

cupied the rest of the evening discussing how eggs are handled, how they should be, and how they could be. Keen interest was manifested from first to last, and a resolution passed, unanimously, placing the meeting on record as being in hearty sympathy with the movement, and asking Mr. Brown to come back next (last) week to larger meetings, which he willingly agreed to do. Judging by all appearances to date, the outlook for this form of co-operation is very hopeful, and we trust farmers in many other districts of Canada may interest themselves in its promotion.

120 Eggs from Four Turkeys.

Editor "The Farmer's Advocate":

Our four turkeys, two old and two young, have laid, up to date, 120 eggs. The two young are laying for the second time, and to all appearances will lay quite a number yet. I am not in favor of turkeys laying too early or too many eggs. We set them under Plymouth Rock hens, with very good results, seven and eight eggs to each hen. When old enough to take to the fields, we divide them between the old turkeys. When shorts are fed, the best should be used, as the cheap grade, which is only ground bran, is a starvation diet. Shorts should be just dampened, as it is then in a crumbly state. When made too wet, it becomes soft and sticky. Rolled oats, such as is now commonly fed to horses, makes good feed for a change. For young fowl, when scattered on the ground or floor, they can pick out the inner substance and leave the hulls. S. C. ASKIN.
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Alfalfa for Poultry.

Alfalfa and clover hay, cut early, and well cured, will be relished by the hens next winter, and will do much to make them lay. Large quantities of chaffed alfalfa are retailed every winter to suburban poultry-keepers. One dealer in London tells us he sells about five tons of it a year, at prices from 2 to 2½ or 3 cents a pound, depending on the quantity. In 50-pound lots it sells at a price equal to \$40 a ton. If it pays suburbanites to buy alfalfa at this figure for their hens, will it not pay a farmer to put some by in prime condition for his flock?

GARDEN & ORCHARD.

Sow a Cover Crop.

While cultivation during spring and early summer is the correct and most profitable practice for the majority of orchards, it should in nearly all cases be supplemented by the sowing of some crop in midsummer, the time of seeding ranging from the end of June, in northerly latitudes, to the latter part of July in more southerly sections where there is less danger of winter-killing of the late growth. The middle of July is about right in most localities. The advantages of such a cover crop are thus enumerated by Prof. H. L. Hutt:

Cover crops may benefit in many ways, of which the following are some of the most important:

1. A cover crop, by adding a large amount of fibre to the land, prevents hard soils from cementing or puddling.
2. On bare and rolling land, where the rains quickly run off, and snows blow off the high portions, a growing crop tends to hold these until they have time to soak into the soil.
3. Land covered by a growing crop dries out more quickly in the spring, owing to the transpiration of moisture through the leaves, and consequently may be plowed under earlier in the season than land which is bare. This is a very important point, as it enables the orchardist to gain several days in the busy season of the spring.
4. Ground covered with vegetation will hold the snows in winter, and thus prevent deep freezing, thereby avoiding the liability of root-killing.
5. A cover crop affords the most economical means of furnishing a supply of humus in the soil.
6. The roots of a cover crop assist the tree roots in rendering available certain mineral plant food in the soil.
7. A large amount of plant food is liberated in the soil after the tree growth has ceased. This is taken up by the growing crop and held in a readily available form for the following season.
8. Leguminous crops, such as clover, vetch, alfalfa, peas, and beans, by virtue of certain bacteria which form nodules on the roots, are able to assimilate nitrogen from the air. As nitrogen is one of the most expensive fertilizing elements, the value of this class of plants cannot be too highly appreciated.

