

## WEIGHT OF RYE STRAW.

SIR,—I will give the results of two experiments in growing rye. I was induced to make the experiment by seeing a report of rye growing. The reported yield of straw and grain was so very large that I very much doubted it, and to satisfy myself whether or not such crops might be grown, I made these experiments. In the first experiment, in 1874, the land was in grass, and had not been plowed for years. Soil a deep black loam overlying hard pan. It was plowed in the spring of 1875, heavily manured, and produced a crop of Lane's sugar beets. After the beets were harvested, the land was thoroughly plowed and fitted for rye, and one-fourth of an acre was measured off for that purpose. The remainder of the piece was laid by for a spring wheat crop. This quarter of an acre was the only rye in the immediate vicinity. October 13th I dressed the plot with 400 pounds of phosphate, and sowed 34 quarts of rye, two quarts of which came from the Agricultural Department at Washington. These two quarts came up well, but did not stand the winter, so that when the crop was grown there was very little rye where the two quarts were sown.

The whole crop was cut in due season, well cured in the stack, then put into the barn, weighed and packed away until the 14th day of February, 1877, when it was threshed, cleaned and weighed. The crop weighed when put into the barn, 2,600 pounds. After threshing, the weights were as follows: Straw, 2,000 pounds; chaff, 100 pounds; screenings, 38 pounds; grain, 364 pounds, or 6½ bushels. The account with the crop taken from my farm book, is as follows: To plowing and fitting, \$2; 400 pounds of phosphate, \$10; one bushel of seed, \$1.50; sowing and rolling, \$1; harvesting and carting, \$1; threshing and cleaning, \$2; interest on land, \$3. Total, \$20.50. When the crop was threshed the rye and straw might have been sold for \$23.52.

In the second experiment, which commenced in the fall of 1877, I again took land that had produced beets. This lot had received two years' cultivation and two heavy dressings of manure, and my account of this experiment is as follows: Plot one-fourth of an acre; good strong loam, and dressed with 500 pounds of fertilizer: Plowing and fitting, \$2; 500 pounds of fertilizer, \$13.75; one bushel of seed, \$1.25; sowing rye and fertilizer, \$1; harrowing and rolling, 50c.; harvesting and carting, \$2.50; threshing and cleaning, \$3; interest on land, \$3. Cost of crop, \$27. The crop weighed when put in barn, 4,124 pounds. Threshed Feb. 14, 1879, and straw weighed 2,137 pounds; chaff, 182 pounds; screenings, 120 pounds; rye, 854 pounds, or 15½ bushels. The rye and straw might have been sold for about \$30, leaving a small profit upon the experiment. At this rate an acre would have yielded 4 tons and 548 pounds of straw, 61 bushels of grain and 8½ bushels of screenings. D. G. R.

## CROPS IN NOTTAWASAGA.

SIR,—We had a heavy frost here June 5. It killed hundreds of acres of fall wheat, and stunted the grass. Our hay crop is very light. The fall wheat that missed the frost looks well. Spring wheat, peas, oats and potatoes look well. The straw of wheat and oats will be short, but I expect we will have a good crop. I bought two pair of steel collars last August, on your recommendation and my own common sense. I have worked them on my horses nearly every day since. I like them well. A number of my neighbors' horses have their shoulders scalded, but mine are all right. J. T., Nottawa P.O., Ont.

## CRANBERRIES AND STRAWBERRIES.

SIR,—I often see inquiries in your paper about cranberry culture. I also see it stated that the upland cranberry can be grown on dry land at a profit, and that it is cultivated in Central New York. I will not say it is not cultivated in this section, but will say that I do not know of any man about here who owns a single plant. I am largely acquainted with fruit-growers from Albany to Buffalo, and do not know one that raises cranberries. I do not believe there is a quart grown within a hundred miles of here, except in swamps, where they grow without culture. If they were adapted to this climate and soil they would certainly be cultivated here. I have twice paid money for plants, and tried to raise them, but failed. We all know cranberries can be raised at a profit when the surroundings are favorable; but

without more knowledge on the subject than most of us have, the safest way is to go slow.

With the strawberry it is very different. Every man who has the opportunity and does not raise strawberries makes a great mistake. Now, while we are enjoying this luxury, farmers all about us have none on their tables. The big dishful of strawberries and cream that should be there two or three times a day is not there. The expense of them for a family is next to nothing. Let us, therefore, all have a strawberry-bed, for home use at least. A. M. W.

## GLUCOSE AND GRAPE SUGAR.

In reply to enquiry by L. L. Huron Co., what is Glucose and wherein does it differ from Grape sugar; we take from the Popular Science Monthly, the following article on the subject:—

Glucose is a sweet syrup made from corn starch, resembling in appearance the molasses of cane sugar, and by reason of its greater cheapness largely affecting the consumption of the cane product. Grape sugar is made to resemble a finely powdered sugar, and is used extensively to adulterate the sugar of commerce. Glucose is used chiefly for the manufacture of table syrups, but also in candies, as food for bees, by brewers both in this country and England, and for making artificial honey, the combs being molded out of paraffine. Grape sugar is also applied to some of the same uses, but principally for the adulteration of other sugars. The cheapness with which glucose syrup and grape sugar can be produced has led to its extensive use. The most flourishing manufactories are at the West, where corn was bought last year at a little over thirty cents per bushel. As from twenty-six to thirty-two pounds of glucose syrup or grape sugar are made from a bushel of corn, the average cost of either to the manufacturer is about one cent per pound. As he sells either article at three to four cents per pound, the business is a very lucrative one, and is rapidly extending. On the first of August there were ten factories in operation in the United States, consuming daily about twenty thousand bushels of corn. There were also in process of construction nine other factories, with a total daily capacity of twenty-two thousand bushels of corn. Prof Wiley estimates that not less than eleven million bushels of corn will be converted into glucose and grape sugar during the present year, and says that every indication leads to the belief that the amount will be doubled in 1882.

