making, and the desirability of owning an animal with duplicate powers.

It is, of course, necessary to produce facts and figures in support of the above thesis, and I now proceed to do so. The prizes for pedigreed milkers have been competed for at several shows, but, as I am best acquainted with the tests conducted at the show of the British Dairy Farmers' Association, I shall limit myself to these.

When a class was made at that show for, pedigreed Shorthorn cows, there was a "standard" of points fixed for each breed, as follows:

l'edigree Shorthorns	110
Lincolnshire Reds	1()(
Jersey	
Guernsey	8.
Red Poll	90
Ayrshire	90
Kerry and Dexter	7.5
S. Devon	100

It may be necessary to explain that, at the above trials, the milk of two days is taken, weighed, and sampled and analyzed. Points are given for the time elapsed since calving, for the total pounds of milk yielded, for the butter-fat, and for the "other solids" present. The totals for each cow represent her milking value, and the "standard" fixed for each breed was arrived at as an approximate average over several years. The standards have been altered from time to time, as circumstances arose, but those above given are the figures adopted for 1908.

The first institution of these pedigreed prizes brought up animals which did not yield much over the standards, but they improved in quality year by year, until now the climax has been reached this year, and the champion cow of the Dairy Show—and practically the champion cow of the British Islands—is a dual-purpose animal. Borothy, owned by Lord Rothschild, is entered in the Herdbook as of beef descent, while she is at the same time the champion milker, and is, indeed, the best milker of any class that has been exhibited during the last four years. As an illustration of the results obtained at the Dairy Show, it is instructive to place side by side the marks gained by the best cow of the three leading breeds since the pedigree class was instituted,

	CAO II			
			Non-pedigree Shorthorn.	Jersey.
1899		94.4	129.3	119.0
1900		90.8	144.1	112.0
			144.4	102.5
1902		102.4	154.4	114.1
1903			154.4	114.1
1904			150.0	115.5
1905			120.3	109.4
1906			132.9	119.4
1907		126.7	133.8	97.9
			133.0	100.7

From all the above, therefore, it will be seen that we not only believe in the dual-purpose cow (or general-purpose cow, to use the English phrase) in this country, but we think we have had it for long in the ordinary dairy Shorthorn, and we have attained to it in the case of the pedigreed animal as well.

While writing this article, I have just been inmed of the results from a large dairy in the neighborhood of Edinburgh. Edinburgh consumes more milk per, head of the population than any other town or city, and the cow-keepers there have been noted for milking and fattening off for more than a generation. They prefer the big, milking Shorthorns from Cumberland and the North of England, and rarely keep these round to breed a second time, and in one case I am informed that they cost £23 to lay in, and were sold out fat at £17 each. This is a considerable saving in proportion to the milking value of the animal, as compared with results obtained from the purely dairy breeds. The sum of our knowledge and experience here, therefore, is to keep on encouraging the development of the general-purpose animal, for she is the one likely to give the hest results in the end.

## What They Think of Our Premiums

Following are samples of the many letters received from week to week, expressing delight with the premiums we offer for obtaining new subscriptions to "The Farmer's Advocate"

I received the dictionary, and like it very ANDREW TURNBULL. Haron Co., Ont.

Received the mouth organs, and we are well THOS. GRAHAM. Yark Co., Ont.

\* \* \* ple ed with it. Bible all O. K. I am well ORA RICE. ORA RICE. i bton Co., Ont.

## THE FARM.

## Use of the Corn Planter.

Editor "The Farmer's Advocate":

In devoting particular attention at this time to corn cultivation, "The Farmer's Advocate is clearly upon the right track. You are correct in placing improved seed and cultural methods to the front, but is there not room for more general advance in the way of planting? Years ago it was not uncommon to see a couple of bushels of seed sown per acre in drills for growing fodder, but for stalk and leaf of high feeding value, as well as ears of good quality, I think the best practice of those sections of Canada where corngrowing has been brought to the greatest perfection, as well as that of experimenters, goes to show that hill-planting gives much the best re-With many, the favorite distance is 3 feet 6 inches or 3 feet 8 inches apart, which allows plenty of room for vigorous growth and thorough, clean cultivation each way. A third advantage is that less seed is usually required than in the drill method, a bushel being enough for five or six acres. Good results are secured by the use of the marker and hand-planter, though more time is required than with the grain drill commonly used where corn is grown for the silo; but many of these drills throw the rows too close together, do not distribute the kernels at even or sufficient distances apart, and do not cover the seed properly, not being constructed especially for that purpose like the modern two-horse, checkrow planter, which, in the American corn-belt, was brought to great perfection, and has won the favor of many Canadians, especially those who grow a large acreage. With it, the corn can be dropped accurately from 3 to 5 kernels per hill, or about so many inches apart in the rows, which

prove so satisfactory, as some might not like to wait long after the fields were ready for seed. I believe I am safe in saying that anyone who has used a good corn-planter would not part with it for much more than its cost, if he could not se-MERSEY. cure another. Essex Co., Ont.

