

FARM BULLETIN.

To Our Subscribers.

The bogus subscription agent is said to be again operating to make money out of the credulous Canadian public. Anyone subscribing to "The Farmer's Advocate" through strangers should be careful to make sure that the man who gets the money is a representative of this paper and that the receipt is a Farmer's Advocate receipt, legibly signed. In all cases beware of the agent who would sell the paper at a price lower than the regular subscription rate of \$1.50 per year. The price of this paper is \$1.50, and no agent has authority to sell it any cheaper. It would be a service to us and a protection to the reading public if subscribers would inform us promptly of the work of any bogus canvasser, giving as full particulars as possible in regard to the canvasser and the transaction.

To the People of Canada.

EDITOR "THE FARMER'S ADVOCATE":

Two years ago, in a message to the farmers of Canada, special emphasis was laid on the important part food production and distribution would play in this world war. It was pointed out that the drafting of twenty millions

of men into European battle-fields and the destructive process of war itself must inevitably be followed by diminished production and enhanced cost of food. Today Roumania, Poland, Belgium are conspicuous and tragic examples of what these things mean. The German food ration is now half the normal requirement, and under the steady pressure of British sea power the Hun is daily tightening his belt. But though the great stress is on the Central Powers other nations are feeling the strain. The smaller neutral countries are confronted with food shortage and high prices. Switzerland and Holland, in arms for defence, feed from their own scanty supply thousands of refugees who, homeless and destitute, have fled thither for sanctuary. England, menaced by an ever-increasing submarine warfare, is organizing her agriculture on a new basis, enlisting for her farms the services of women and disabled soldiers, and putting her beautiful and historic parks under the plough. France sows her grain and reaps her harvest, even within the sound of the guns, by the heroic and unceasing labor of her old men, women and children.

Such is the picture of Europe at this hour. Facing the fateful days which lie before us in this third and sternest year of the war, we realize with increasing clearness how vital a factor in the final decision the food supply must be. The government of this country fully appreciates what the farmers have done during the past two years. In urging them to maintain their efforts, though confronted with more difficult conditions, I do it, not because of the high prices which will doubtless hold for nearly all food products, but because of the important and special service which Canadian agriculture can render the Empire at this juncture. All who assist

in this work render a great service to the state. I do not say the greatest for that is done by those, who facing death, daily serve their country at the battle front. Thousands of us cannot serve, but we, who are mercifully free from the iron heel of the invader, we, who know nothing of the terrors by sea and the privations on land which others suffer, may well redouble our efforts to supply what they may sorely need.

I especially appeal, in this critical year, to those in our cities and towns, who hitherto have not felt the necessity for directing their energies to food production. Individual efforts, even though small and unskilled, will in the aggregate mean much. By applying their labor to uncultivated land near their homes, or by assisting farmers, everybody having health can accomplish something. There is need, not only for an increased supply but for a wise economy of food. If all labor is not efficient there can at least be patience and forbearance where partial efficiency is accompanied by willingness. There is no place in the state now for either half-hearted services or ill-founded criticism. In the common task which faces the country co-operation should be the watchword. The Dominion and Provincial Departments of Agriculture are already giving, and will continue to give, special attention to the many problems involved. The National Service Board and the municipalities are also devoting their energies to these questions, and I am confident that the various organizations, both of men and women, throughout the country will give whole-hearted and active support to a work which at this special time is a high and necessary national service.

MARTIN BURRELL, Minister of Agriculture.

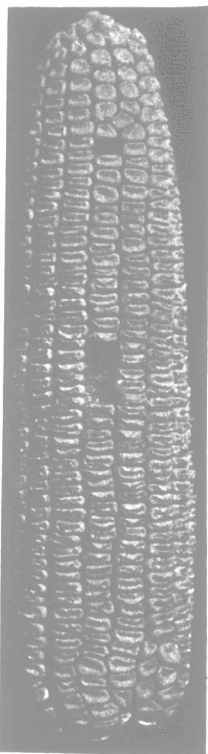
Growing, Showing and Feeding Ontario's Corn Crop.

