"What do you think of a class in a dairy test for heifers under two years old?" we asked Mr. Leggett of the firm of McMillan & Leggett, by way of introducing the subject.

#### A DANGEROUS CLASS

"That two-year-old class is an inducement to breeders to ruin their heifers," was the unhesitating answer. "It is worse than the class for two-year-old heifers at our fall fairs. It would be to the advantage of the dairy breed to get rid of both classes."

"At what age would you breed?"

"At not less than two and one-half years, although I would not like to let a heifer go for three years. In no case would I have a heifer freshen at two years or under."

These are only a few of the many opinions that we heard expressed on this subject. A few were inclined to disagree with the conclusions expressed by Prof. Barton, but for the most part dairymen agreed that Prof. Barton was just about right. Even those who disagreed referred only to exceptional cases and all expressed the opinion that in the long run it would be better for both breeders and their cattle were heifers not allowed to freshen under two and one-half years at the least. We invite the opinion of other Farm and Dairy readers on the subject of "Age to Breed Heifers."—F.E.E.

### Cooperation in Eradicating Bad Weeds

T. G. Raynor, Seed Division, Ottawa

A year ago last January, the Experimental Union of the Ontario Agricultural College, at its annual meeting appointed a committee, under the chairmanship of Prof. Howitt of the Botanical Department, to formulate some line of experiments in destroying weeds. Accordingly, some experiments were outlined and a few farmers carried the plans out. Results were remarkably successful considering the year. It augurs well for the future. It means that we need not be terrorized by the rapid spread of some bad weeds. In fact, there is a most hopeful outlook for dealing with the worst of them.

For instance, both couch grass and perennial sow thistle were successfully treated by handing the land in a similar way. The soil was well worked up in the spring after the spring seeding was done. It was then thoroughly manured and worked over again to secure a fine seed bed. Rape was sown in drills, 1½ lbs. an acre, and thoroughly cultivated. The rape was pastured off, and on examination in the autumn, experimenters reported an effectual clean-up of the weeds in question.

A large number of farmers should try this experiment this year. Prof. Howitt, O.A.C., Guelph, will be glad to correspond with farmers desiring information on methods of procedure.

### To Get Good Seed

R. A. McG., Perth Co., Ont.

I believe that the best place to plant seed is the farm on which it is grown. There are many farmers, however, at least in our neighborhood, who have undesirable varieties of various grains and in this case it is inadvisable for them to plant their own seed. Many of these men do not think that they can afford to go out to buy enough seed of the desirable varieties to plant their whole farm and accordingly they let it go from year to year and in the aggregate lose hundreds of dollars through continuing with, say, oats that yield eight or 10 bushels an acre less than would such varieties as the Siberian and O.A.C. No. 72 under the same conditions. I will describe a plan that I have used for introducing a good variety of barley on my farm, and of maintaining its high standard.

When O. A. C. No. 21 first became known a few years ago, the yields reported to me were

almost unbelievable. I wrote to Prof. Zavitz and discovered that the tests at the College proved the variety that I had always had to be one of the poorest. I immediately secured a peck of the new seed and sowed it on a quarter of an acre of carefully prepared land. In the fall just before the barley was ready to cut, I went through the field and selected enough of the best heads to make a peck of threshed grain. In selecting these heads I paid attention to the strength of straw, length of straw, strength of head and number of heads per plant. When I had made this selection, I cut the field and



Getting Ready for the Sap Flow

Quebec maple sugar makers are fully alive to the importance of their industry. They have recently formed a Provincial Organization of Maple Sugar Makers. The evaporating house of one of these live Quebec men, Mr. Fred Schwartz, Pontiac Co., Que., may be here seen as it looked just before its first sugar making season.

threshed that quarter acre by itself. This I used for seeding my farm the following year. Needless to say, the seed patch was kept clear of weeds.