## Corn, the Backbone of American Agriculture.

Corn is one of the most valuable farm crops from both dairy and commercial standpoints, and more attention should be given its cultivation. In proof of the above assertion, we quote from remarks made by Dean Hurd, Farmers' Week, at the University of Maine: "Corn gives more food to the acre than any other crop; it is used in the manufacture of about 125 articles of trade.'

That it can be grown profitably in Maine, is proven by the output of her canning factoriesthe sweetest and best-canned corn on the American market-and by the financial success of those farmers living within delivering radius of the factories of the State.

The value of the crop as a factor in the ration of the dairy cow led to extended discussions at the recent dairy meeting, as to increasing the yield per acre, together with improving the quality of the product.

The matter was also touched upon at the University Farmers' Week, where a fine display of the best-known varieties was shown, and a demonstration in corn-judging by score-card was given. Interest in this crop is widespread over the United States, and culminated in the National Corn Show, held last fall at Chicago. This is to be duplicated at Boston the coming October, as the New England Corn Exposition. liminary step to encourage interest in such a display is the offering by the University of seed corn

for competitive culture and display, both at the next annual Dairy Meeting and during Farmers' Week when premiums will be offered the successful growers in each variety, men, boys, and the gentler sex, also, being eligible to

compete. In 1907, Dr. Geo. M. Twitchell took the initial step to arouse interest in corn culture, when, in connection with the work of the Maine Dairymen's Association, he offered special premiums, to be competed for by boys, and furnished them with seed. The large number of exhibits proved an attractive feature of the dairy conference, and pointed to its success. The Experiment Station has, for some years, been paying particu lar attention to propagating, by hybridization, varieties

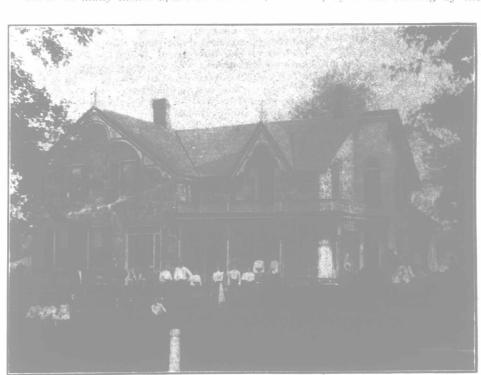
of corn that will maare made straight. Experiments have shown that ture in the shortest Maine season, and thus eliminate the chance of non-maturity

Said Dr. Twitchell, in his address before the Dairy Meeting: "If an acre of corn is planted in drills three and one-half feet apart, and the seed dropped nine inches apart in the drill, there will be 16,594 stalks, assuming that every kernel germinates. Allowing one ear to the stalk, and six ounces of shelled corn to an ear, the average with nine-inch ears, the yield will be 104 bushels of shelled corn to the acre."

This yield would be increased if the ears were longer, and decreased if shorter, hence the desirability of at least coming up to the standard The average corn crop of the country has been placed at 24.2 bushels per acre, because the grower will not fulfil his part of the contract.

The soil must be prepared thoroughly before planting, and enough fertilizer used to insure a full meal to the crop every day until perfected. The seed must be carefully grown, taken from the most vigorous stalks, thoroughly cured, and shelled from the center of the ears only.

Dr. Twitchell cited the following, which shows the important part which careful selection of seed plays in the profitable production of this crop: Seventeen bushels of fine ears were selected from fine ears, just after ripening. From the choicect of these, selected by test and measure, ten acres were planted in the corner of a 63-acre field; the remaining 53 acres were planted with the best of the rest of the 17 bushels, and the surrounding fields were planted with seed from cribs in which the best corn had been placed the previous fell.



A Farm Home Reunion.

Residence of Alex Wigle, Kingsville, Essex Co., Ont.

yields of ten to fifteen bushels more corn per acre were grown where the kernels were planted three in a hill than where the same number of kernels were used in the plot, but planted some hills with one or two, others with four and five. A groove in the soil is made, regulated to proper depth, even in soft places, into which the grain falls and is promptly covered, and 12 to 15 acres per day can easily be planted when the grower gets the hang of the machine. This is a very important consideration. Once the ground is prepared, unless planted speedily, a shower of rain may put all or a portion of the field out of condition for many days, and perhaps involve reworking. If, however, it is planted, a light stroke of the harrows will loosen up the crust and promote growth. In starting, after the land has been worked fine and rolled, we drive once across the side of the field to lay the linked cable, which, on the return trip, and subsequently, trips the required number of kernels into the hills; but, for drilling in, this cable is not needed. The use of the two-horse cultivator and harvester, in addition to the planter, has relieved the corn-grower of much of his old and tedious It may seem that, to invest some \$45 in a planter, used perhaps one day in the year, is a good deal, but there is considerable mechanism and material in the implement, and its work is so advantageous that it is looked upon as a money-maker. There is nothing to hinder a couple of farmers owning one together, though joint-ownership by more than that might not

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