

EDITORIAL.

The Farmer's Advocate Christmas Issue,
1896.

The next issue of the FARMER'S ADVOCATE, that for December 15th, will be a special Christmas Number, with a beautifully-designed cover in colors, and containing a great variety of special articles by eminent writers; also many attractive and interesting illustrations, including a full-page colored live-stock engraving. Partaking somewhat of the spirit of the holiday season, it will, however, in the main be expressive of Canadian agriculture under present-day conditions. We have an abiding faith in the future of agriculture, and this old earth has no better spot on which to farm than the Dominion. We feel assured from the character of the work already completed that the Christmas FARMER'S ADVOCATE of 1896 will meet with an appreciative reception. To make room for all the additional subject matter and illustrations, our usual size will be enlarged upon; but this issue, as usual, will go free to all our regular readers. We would also remind our friends who are pushing the new subscription campaign so energetically at the present time to see that subscriptions be sent in promptly so that all will be sure of securing this attractive number. To facilitate work in our subscription department at this season, we request all at present receiving the ADVOCATE to favor us with their renewals by an early mail. With many new names coming in, we cannot guarantee being able to furnish extra copies of the Christmas Number on orders reaching this office after December 15th, hence our request for an EARNEST EFFORT NOW and an early response in making returns. All subscribing now not only receive the present and the Christmas Number, but all the issues of 1897 at the usual rate. In practical, up-to-date value to farmers and breeders, we feel safe in saying that the FARMER'S ADVOCATE of 1897 will surpass that of any previous year. By attention to the foregoing suggestions our readers everywhere will place us under renewed obligations.

The Chicago "National Horse Show" is in prospect for the latter part of 1897.

Mr. J. B. Muir continues in this issue his valuable series of articles on winter buttermaking, which are being highly prized by practical dairymen.

Mr. Rivers, the well-known Shorthorn breeder, writing us under date of Nov. 20th, 1896, says: "I think I have read every article in the last three issues of the FARMER'S ADVOCATE, and appreciate it more all the time."

The name of Hon. W. D. Hoard, ex-Governor of Wisconsin and editor of *Hoard's Dairymen*, has been suggested as Secretary of Agriculture in the incoming U. S. Cabinet. Mr. McKinley might cast about a good while before he could make as fortunate a choice.

Two or three days spent making openings for the watercourses, especially at the mouths of underground drains, will pay well for the doing. These subterranean waterways, being out of sight, are apt to be neglected except by the ones who had them placed there. The rains that have already fallen will show where outlets are required in all the fields. All culverts and open ditches will be the better of attention.

The Crow's Nest Pass.

The building of a railroad into the British Columbia mining country, through the Crow's Nest Pass, would prove a great boon to Manitoba and the Northwest Territories. There seems no longer room for doubt that fabulous mineral wealth lies awaiting development, not only in the Rocky Mountains, but also to the eastward between Manitoba's boundary and Lake Superior. One of the greatest drawbacks to successful farming in the western country has been the great distance from markets, but with the influx of people and capital to the mining regions on each side, British Columbia to the west and Northwestern Ontario to the east, it will give an increased home market for agricultural products,

such as flour, beef, mutton, pork, butter, cheese, and eggs. To reach the Kootenay country, a railroad must be constructed through the Crow's Nest Pass from some point on the main line of the C. P. R. Whether this line be built by the C. P. R. or independently is immaterial as long as the interests of the people are safeguarded. If it is necessary for the Government to bonus the work some compensating concessions should be obtained in return. The larger the traffic our great railway receives the greater should be their profits and the sooner should the West be likely to obtain more favorable freight rates to the sea.

The Transportation of Farm Products.

"The question of railway freight rates, including what seems to be an unfair discrimination, is one of great magnitude and vital importance to the farmers of Canada, and should receive the most careful consideration."

The foregoing was one clause in the report of the Select Committee on Agriculture and Colonization submitted and unanimously adopted at the last session of the Canadian House of Commons. Though noncommittal, it is an index of a conception unerringly taking shape in the public mind with regard to transportation service, and out of which are destined to grow serious problems for the consideration of statesmen. The distribution of the world's food supplies by transportation on land and water is too intimately involved with the general well-being of the country, and railways have received too large subventions in the form of money and land grants from governments and municipalities to be ever regarded as mere private concerns. We apprehend that it is quite within the function of Government, if need be, to see that such service is rendered that the well-being of neither the producer nor consumer will be prejudicially affected. Freight rates are a heavy charge against the products of the soil, and coupled with the cost of many of his absolute necessities, absorb sufficient to touch at a vital point the resources, particularly of the Manitoba and Northwest farmer. Our great transcontinental road was constructed largely in anticipation of the development of Western Canada, and considerable stretches of country through which it passes yet yield comparatively little earnings. We must make due allowance for this, and freely acknowledge the general excellence of its service; but the whole Dominion being in practical partnership with this and other railway enterprises, it is bound to see that agriculture, the basal industry of the country, is never handicapped at any point by undue charges, nor in any other way. The shareholders of railways look to their executive officers for dividends, and the latter naturally do their best to increase traffic returns. We, however, notice by the report of the U. S. Inter-State Commerce Commission that the more important trunk lines in the Republic have been reducing the expenses of management, while they have at the same time maintained the efficiency of their lines and rolling stock. They are, therefore, in good condition to take advantage of the better times now apparently about to open up. Hence, if the farmer is forced to economize (though he is all the while compelled to farm better), railways can surely do likewise.