The Ontario Corn Growers' Association held their Annual Corn Show and Convention in the town of Kingsville, February 13 to 16. "Corn was king." The best that the country produced in 1916 was on exhibition. Visitors to the show saw corn, talked corn, listened to expert and professional men expound on the value of corn to agriculture, and secured information about the growing and feeding of this important crop. Grains and small seeds also came in for their share of comment. One thousand entries made by three hundred exhibitors were neatly and attractively arranged in a large tabernacle. There were more entries than last year, and the quality on the whole was superior. The showing made of both corn and grain was a credit to the growers, especially when it is considered that the excessive rains last spring delayed seeding on an average of three weeks, and the early frost last fall caught considerable of the corn before it was matured. The quality and uniformity of the exhibits showed that great care had been taken in selecting the entries. The Corn Show has done a good deal in the way of setting standards for the different varieties of corn, and illustrating the value of seed selection. The winning bushel of Dent corn, exhibited by B. R. Cohoe, of Woodslee, attracted a good deal of attention. The ears were uniform in size and shape. The entire bushel was laid out on a rack, and little difference could be seen in the length of the various ears. Such corn is a big asset to the district as well as to the grower. As with all other crops, "like tends to produce like." A splendid program was arranged by the Executive for Wednesday, Thursday and Friday of the Fair. Demonstrations in judging were held and a judging competition was run off for the young men. At each of the meetings the audience entered freely into the discussion of the subjects. In this way many points of interest were brought out. A very creditable display, showing the products of field and garden, was put up by South Gosfield Township. A star design composed of corn was exhibited by George McCormick. Wm. McCutcheon, of Glencoe, also had a very attractive display.

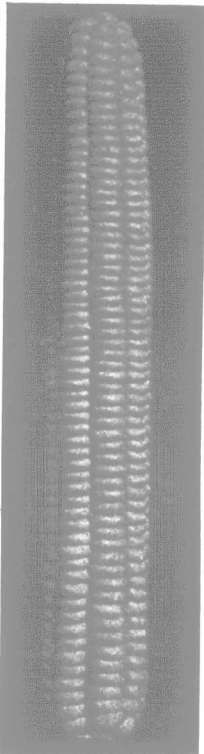
Besides corn there were numerous exhibits of different kinds of implements used in the planting, cultivating and harvesting of the crop. The Show was a success. Entries were of high order, and addresses delivered each day were practical, educative and in keeping with the event. Much credit is due the secretary, J. W. Noble and others who had the work in charge. Among the judges were Dr. C. A. Zavitz, O. A. C., Guelph, and Prof. J. D. Harper, Lafayette, Indiana.

Increase Yield and Quality by Selection.

Prof. G. I. Christie, of Lafayette, Ind., who was scheduled to give an address at the Corn Show was unable to be present, but his place was ably taken by Prof. J. D. Harper of the same place. Throughout his address on Thursday afternoon emphasis was laid on the necessity of having the corn thoroughly matured in the fall, in order that the vitality may be maintained through until seeding time. "Corn judging really gets at the first step of corn improvement in any community," said the speaker, who proceeded to define what a really satisfactory ear of corn should be like. It is necessary to adhere to a standard in regard to length and circumference; deep kernels are wanted, the rows should be straight, and both butt and tip well covered. Prof. Harper claimed that "great as are variety differences in corn, individual ear differences are still greater." Like all other crops, corn has the characteristics of retrograding unless an effort is made on the part of the grower to keep it up to a high standard. Even the best corn, if proper selection is not followed year after year, will go back. It was claimed that it is quite possible to double the yield as well as improve the quality of corn grown in Ontario. The use of individual records with corn, as well as with cows, was advocated. It is always advisable to select seed from the standing crop, in order that an



Champion of the Dents.
Exhibited by G. Coghill,
Kingsville.



Champion of the Flints.
Exhibited by A. S. Maynard,
Chatham.

idea may be ascertained as to the yield of forage and height of ear on the stalk. Yields were given for six different States in the Union, which produced in 1915 from two to ten million bushels of corn each, but the average yield per acre was only from thirty-two to thirty-six bushels. Prof. Harper contended that Ontario, especially the southern part, was adapted for the growing of seed corn, and from statements which he had received, and from what he had seen at the Fair, the crop compared favorably with that grown in the corn belt.

