

bush, planted in 1897; Victoria gave 34.9; Fay, 27.6, and White Grape, 17.3. Fay is a general favorite, which with White Grape will make an excellent home collection. Houghton gooseberry is the heaviest yielder, producing in 1899 45.2 ounces per bush, planted in 1897. Downing is a good second, yielding 39.2 ounces; Industry, 24.5, and White-smith, 24.5 ounces per bush.

Intensive Farming.—An excellent address, clearly delivered, by Mr. Geo. T. Powell, of Ghent, N. Y., was much appreciated. In the space at our command we give our readers a brief summary. Moderate or low yields of crops bring about a condition hard to meet. At the present day we see a tendency to spread over too much area. The aim should be to produce a maximum yield. A twenty-bushel crop of wheat is dangerously near the margin of cost, while a 40-bushel, or maximum yield, can withstand lower prices without discouragement. Farmers who get beyond average crops, approaching maximum yields, feel the least stress of depression. At this point in his address Mr. Powell turned his remarks in the direction of fruit culture, in which he is an expert authority. In fruit-growing, as in grain-growing, maximum yields are needed, and that with the least possible delay. We must bring trees into fruiting in the shortest possible time. To illustrate, it was pointed out that the average length of time required for apple orchards to come into bearing is twelve years. In many cases it runs from fifteen to twenty years. The Northern Spy is an exceedingly strong, hardy tree, with a fine-grained wood and great powers of resistance against disease and insects. The King represents the height of excellence in flavor, form, color and size of fruit, but the King, if grown on its own stock, is weak. Its limit of usefulness does not extend beyond fifteen years. Under no circumstances should King trees be planted to produce King fruit. The King should be grafted on a hardy tree like the Northern Spy or the Tallman Sweet, which is of like character with the Spy. Trees, like animals, possess varying characteristics, even in the same varieties. Study these characteristics in the tree from which the scions are taken for grafting. In selecting scions Mr. Powell advised taking scions from mature trees that have desirable form, and with a tendency to early fruiting, in order that these qualities may be reproduced on the trunk bearing the graft. The speaker last year, through frequent thorough cultivation, produced an excellent growth of grafts. One branch is grafted each year from the first year after the tree arrives from the nursery until the top is gone over. In this way no serious check is given the tree. By intelligent grafting we can not only regulate the form of our trees, lessen the time required to bring them into bearing, but we can develop the power of resistance to disease. The Baldwin apple is deteriorating, largely from a tendency to fungous disease in the leaves. This weakness would be propagated in offspring from this variety in stem or scion. Besides selection, the intensive methods adopted are along lines guided by intelligence and understanding. It is necessary to study the needs of our crops, in the form of condition, nutrition, and cultivation, and then supply these in proper form. By this method Mr. Powell has developed strawberry plants to such an extent in hills well apart that individual plants have produced as many as six hundred berries in a single season. This indicates what can be done through intensive culture intelligently carried out. Mr. Powell also gave an address on Soil Tillage. Good farming, he held, consisted in cultivating the soil so as to make use of the large stores of fertility already in the soil, and to conserve the moisture. It is a subject of which much is heard to-day, but too little practiced, and Mr. Powell's remarks were timely and well appreciated.

Prof. J. B. Reynolds presented his report on Soil Physics. The conclusions were that rolling the soil immediately after seeding retarded germination, and was detrimental to the crop; but if the harrow followed the roller, good results were realized.

Officers of Experimental Union for Ensuing Year.—President, H. R. Ross, Gilead; Vice-President, Thos. Mason, Straffordville; Secretary and Editor, C. A. Zavitz; Treasurer, H. L. Hutt; Board of Control—President Mills, Nelson Monteith, G. C. Creelman, H. L. Beckett, and C. A. Zavitz.

Better than War News.

SIR,—When the beautiful Christmas number of the FARMER'S ADVOCATE came to hand I was reading the war news. Gladly I laid aside that which is so cruel and inhumane for the peaceful, happy themes and scenes of agriculture. Oh, when will the sword and spear be beaten into the plowshare and pruning hook, and men learn war no more?

Agriculture is more interesting to me than any tale or romance, for it has to do with the real things of God that lie all around us. We help nature, and in return nature helps us.