As to the kind of crop to use, considerable room for choice exists. It is good practice to use a different crop from year to year. Except in orchards where the wood growth is excessive, we strongly recommend a leguminous cover-crop. We did a little experimenting in a small way in our demonstration orchard last year, trying alfalfa, red clover, mammoth clover, hairy vetches,

rye and oats. Everything considered, we regarded hairy vetch as the most satisfactory, and expect to use it altogether this year. It is a legume, drawing nitrogen from the atmosphere. It makes a thick, even growth, nice to work on, and not difficult to plow under, especially where a rolling coulters is used. Thirty-five pounds of seed should be sown per acre, and, while the seed is rather expensive, there is little doubt that, in an ordinary season, it will be repaid by the increase in fertility and humus content of the soil. Next to these we would rank alfalfa, sown at the rate of 30 pounds seed per acre, and red and mammoth clover at the rate of 20 pounds. Rape gives fair results in young orchards. Rye is to be recommended in orchards where more desirable crops cannot easily be made to grow. Sow preferably when the ground has been moistened by a rain. Harrow in, roll, and then give another brush with a light harrow to re-form the mulch.

The best fruit-growers make extensive use of cover crops. Join the ranks of the best growers.

Vegetable Crop Prospects June 1st.

Crop reports, dated July 1st, received by the Ontario Vegetable-growers' Association from the Central part of Ontario, from the branches of the Association at Oshawa, Toronto, Berlin and Brantford, show that the tomato crop is looking well, but rain is needed. Early potatoes are rather patchy, suffering from drought, bugs very plentiful; spraying with poisoned Bordeaux mixture is effective. The onion crops are looking well. Celery shows an acreage much the same as last year, with the crop looking fairly well. No damage as yet from blight, although some reported to be running to seed. Cabbage and cauliflower have not much change in acreage so far. Drouth has retarded late planting, much damage is reported from cutworms, and the pest controlled by using poisoned bran. Oshawa reports that the beets grown for canning factory are looking well.

In the Southern Division, as represented by the branches at Ojibwa, Tecumseh, Dunnville and Hamilton, the tomato crop is reported to have decreased in acreage, owing to the reduction in prices by canning factories. The crops are looking well. The early crop of potatoes is a little late; the main crop good. Dunnville reports damage from the flea-beetle, with bugs abundant. In onions, the conditions of the crop are fair, although the root maggot is very bad. In celery there is a slight increase in acreage, with crop looking good. Rain is needed. Cabbage and cauliflower shows a fair crop. Dunnville reports that beans, peas and corn for factory purposes are looking well, peas excellent. Ojibwa reports a heavy frost on June 10th, killing melons and cucumbers.

The reports from the Eastern part of the Province, from Ottawa, Kingston, Belleville and Picton show that the tomato crop has been reduced, owing to heavy frost in Ottawa and Kingston on June 3rd. The crops at Picton and Belleville are looking fine, although there is some damage from cutworms. The onion crop is very satisfactory, except at Ottawa, the celery fine, but needing rain; cabbage and cauliflower crops are looking fair. Ottawa reports: "Unless we get a marked change in weather conditions very soon, vegetables will be very poor. We are having one of the worst drouths we have ever had. Strawberries about a quarter of a crop, raspberries seriously threatened. Currants and gooseberries dropping badly."

In the Western Division of the Province, as shown by reports from Sarnia, St. Thomas, Stratford, Woodstock and London, the tomato crop is fair, although improving rapidly. It shows some damage from cutworm and potato bug. The potato crop is doing well, and the onion crop looks promising, while the celery crop shows the early planting delayed by drouth. Sarnia reports an increased acreage in peas and beans for the Port Arthur market. Reports from all parts of the Province show that the long-continued drouth is causing great anxiety for the future in the minds of vegetable-growers. Late plantings of cauliflower and cabbage and celery are being delayed beyond their proper time, and if drouth continues much longer, will be the cause of great damage to other crops.

It is generally known, and has been stated from time to time through these columns, that our common cultivated fruits do not usually reproduce true from the seed. Sometimes they may, but usually not. Color, shape, flavor or other characteristics any or all may be different. There are a few familiar exceptions, such as the common sour cherry. There are also, we believe, a few varieties of apples and peaches which reproduce with fair faithfulness. Last week, Mrs. Morris McMoray, of Middlesex County, brought into our office laden branches of two cherry trees, one sweet and one subacid, taken from trees grown from pits she planted herself. In each case, she informs us, the fruit is of the same kind as that grown on the trees which bore the pits she planted.