## TIMOTHY OR RYE GRASS—WHICH?

SIR,—I would like if you could tell me which would be the better of the two to sow for hay, orchard grass or rye grass. Our soil is a heavy black loam. Would either be better than timothy? I have cut timothy this season that will give from two and a half to three tons per acre; while some will not be more than two per acre, also how much of either to sow per acre. The crops in this locality are looking well. Wheat will give from twenty-five to thirty bushels per acre; oats from fifty to seventy; peas a good crop, and early sown barley good, while that which was sown later will not be so good on account of the drouth. I have been a subscriber to the ADVOCATE for quite a number of years and like it exceedingly well. I am sorry the proprietor of the ADVOCATE has such a poor opinion of the Bulls' Eye of the Dominion, but I think if he were here this summer he would have to change his opinion of it, and show the bright side of the picture this time.

Now, Mr. Editor, you must bear in mind, while you read this, that it comes from a native of Manitoba, who has never been about the world but I have seen men who have been through the greater part of Ontario and who say that they have never seen a more busy place than Winnipeg. I think that some of the scenes given in the ADVOCATE were a little far fetched, and were most certainly the dark side of the picture, and you should not fail to give us the bright side at your earliest convenience. I received the maple seeds all right and would like to know the best time to plant them.

ASSINIBOIA,  
North-west Territory.

[Either of the varieties of grasses named would be good for hay, yielding heavy crops, if the land be in good condition and nutritious feed for stock if well sowed. *Dactylis glomerata*, orchard grass, cocksfoot (by the three names it is known) is one of our most useful grasses, growing best in deep rich loamy soil. For a mixture of grasses, 3 to 6

lbs. of orchard grass are enough. About 30 lbs., 2 or 3 bushels would be needed if sown alone.

Rye grass, *Lolium perenne* or *L. Italianum*. The Italian Rye grass was introduced not many years since to British agriculture. It is more productive and succulent than the perennial, and is more relished by stock. The rye grass of either variety is one of the most valuable meadow grasses. It will grow on all soils. It has been tried here, and has not quite fulfilled the expectations of those who introduced it. At the rate of 5 or 6 lbs. of seed to the acre in mixtures for permanent grass, sown with clover, or of 3 or 4 bushels per acre sown in rich land, its produce is generally unequalled in quality and quantity.

Ryegrass is not a perennial plant, notwithstanding its name. It dies after it has seeded. If, however, it be prevented from seeding by being perpetually cut down, it will for years continue growing and throwing up its succulent leaves and stems.

Timothy or herd grass (*Phleum pratense*) is a first class grass, yielding a heavy crop of palatable nutritious food. One or two pounds of seed per acre is enough, as the seed is very small.

Maple seed should be sown as soon after it has been gathered as possible, or else kept dry; not too much so, till spring. This seed grows after falling if covered by any means with a little earth.

SIR,—Will you please answer the following questions. Is the Essex pig as profitable as the Berkshire and will they grow as large at a year old? What kind of apples are the most profitable for shipping, as there is such a variety there must be some better than others for home and foreign markets and drying purposes? What kind of small fruit is the most profitable for farm gardening, that we may have small fruit through the season? Can we grow the garden peas, such as is used for canning purposes, on a large scale without cultivating and without sticks so as to be profitable, or must they have sticks and be hoed?

A. S., Luton P. O.

[There exists great diversity of opinion as to the comparative quality of Essex and Berkshires. Both breeds are very much alike, and there is very little difference between them. We prefer the Berkshires, thinking their flesh to be nicer pork.

In selecting the varieties of apples for planting we must be somewhat influenced by the adaptability to the section of the country and its climate. The opinions of fruit growers generally, as based on experience are in favour of the following varieties, viz:—Summer varieties, the Red Astrachan, Early Harvest, Summer Sweet and Sweet Bough; to these some add the Keswick, Codlin and the Tefopsky. Fall apples, the Duchess of Oldenburg, the Gravenstein, Alexander and Maidens' Blush; winter varieties, the Golden Russet, the Northern Spy, the Red Canada, Tolmans Sweet, Fameuse, Spitzenburg and Baldwin are among the general favorites.

Of small fruits the most profitable in a favourable season is the strawberry; raspberries also are profitable.

Of peas the dwarf varieties are not staked.

SIR,—Will you kindly repeat the free copy of your valuable paper as a prize at our annual plowing matches?—R. H. T., Sec.-Treas. Sherbrooke Plowmen's Association, Lennoxville, Que.

[Certainly. The Farmer's Advocate and Home Magazine for one year will be given as a special prize to any Plowing Matches, on application by the Secretary.—Ed. F. A.]

An article for publication, signed "Smith," has been received. The writer does not send his name and address, and we therefore cannot use it until our will is complied with. See "Notice to Correspondents."

Keeping hogs in orchards to eat up all early fallen fruit will certainly have a most beneficial effect in the destruction of myriads of insects, causing the fruit to be less knotty and imperfect. A man whose trees, as usual, bore more apples during the even year than he could make use of, and in the odd year not enough—with a long pole went to work and gave his trees a thorough beating on the south side, when the apples were about as big as hickory or hazel nuts, knocking off all the apples on that side he could see, and breaking the little twigs as well, and the result was that the trees for many years bore full crops annually on alternate sides.