I have followed this system ever since, always seeding a quarter of an acre of the hand selected seed and using the balance of seed from the plot for the general seeding of the farm. I find this a cheap and efficient manner of getting the best varieties at little price, and then of maintaining the quality and improving it from year to year. It is not half as much trouble as some people seem to think it is. The main thing is to get started.

We must have conveniences in the farm home, the same conveniences as are in the city. If we would keep the boys on the farm we must keep the girls there also.—T. G. Raynor, Ottawa, Ont.

It has been made an understood thing that poultry plants on a large scale cannot be made to pay. This has been proved a fallacy. It is possible and is being demonstrated in at least three big plants which I know of and have visited.—John I. Brown, Montreal, Que.

With two grade Holstein cows I have produced 18,234 and 17,020 lbs. of milk a year respectively. I do not lay so much stress on the variety of feed or on the quantity as I do on regularity of feeding, watering, grooming, milking and general care. I do not think we have varied 10 minutes in milking or feeding while these cows were milking in their last milk period.—J. W. Waring, Oxford Co., Ont.

### Expert Advice on Maple Sugar Making

M. F. Goddard, Shefford Co., Que.

I will divide the process of making maple syrup into four grades or classes, Nos. 1, 2, 3, and 4, and each of these classes represent a certain percentage of makers.

After a long experience as a maker of maple sugar myself, and also as a buyer, I contend that to-day not more than 30 per cent. of maple sugar producers belong to No. 1 class; 30 per cent. to No. 2; 30 per cent. to No. 3; and 10 per cent. to No. 4. If I have erred in these figures, it is classing too many in Nos. 1 and 2 grades. It is easy to change from No. 4 grade to No. 2, as I have seen it done many times when as a buyer I have paid 40 cents more a gallon to one man than another. These men were neighbors, and the next week, and ever afterwards, the No. 4 man had No. 2 syrup.

#### HOW THE POOR MAN WORKS

In these four separate classes each maker that belongs to them has a different way of producing his maple sugar and syrup. I will take up No. 4 grade, or first class. Those that make this grade do not look upon their sugar bush as of much consequence. There fore they do not spend much time on it. Any old boiling apparatus will do them. Wooden buckets put away without washing, a West India molasses barrel for a gathering or storage bucket, sap never strained and allowed to stand in buckets, perhaps a couple of days at a time, and the result is hardly any of this maker's products bring more than six cents a pound for sugar.

Next is No. 3. His way is much better than No. 4. He has a modern evaporator, tin buckets, and other utensils up-to-date, but he is not particular, not clean enough, and while he may be one of the best farmers in his neighborhood, as far as his land is tilled, and care of his stock is considered, he does not use the same methods in his sugar orchard, and the result is an inferior grade of sugar, a strong syrup, and he, too, takes a lower price for his products.

#### WHERE NO. 2 FAILS

And now for No. 2. His sugar orchard is equipped in the most modern manner, his buckets are all tin, his sap spouts are all modern, he uses the latest storage and gathering tanks. But he has made a mistake to start with which makes it almost impossible to make much of No. 1 grade, unless the sap runs very slow. It is this. He is trying to make his evaporator do more than it was made to do. He has a 3x12 evaporator, when he should have a 4x14 or a 4x16! In all of his other methods he is the equal of No. 1, but he works more hours, burns more wood, and this adds to the cost of his product.

I will now try to explain thoroughly the methods of the No. 1 class of sugar and syrup makers. To start with, he taps no maples but rock maples. If there are any soft maples in the orchard he cuts them down for fuel. When tapping his trees he does not bore them deeper than one inch into the wood of the tree, being very careful not to strike a decayed or colored part of the tree. He uses the most modern spout and prefers a small second growth tree to the large first growth. His buckets are thoroughly washed when they are put away in the spring, and when taken out the next spring are rinsed out again before hanging to the tree.

#### "RIGHT ON THE JOB"

When the sap commences to flow this class of maker does not wait until the buckets are full, or even half full, to gather his sap, but is after it when there is barely a quart in the bucket and it is carefully strained into the drawing

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