THE FARM BULLETIN.

Another Budget from Australia.

JUTE IN WOOL—PROGRESS OF THE LAND INDUSTRIES.

An economic method of settling the jute-in-wool problem is still bothering experts. The paper-lined packs, as suggested by the London committee, is generally regarded in Australia as too expensive a plan. A local suggestion is that only superior canvas should be used, and that the loose fibres should be removed by cleaning and singeing. But what is the wool-grower going to get in compensation for the added expense? The buyer's only hope of a reform is to make some provision in a monetary sense, by applying the proceeds of the sale of the empties to a fund, and foregoing the draft allowance. Quite lately, however, they decided, at a meeting in London, not to entertain the abolition of the draft allowance. So the sheepmen are likely to use the cheap jute packs as a set-off to the conservative buyer who suits his own ends all the time. It is now proposed in Australia that a referendum be taken amongst wool producers, as to whether they will force the draft question on the buyers. There may be some delay while the splendid prices and prospects keep up. But on the slightest sign of a slump, the fight will begin. And when it starts, it will be a solid battle, make no mistake. The Australian crowd is pretty determined that the old custom must go.

THE PRICKLY PEAR OCCUPYING MILLIONS OF ACRES.

The State of Queensland has discovered that the figures relating to the prickly-pear curse must be amended. Officialdom has been saying for the past four or five years that the vegetable pest had control of five million acres. They seemed to forget the rate it was spreading. One authority now gives the area at twelve million acres. During the past three years 1½ million acres have been given away at a peppercorn rate for the least-stricken patches, and a bonus with free land for the worst; but that area does not cope with the spread during the time of settlement of the affected belts. It is hard to foresee the end of this colossal evil. It is also making great headway in north-west New South Wales, where the lost country amounts to a couple of millions. The trouble is that the pear has adapted itself to the country with a limited rainfall, and if we railwayed it we have not the population to occupy the areas. At one time it was hoped that the pear could be turned to account as a stock fodder, as material for paper pulp, and for the production of a low-grade spirit. But all these schemes have exploded, as the vegetable is not worth treating in any direction as a commercial proposition. So it has to be tolerated as an unmitigated curse, which never slumbers nor sleeps. It is one of the evils of having too much land and a climate which induces great growth at all periods of the year.

A MACHINE THAT CUTS, THRESHES AND BAGS GRAIN.

Australians note with interest the progress made in the United States and Canada with harvesting machinery. They concede the hope that the motor harvesters, or those drawn with thirty mules or horses, are economic. Australians will not look at these big lumbering concerns, for every trial has been unsatisfactory. They claim that the local combined harvester is the most economic known for their purposes. It practically bags the grain from the field in one operation, with a minimum of labor. The 30-horse concern requires eight hands to work it; but a similar number of men and horses, split up amongst a number of 3-horse machines, will, it is claimed, do more work in a day. Then, again, if the smallest breakage occurs on one of these big machines, all horses and men are idle, whereas a breakage on our Australian harvester only affects the one small team. A year or two ago a harvester was designed so that the horses pushed, instead of pulling, but it had a short life. It easily bogged in soft land, just as the big motor concerns bog, as they are pushed, instead of being pulled. The principle is well illustrated by a hand barrow. Every man knows that on soft ground it is easier to pull than to push it.

AFTER IRRIGATION FARMERS.

Australia wants some irrigation farmers to occupy some of the thousands of acres of land which is, and will soon be, served by good supplies of water. Can any be expected from America? An organized attempt is to be made to obtain a few hundred skilled men from your country. Although irrigation so far has been very successful, Australians are not rushing the openings. The tendency is for farmers to increase their areas, rather than reduce them and go in for intensive culture. No doubt this disease will be cured in time, but the Governments which have spent millions of money in opening up the schemes cannot wait the evolution, and they have decided to go abroad for farmers. The Australians who did take to the plots are doing well, and the Minister of Agricul-