It is necessary to select carefully in order to secure a high yield, and a variety suitable for the district should be grown. The following table shows the number of bushels per acre from different sized ears:

Stalks per hill.	Stalks per acre.	Bushels Per Acre.		
		8-oz. ear.	12-oz. ear.	16-oz. ear.
1	3,500	25.0	37.2	50
1½	5,250	37.5	56.2	75
2	7,000	50	75	100
2½	8,750	62.5	93.7	125
3	10,500	75	112.5	150

There is a very great difference in the yield of certain varieties, and the grower should select the kind that will do best on his particular farm. There is possibly no crop that will adjust itself to climate and soil conditions as readily as will corn. A variety that might be early in one district may take a number of days or even weeks longer to mature in a district two hundred miles distant. Corn responds readily to selection and breeding, thus making improvement possible. By selecting according to a definite standard, which shows aid in establishing, a marked difference can soon be made. It was advised to select early-maturing ears in the fall and put them away on racks, then select again in the

spring. It has been found that ears which are very big in circumference have a tendency to be late in maturing, so naturally the man who is endeavoring to establish an early strain should eliminate the very thick ears. The speaker gave the cost of producing an acre of corn in Indiana as \$13.49. This figure is much less than Ontario growers count on. However, it serves to illustrate the point that the cost of producing a bushel depends on the yield. The crop which costs \$13.49 to produce averaged 37.1 bushels, or it cost 36.4 cents to produce one bushel. The cost of preparing the soil and summer cultivation was practically the same whether the yield was high or low. The average of several hundreds of growers that produced a thirty to forty-bushel crop was about \$13 per acre, or 34.8 cents per bushel. When the yield was increased to the sixty or seventy-bushel class the cost per acre was \$14.49, or 22.2 cents per bushel. When the crop averaged ninety bushels and over, the cost of production was \$15.43 per acre, and the cost per bushel 16.5 cents. At the Indiana Experiment Station considerable work has been carried on to determine the difference in yield from a cylindrical, rough, dented ear, or one where the kernels were quite smooth. Prof. Harper wants the kernels of a Dent variety well dented, but does not care for sharp points sticking up. The average of five years showed a difference of three bushels per acre in favor of the rough dent over the smooth.

"Every kernel put in the ground should give an account of itself," said the speaker, and in order to have it do so testing is essential. It is not enough that each kernel should send up a stalk, but that stalk should be strong and of good color. It is also necessary to have the ground well prepared and in good tilth. The grower cannot expect a heavy yield from poor, wet soil, even if good seed is sown. Corn does best on a warm soil which has good underdrainage. In a demonstration on clay soil the tilled land was found to yield 14.3 bushels more per acre than the same class of soil without drains. At ordinary prices this would realize almost sufficient to half pay for a system of drainage in one year. The aim should be to increase the yield per acre in order to raise the net profit. One acre of corn yielding 80 bushels per acre returns greater net profit than three acres yielding forty bushels per acre, when rent of land, labor, etc. are considered. The acres can be made to yield more bushels by paying attention to selection. The grower must know what he wants and then work towards that end. Selected, well-matured, carefully stored, high-vitality corn gives heavier yields than ordinary seed. In many parts of Canada it is impossible for each grower to produce his own seed, but the speaker advised those who could to do so. The variety which is best adapted for the particular farm can be made to ripen a few days earlier by selecting for seed the first good ears to mature each year. The man who grows corn for fodder or silage purposes should pay attention to the quality and kind of seed sown.

At an evening meeting Prof. Harper emphasized the fact that farming is a man's-size job and requires the best thought of the country to solve its problems. Practical education for the boys and girls was suggested as a means of interesting them in the work and the life on the farm. Corn and pig clubs have awakened a new interest in rural life in the youth of many parts of the United States, and the speaker commented favorably on the judging classes for the boys at the Corn Show.

Corn Expert for Ontario.

Dr. Creelman, Commissioner of Agriculture, for Ontario and President of the Agricultural College, assured the corn growers gathered in annual convention that a specialist would be appointed to look after their interests in the province. He felt that the crop was of sufficient importance to require some one to devote his whole time to conducting experiments, holding demonstrations, plant breeding, etc., in order to find out the best methods of selecting and curing seed, and the varieties suited to