

is no need for dealing with this phase of the question; it is the matter of how the regulation should take place that is important. The members of the Railway Committee have not the opportunity to obtain the specialized information which is necessary. With the expanding railway system of Canada, a need of regulative policy based on consecutive policy is necessary.

In the older days equity was measured by the length of the Lord Chancellor's foot. In Canada the regulative policy has depended upon the Minister of Railways and Canals for the time being. To cite one example of the importance of specialized information: Is the Canadian farmer subjected to unfair competition because of the way in which the Canadian railway arranges the rates on his product, as compared with the rates given his American competitor? Can this be determined without adequate information with reference to the facts in dispute, which would entail inquiries precluded by the engrossing political duties of the Railway Committee? This question and the many others difficult—some impossible of solution—demand the constant regulative attention of a tribunal whose members shall be fitted by technical equipment and non-political tenure to deal with the matter.

One thing that must be constantly borne in mind is that, though a railway commission, with the proper powers and judiciously manned, will undoubtedly be of benefit, at the same time it is futile to hope that it will create such a condition that everybody will be satisfied. The matter of rate regulation is a matter of compromises, and it is as essential to keep in sight the rights of the railway as it is to pay attention to the rights of the shippers. It was after a searching investigation by the Cullom Committee that the act to regulate commerce was enacted and the Interstate Commerce Commission was appointed. The wise words with which this committee closed its report will bear constant iteration: "That a problem of such magnitude, importance and intricacy can be summarily solved by any master stroke of legislation is beyond the bounds of reasonable belief. That a satisfactory solution of the problem can ever be secured without the aid of wise legislation the committee does not believe."

S. J. McLEAN.

Leland Stanford University, California, January 22nd, 1903.

[Editorial Note.—Prof. McLean, author of the foregoing, was born in Simcoe County, Ont., Canada, in 1871, and graduated from Toronto University in 1894; pursued graduate studies in economics in Toronto, Columbia and Chicago Universities until 1897, when he received the Ph. D. degree from the latter. From 1897 to 1902 he was Professor of Economics and Sociology in Arkansas University. He specialized in transportation, and has contributed articles on this subject to leading reviews and magazines. In 1899 he made a report to the Canadian Minister of Railways and Canals on railway commissions in England and the United States, and in 1901 acted as a Special Commissioner on railway rate grievances. At present he is Associate Professor of Economics, and head of the department of Economics and Social Science in the Leland Stanford (Jr.) University, California.]

Grain Growers Organizing.

As an additional indication of the determination of farmers to avail themselves of the advantages of united action in securing and maintaining their rights and privileges, it has been decided to organize the Manitoba Central Grain-growers' Association at Brandon on March 3rd. Sessions will be held at 2 p.m. and 8 p.m., and several prominent speakers will take part. There should, and doubtless will, be a large and representative gathering.

You can never do your friend or neighbor, who ought to have a first class farm paper, a good turn more cheaply than to send us his name and P. O. on a post card. It will bring him a free sample copy of the "Farmer's Advocate."

A Word of Advice to You.

Almost every reader of the "Farmer's Advocate" in Western Canada has a friend or relative now residing in Great Britain, in Europe, in Eastern Canada or in some of the States of the Union who at the present time, when the illimitable wheat fields and stock ranges of the West have sprung into prominence, is deeply interested in the possibilities so closely associated with our Western country.

It is within your power to intensify and focus this interest by placing in his hands the LATEST, MOST UP-TO-DATE AND RELIABLE LITERATURE and information in the West. Such action on your part does not require much effort, since all who are interested in the welfare and future of the West, whether Government official or periodical, will cheerfully co-operate with you and furnish you, or forward to your friend direct, information or literature bearing upon this most vital subject. If you have not already done so, take the necessary step at once. It might be the means of bringing a "new light"—a bright ray of sunshine—into the possibly now cheerless future of your friend or relative. Remember, you have done well here; so "do unto your neighbor as you would he should do unto you." Send us the names and addresses of such persons and we will be pleased to forward them, gratis, a copy of our Immigration Number.



FOXHOUND PUPPIES.

Owned by R. H. Readhead, "Bow Hill," Calgary.

Plan of Agricultural College.