The experience of the breeders of Canada a year ago in resisting a new but evidently not well-considered freight tariff on breeding stock, that would have been a serious blow to the industry, shows how prudent it is to have some effective remedial machinery to set in motion in such cases, which are liable to arise at any moment. In that particular case there was the law requiring such tariff changes to be submitted to the Governor-in-Council before going into effect, which apparently had not been done. Either the Government or some body to which its powers may be delegated, like the U. S. Inter-State Commerce Commission, must take oversight of these matters.

The Canadian Government is now inaugurating a system of cold storage, and it will be their duty not only to see that it is efficient, but in some way that the charges against dairy products, poultry, fruit, etc., will not be such as to discount the advantages sought. Now is the time to make proper safeguards for the future.

In this connection much has been said regarding the fast Atlantic steamship service, a question to be settled by next session of Parliament, but whatever may be needed for passenger or mail service, we are not aware that speed is the *sine qua non* of getting our products to the British markets, unless, possibly, in the case of some of the more perishable fruits. Lower freights on "animals and their products" would be a substantial benefit not to be derived from speed. We recently published a series of articles describing the remarkable development of Australian butter dairying. Though some 12,000 miles distant from the British market, with the torrid zone to cross, they have built up a splendid

trade, Australian butter selling higher in England than Canadian or American. This was accomplished in the first instance by uniform and superior factory methods, but most of all by a complete system of cold storage transportation so perfect in its detail as practically to overcome time and distance to such an extent that packages of butter for test purposes sent all the way to England and back to the Colony were still found in the choicest of condition. A 20-knot service is therefore not essential to the proper transport of farm products. If they are carried to England in proper condition, with a fair degree of speed and regularity so that our customers will be properly served, that will be sufficient on that point. It will be the duty of the farmer, the dairyman, and fruit-grower to see that an adequate supply of high-class products are forthcoming.

The Agricultural Conventions at Washington, D. C.

BY PROF. FRANK T. SHUTT.

On November 6th, 7th and 9th the convention of the Association of Official Agricultural Chemists was held in Washington. It was very largely attended and is said to have been the most successful meeting in the history of the Society. Its membership is composed of the chemists of the United States Experiment Stations, and their object in thus meeting annually is to discuss and adopt analytical methods to be used in the examination of cattle foods, fertilizers, dairy products, soils, and all other matters relating to agriculture. The discussions are mainly technical and therefore of little interest to the general reader. The results obtained through the labors of this Association, however, are of the greatest importance to the farmer. They enable him to purchase fertilizers with economy and assist him in the rational feeding of stock, etc. Attendance at this convention impressed the writer with the fact that those who would keep pace with the onward march must avail themselves of that scientific knowledge that day by day is contributing to the solution of agricultural problems.

The officers elected for 1897 are as follows: President, Wm. Frear, Pennsylvania; Vice-President, A. L. Winton, Connecticut; Secretary, H. W. Wiley, U. S. Agricultural Department, Chief Division of Chemistry.

Immediately following the above, viz., on the 10th, 11th and 12th November, the Association of Agricultural Colleges and Experiment Stations convened under the presidency of Prof. S. W. Johnson, Director of the Experiment Station, New Haven, Conn. The attendance was very good, over 150 being present. The programmes of the various sections showed more than forty papers to be read, of which nineteen were on agriculture and chemistry. Many were so interesting that it is to be regretted that this review must be so limited.

In the inaugural address the venerable President referred to the promotion of agriculture by scientific investigation and experiment and by the education of those about to engage in agriculture for a livelihood. In both these channels, he said, America was doing a great and lasting, though perhaps not a brilliant, work. The character and technicalities of college work were then considered by the President, who, in closing, reviewed the chief features in the progress made during the past year by the Experiment Stations towards a better and clearer knowledge on the many different questions with which the farmer constantly finds himself confronted.

Dr. A. C. True, Director of the Office of Experiment Stations, submitted a report on methods of instruction in agricultural colleges in the United States and in Europe. A bewildering variety exists in the United States, and a reasonable uniformity is much needed, one great obstacle to which is a very defective nomenclature. He suggested a tentative scheme for simplifying the nomenclature of agricultural investigation, making five classifications: 1. Agronomy, including climate, soils, fertilizers, crops or plant production; 2. Zootechny, or animal industry, animal physiology, animal production; 3. Agrotechny, agricultural technology, the dairy, sugarmaking, etc.; 4. Rural engineering; 5. Rural economy or farm management.

A most instructive address was given by Prof. Huston, of Indiana, on "Chemistry for Agricultural Students," in which he outlined a course of laboratory work that was at once didactic and practical in its character.

A spirited discussion followed a paper by E. Davenport, of Illinois, on "Implement Testing by Experiment Stations." Several held that this work should not be done, as the results were used as an advertisement by firms who obtained favorable reports. On the other hand, it was urged that reliable information on farm machinery was of the greatest value to the farmer; indeed, that it was just as useful and valuable as any other information given out by the Stations on fertilizers, cattle foods, treatment of land, etc. In this matter it is evident that no cast iron rule can be adhered to, but the discretion of the officer in charge of the work exercised.

Prof. J. H. Waters, of Missouri, presented a valuable piece of research work on "Dynamometer Tests" of broad and narrow tires on different kinds and conditions of roads, and in fields plowed and in grass. The trials compared 6-inch and 11-inch tires. Though there were some instances in which the lighter draft was obtained by the use of the narrow tire, as for instance where the mud was