

Prof. Craig, Experimental Farm, Ottawa; Rev. Canon Fulton, St. Vincent de Paul; Rev. J. Edgar Hill, Montreal; Rev. Brother Norbert, Montreal; Messrs J. M. Fisk, Abbotsford; W. M. Patterson, Clarendville; H. W. Benyon, Montreal; James Johnston, Montreal; G. B. Edwards, Covey Hill; R. B. Whyte, Ottawa; M. Newman, Lachine Rapids; G. R. Robertson, Montreal; A. S. Henshaw, Montreal; J. Robinson, Mayor Como; I. J. Gibb, Como, and W. W. Dunlop, secretary, Outremont.

The president opened the proceedings with an able address and was followed by Prof. Craig, who gave an excellent lecture on "Spraying," a full report of which was published in the *Star* a short time ago. He advocated the use of the Bordeaux mixture, which is composed of four pounds of copper sulphate, four pounds of unslaked lime to fifty gallons of water, but warned those present that spraying alone will not preserve the orchards. The time had come when the orchards must be manured and carefully fostered. The old method was to take a crop of hay off the fruit orchard, but the time for that had gone by and those who wished to preserve their good fruit crops would have to assist the trees and at least see that they were not robbed of the goodness of the soil. Prof. Craig answered many questions and advised those who had only time to spray once a year to do this just before the blossoms opened. He would certainly discourage the use of mineral fertilizer in the autumn.

Many delegates gave the result of their experiments with various fruits. The best six varieties of apples for profit in the Ottawa Valley was the next question discussed, the president holding that these were the Duchess Wealthy, Fameuse, Canada Red, Winter St. Lawrence and Macintosh Red. Mr. Shepherd has exported most of these apples and finds a good market for them in England, France and Germany. Other varieties suggested by various delegates were the Ben Davis, Non Pareil, English Russet, Scotch Winter and Yellow Transparent.

Cold storage was then taken up. Prof. Craig defining this as putting fruit into a temperature so low that no interior chemical change will take place. When this can be done the fruit may be stored indefinitely. Last year he had tried storing apples, pears, peaches and grapes at a temperature of 34 degrees. This arrested the ripening process, which continued just the same as though it had never been stopped, when the fruit was taken from storage. The fruit should be picked before it is quite ripe if the best results are looked for, and then it may be easily kept until mid-winter. Stone fruit did not give such good results as apples and pears, even Bartlett's being perfect at the end of February. The Professor advised his hearers to try and go in for some system of district cold storage warehouses, where by paying a small fee, fruit could be stored in time of glut until the market was open. This question of cold storage had been taken up by those who grow for export, and the Ontario fruit men had followed the lead of the butter men in asking the Government to provide them with some means of cold storage, so that perfect samples of Canadian fruit may be put on the English market. The Dominion Government had therefore made arrangements for two trial shipments in butterships. The fruit will be picked in the Niagara district and carefully wrapped in tissue paper and packed each box bearing the grower's name. Should the experiment prove a success, other shipments

will follow, and the speaker advised the delegates to see that Quebec was not left out in the cold in this matter.

To day the members of the society are being entertained by the Trappist fathers, at Oka, where more papers are being read and speeches delivered.

Sir Henri and Lady Joly de Lotbinière, who are attending the Pomological Convention at Como, are to be the guests of the Trappists at Oka for a few days.—*Star*.

FRIENDS IN THE GARDEN.

We should Distinguish Between Insects that are Useful and Injurious.

We should learn to distinguish between foes and friends in the garden, and, if necessary, the children should be taught early the difference between insects and birds that do harm to plants and those that do good. Snakes, toads and lizards, instead of being injurious to the plants, are always invaluable helps in keeping down the injurious insects. Snakes may be repulsive in appearance, and poisonous ones very dangerous, but the ordinary ground snakes will not hurt one, and they will keep down mice, bugs and insects as nothing else can. As a rule the noxious insects are in the greatest numbers in our gardens, and hence toads, lizards and snakes that eat all that come near them destroy more of the foes than enemies. I should never think of killing one of these creatures in the garden, but would be more inclined to protect them, and even import them into the garden. I have seen a small gray lizard clean off the worms from a field of cabbages as fast as they could multiply. Attracted by the fat feast the lizard returned every day, and he would make trips up and down the rows of cabbages until not a worm could be found.

A few toads in hotbeds and coldframes are of inestimable value. They will keep down all insects that begin to show themselves, finding them under leaves and stalks that hide them from an ordinary observer. In Paris toads are regularly caught and sold to gardeners for insect hunting in their green houses. And yet many boys and older people destroy them ruthlessly as soon as they discover them in the garden. The toads will eat cutworms by the wholesale if they can find them, and I have seen them devour potato bugs in great numbers when deprived of more palatable food.

But we have also friends among insects, and it is well to bear in mind that they can do much good for us. The so-called lace-wing insects are nearly all friendly to us. They live on other insects, and do not eat any of the plant. If a few can be turned loose in a greenhouse they will destroy all insects other than those of their own class. In this class are included the ant-lions, aphid lions and dragon flies. For every one of these we kill we must expect a dozen enemies to spring into active existence that must be destroyed by spraying.