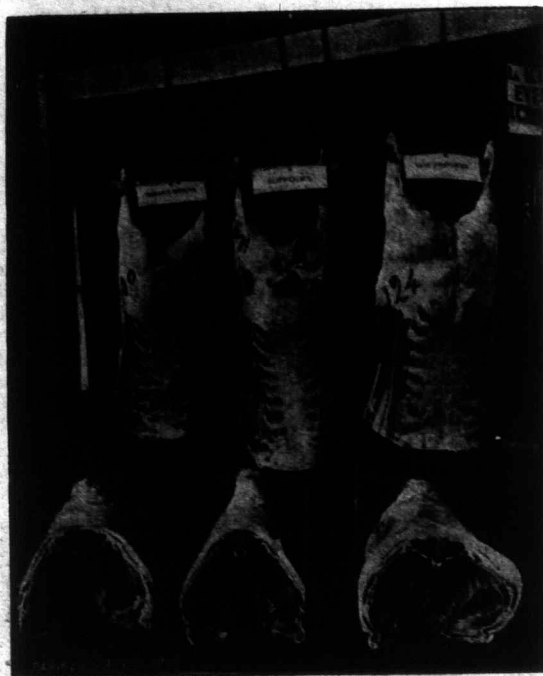
Every farmer who reads this really fine edition of the ADVOCATE will have an increased love and pride in his calling. The effect will be to draw out the best that is in him and his acres; and those who are not farmers may read with pleasure about what the Hon. Sidney Fisher calls the great Canadian farm which stretches from the Atlantic to the Pacific.

That chapter and scene of the old log-cabin times—how true to life. The dear old grandmother with her white-trilled cap, the bed with its gay patchworked quilt, and the little trundle-bed where so many little tired ones have rested, and the ever-

present spinning-wheel in the corner; when the maple trees supplied our sweets, and our apple sauce was made from pumpkins; when we didn't need a daily paper, for we knew everybody's business and everybody knew ours, and we thought it no wrong either.

And that leaf from the early days of the Red River settlement. It seems a long way from those times to the beautiful homesteads, comfortable out-buildings, and fine stock we see in this number, but it speaks volumes for the capabilities of this "Land of the Maple Leaf," or "Lady of the Snows," and the industry and intelligence of our Canadian people.

I'm glad that with the rest you have given us the pictures and account of the herds and dairying of Mrs. E. M. Jones. She has done a good work, not alone in showing what can be done with cows, but in clearing the way for other women; what one has done another may do. There was a time when

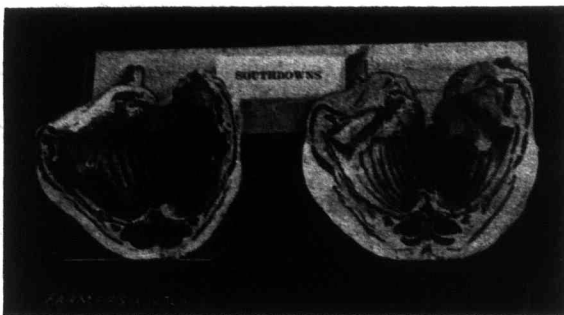


DRESSED CARCASSES OF DORSET HORN, SUFFOLK AND SOUTHDOWN AT ONT. PROVINCIAL FAT STOCK AND DAIRY SHOW, 1899.

Southdown carcass excessively fat.

farmers' wives were afraid to attempt anything in what was considered man's department. But Mrs. Jones has shown that women can be interested and successful in outside affairs, and at the same time keep her home-making and womanly qualities.

Then, we have that good article on "Woman's Influence on the Farm." Dear me, one can't begin to reckon up all the influence that comes from a good woman on the farm, or anywhere else, for that matter. It is said that the best crop the farm raised is its girls and boys (now, I suppose I should say boys and girls to be orthodox; but I put girls first because I think they ought to be first for reasons which I can't stop to tell), and it is in the raising of this crop where the women's influence is seen. A large percentage of the world's workers, let it be in brain or brawn, comes from the homes of those who follow the time-honored occupation of tilling the soil. It is right and proper that women should take an interest in the affairs of the farm, the working of which is somewhat different from other occu-



CROSS SECTIONS OF SOUTHDOWN CARCASSES AT ONT. PROVINCIAL FAT STOCK SHOW.

The leaner carcass won 1st award. The other excessively fat.

pations, in that all have to work for the common good. The wife and children are as essential as the man himself; very often they work quite as hard, and if there be loss or failure they share it alike.

Jean Blewett lifts the curtain and gives us a peep at another side of the question. As Samantha says, all questions have two sides, some have twenty. Farm life is one of the many-sided ones. The wife's legal right to do as she pleases with her share of the joint earnings, which power she has not at present; the husband owns everything, and can will her share as well as his own to suit himself. The daughter's share as compared with the son's. These are some of the many sides to this question which ought to be cured.

There are many other good things in this Christmas number of the ADVOCATE, but I must not take up any more space. I'm glad I have one of my own to show my friends, and I wish that every farm home in the land had one also.

MRS. H. ELFORD.

Prof. Robertson's Prizes.

ONE HUNDRED DOLLARS PRIZE MONEY PAID—TEN THOUSAND DOLLARS MORE PROMISED FOR SELECTION OF SEED GRAIN.

It will be remembered that in the FARMER'S ADVOCATE for October 2nd last, Prof. Robertson, Commissioner of Agriculture and Dairying, Ottawa, personally offered one hundred dollars in twenty-four prizes to boys and girls for the one hundred heads of wheat and oats bearing the largest number of seeds. The farmers' boys and girls took up the matter with interest, and all the Provinces were represented in the competition. British Columbia took first prize for both wheat and oats. The prizes went to the Provinces in the following order: Ontario, 13; British Columbia, 3; Northwest Territories, 2; Manitoba, 2; New Brunswick, 2; Nova Scotia, 1; Quebec, 1. Many very superior samples of grain were submitted, and some of the competitors showed much skill and taste in arranging the heads daintily and in packing them carefully. However, some lots arrived in poor coverings and a generally dilapidated condition. The list of prizewinners is as follows:—

OATS.

- 1st—Albert Norton, Salt Spring Island, B. C.
- 2nd—Henry Lennox, Magneta, Ont.
- 3rd—R. E. McLennan, Beaver Point, B. C.
- 4th—A. H. Bourne, Innisfail, Alberta.
- 5th—Alex. Monroe, Trout Creek, Ont.
- 6th—Alice Westney, Pickering, Ont.
- 7th—Walter Gordon, Collina, N. B.
- 8th—Andrina Farquharson.
- 9th—Alex. Chisholm, N. Intervale.
- 10th—G. W. Jeffrey, Brooklin, Ont.
- 11th—Nellie McBeath, North Bay, Ont.
- 12th—Florence Hay, Northgate, Man.

WHEAT.

- 1st—Donald and David Graham, Spallumcheen, B. C.
- 2nd—G. H. Bayliss, Wetaskiwin, N. W. T.
- 3rd—Pearl Heinrichs, Headford, Ont.
- 4th—Curnel Carr, Woodford, Ont.
- 5th—Fred C. Montgomery, Meaford, Ont.
- 6th—Annie Davis, Avening, Ont.
- 7th—Charlotte St. George, Tramore, Ont.
- 8th—Jessie Coombe, Brandon, Man.
- 9th—Thos. Rowen, Glen Almond, Que.
- 10th—Leverett Shaw, Avondale, N. B.
- 11th—Howard Zavitz, Coldstream, Ont.
- 12th—Andrina Farquharson, Woodford, Ont.

Prof. Robertson says that a generous friend who has the best interests of the farmers' boys and girls and of the agricultural community closely at heart, has made it possible for him to offer cash prizes to the amount of ten thousand dollars for a competition in the selection of seed grain in all the Provinces during the next three years. Full particulars regarding this splendid encouragement to farmers' boys and girls will be published at an early date.

Farmers' Institutes.

While the attendance at Farmers' Institute meetings is reported to be increasing year by year, yet in some districts there are too many farmers, and especially those who are not making the greatest success of their business, who stay away, either from lack of time or a lack of appreciation of the information presented and discussed by the delegates and local members. As a rule the men attending are already fairly good farmers, who realize the value of knowledge, not simply to be listened to, but appropriated and practiced as occasions present themselves in their farming operations. It is frequently the case that many of those attending, especially in the afternoon meetings, are the older men, leaving the young fellows home to do the chores and come in the evening. In some instances this arrangement may appear necessary, but we have no doubt the Institute system would work more valuable results were the younger men to attend the day meetings, when the subjects and discussions are of more practical value than in the evenings. It is the younger men who are most likely to appropriate new ideas, and without results of this kind the work of the Institute is largely lost. The men chosen to address the meetings are selected because of their practical knowledge of their subjects and their ability to express their views clearly, so that persons who go to a meeting in the spirit of one anxious to gather some helpful points, and also to give what information they can to help others, will receive much benefit from the meeting, while, on the other hand, if the object is to "heckle" the speakers with a view to corner or put them to ridicule, not only will their own time and trouble be lost, but in this way no little harm is done. Let it be remembered that while a speaker may advance views widely different from those held by many old-timers, or he may refer favorably to a class or breed of stock men in the audience can see no good in from their view, the whole business of agriculture will not be endangered if that delegate is not publicly put down as a crank or a book farmer. There are always two sides to a question, and it is well to remember that either side has its truth and redeeming virtues. It is a good plan to give some special thought, beforehand, to the subject to be presented in order to contribute something of value to the discussion. While delegates usually go before their audiences well prepared, there are great differences in the manner of presenting their subjects. To reach an audience successfully, a certain amount of tact must be exercised by a speaker so as to accomplish the greatest good. Our observation while attending meetings leads us to more highly appreciate the delegate who does not attempt to tell all there is about a subject, sometimes exhausting both subject and audience,