The tiger-beetles and the lady beetles, as well as the long legged ground beetles, are all insect eaters, and they go around the garden in search of their prey continually. They will attack large grubs and other insects, as well as the very small plant lice that hide behind the leaves. These beetles must be distinguished from others that destroy the plants. The large robber-flies are also great friends in the garden, and they will attack all kinds of

grubs and insects to devour. They are particularly eager to destroy aphids, and in this respect their presence should be greatly encouraged.—*Gormantown Telegraph*.

TO APPLE-GROWERS.

Be Careful as well as Honest.

The National Apple Shippers' Association desires to acquaint apple-growers of the country with the aims of the association and to ask their aid in the reforms proposed. Dealers, shippers and growers must prosper together or not at all. In this view of mutual interest, the following suggestions are submitted to orchardists, representing the result of careful thought and discussion:

1. It will be to the advantage of all interested in apples—growers, dealers and consumers—if there is a recognized size and quality of package, as well as for size and quality of fruit, both in what is now known as No. 1 and No. 2 apples. A good size of package is easily suggested—one that has been in use for some years by the best class of western dealers and larger orchardists. A full-size flour barrel (that is, a barrel with 17½ inch diameter of head and 28½ inch length of stave) will meet all requirements, giving a good, generous-looking barrel, and when well shaken down and pressed, holding three bushels of apples. In some sections of the West, the barrel now in use is smaller than this, but these barrels are invariably discriminated against in price by the better class of traders; in fact, they are generally spoken of as "the snide barrels." In a good apple year like the present, the difference of a peck of apples in a barrel will mean to the grower not more than five cents in the orchard; but when the apple comes to sell in the market, the small barrel will bring on an average at least 25 cents less. Besides, the trade is so generally convinced that a package "snide" in size generally contains fruit "snide" in quality, that they avoid it as far as possible, even at a fair difference in price, and as a consequence in times of oversupply they are the ones neglected, while the more honest looking, if not really more honest, packages are given more prominence and consequently better sale.

2. It is not so easy to arrive at a proper standard for size and quality of fruit, for the reason that sizes and qualities of the same varieties vary considerably in different sections and in different seasons. The standard adopted by the association will come as near to properly covering the ground as is possible without naming all varieties of apples, and it is recommended to your favorable attention:

"That the grade No. 1 shall be divided into two classes, A and B. That the standard for size for class A shall be not less than 2½ inches in diameter and shall include such varieties as the Ben Davis, Willow Twig, Baldwin, Greening, and other varieties kindred in size. That the standard for class B shall be not less than 2 inches in diameter and shall include such varieties as Romanite, Russets, Winesap, Jonathan, Missouri, Pippin, and other varieties kindred in size. And, further, that No. 1 apples shall be at time of packing practically free from the action of worms, or defacement of surface or breaking of skin, and shall be hand-picked from the tree."

This standard does not prevent any grower who may have good apples below the standard of size in either

class from marketing them for what they are. Occasionally, some really choice fruit might run below the standard, but the exceptions are so rare that there can be little objection to the standard as fixed.

These suggestions are to the interest of every intelligent, capable apple grower. If may not suit his shiftless neighbor when he find that his neglected fruit will not grade as No. 1. But that class has no legitimate place in the industry. To increase the consumption of apples, the consumer must be pleased, and nothing will tend to that end so much as to furnish him with a better, rather than a poorer apple than he expected when he made his purchase. Let the barrel branded No. 1 be not only No. 1, but fine; and let the purchaser find the barrel branded No. 2, not cider apples, but good fruit. Each barrel sold under this plan will make a customer for two more, and a crop of apples cannot be raised in this country too large to sell at fair prices, and that without going to Europe for a market for the surplus.

It may be too much to hope that all that is outlined can be accomplished this year, but by cooperation a long step can be made toward it. One thing is sure in this big crop year, the grower who most closely follows the suggestions will be the man best satisfied with the results of his year's work.

The association is especially anxious to have growers understand that the prosperity of both growers and legitimate dealers are bound up together. Anything advancing the interests of one is for the benefit of the other, and for that reason it urges hearty cooperation between the two interests, to the end that the apple trade may be further extended upon a sound basis with a reasonable profit to all concerned. The apple is the king of fruits, and its use can be greatly enlarged by honesty in all dealings and intelligent organized effort upon the part of the growers and dealers.

The Dairy.

STRAW AS A STOCK FOOD.

The utter neglect of the value of straw and the waste of so many million tons annually by the American farmer, says J. S. Woodward, amounts almost to a crime. In no other country is straw so wasted, and if the present scarcity of hay shall lead our farmers to better appreciate straw as a food for stock, and of their taking better care of it, the frost and drought that have so disastrously affected the grass crop, will not have been an unmitigated evil.

All over the great grain-growing sections of the boundless West the nightly fires which so universally illumine the sky are glowing evidences of the ignorance and folly of our farmers. With them straw seems to be regarded as a necessary evil connected with the growing of grain, and the match is applied as the readiest means of getting it out of the way of the plow for the next crop. Here in the East we make a better use of it, but even here we do not half appreciate it. Most farmers pile it up in unshapely heaps, which they call stacks, but so slovenly done that water saturates it from top to bottom, and the cattle are allowed to run about these during winter to work it down into what they call manure, but which is little more than wet straw,