At the opening of the Manitoba Legislature on February 12th, the speech from the throne, by Lieut.-Gov. Sir Daniel McMillan, K.C.M.G., contained the following announcement: "My Government have decided to recommend to you the establishment of an agricultural college, whose special object will be the development of those industries that will promote the interests of the farmers and stock-raisers of the Province."

When the agitation in favor of an Agricultural College took active form about two years ago, and it became evident that the time had arrived when a school fitted to give practical instruction in the various branches of agriculture should be built and supported in this Province, the "Farmer's Advocate," with great care and after considerable deliberation, prepared a plan which it was believed would suit Manitoba's needs and conditions. At the request of numerous farmers who are taking an active interest in this question, we again publish an outline of what we still believe would be best suited to the requirements of this country.

In drafting the scheme herewith submitted, we have endeavored to make a careful study of the various Agricultural College courses of the continent, and to keep in mind the conditions of this Province, and while necessarily imperfect, the general outline will, we believe, commend itself to the Government and to the up-to-date farmers of

the Province. We may at once assume that the initial outlay will be considerably larger than that needed annually; in fact, it can be stated broadly that whereas an agricultural school with say 320 acres of land can be put into operation for about \$50,000 to \$60,000, the necessary annual expenditure will only amount to \$15,000. The initial outlay would be somewhat as follows: 320 acres of land, costing from \$10,000 to \$16,000, depending on the location; a building three stories and basement, containing lecture rooms and offices, laboratories and gymnasium, library, reading room, and fittings, would cost about \$25,000; farm barns for horses and cattle would cost \$3,000; for sheep and swine, poultry and farm implements, \$750 each. It must be kept in mind that the Province cannot afford elaborate buildings, neither would it be wise to erect such. In addition, the farm would need to be stocked with representatives of some of the breeds of cattle suited to the Province, say a bull and three cows of four or five breeds, which would cost in the aggregate about \$3,000, all of which would be used for teaching purposes. Horses would be required for the farm work and for instruction, say two teams of Clydesdales, \$800; one team of lighter horses, \$250; sheep representatives of one of the long and of the medium woolled breeds, of each one ram and ten ewes, which could be got for about \$250; while the breeds of swine, one boar and two sows of reasonable quality, of say three leading breeds, could be got for \$150. One hundred dollars invested in utility breeds of poultry would be ample for a start. Good specimens of other breeds of live stock could be rented for breeding and instruction purposes. Implements, harness, etc., would call for another \$1,000, making a total cost of somewhere in the neighborhood of \$60,000.

Given such an equipment, what would be taught, what teaching force would be required, and what would be the cost? In the first place, the course should be one of two years, of 16 to 18 weeks each, starting, say, November, and ending in March, thus allowing students to be home during the busy season, and permit the college force to do some experimental and outside work during the summer vacation. While other institutions have a large teaching personnel, at the start the force could consist of four professors and three instructors, one of the professors being appointed Controller of the Institution: First, a Professor of Agriculture, to teach the principles of soil cultivation, the growing of farm crops, cereals and grasses, drainage, silos, etc., and the principles of agricultural physics, such as draft of implements, roadmaking, meteorology, construction of implements, applied agricultural chemistry, showing its relation to the preservation of soil fertility; judging of cereals, etc. A Professor of Horticulture and Botany, taking up the teaching of plant life, small-fruit culture, gardening, forestry, the identification and destruction of weeds, prevention of smut, rust and other fungous diseases of plants, and the judging of roots and vegetables; he could, during the summer, have full charge of the tests belonging to his department and supervise provincial weed inspection. A Professor of Animal Husbandry would be necessary to teach the principles of breeding and breeds of live stock, feeding of animals, elements of veterinary science and bacteriology, and to have charge of the live stock of the farm. A Professor of Dairying, to teach farm dairying, factory work in butter and cheese, and attend to inspection during the summer. Men who would be thoroughly posted in their work and energetic could be secured for \$1,500 per year. An instructor in farm economics, farm bookkeeping, drawing and parliamentary practice could be got for \$1,000 a year, being also bookkeeper and secretary of the College. A carpenter and blacksmith would also be needed during the school term, to give instruction; each could be got for \$75 a month, say \$750 for the two men for the course. The stock would need attention by skilled men, a horseman, cattleman, and a man to look after sheep, swine and poultry, each at \$40 a month. Wear and tear, incidentals, printing and advertising would bring the total to \$15,000 yearly.

It may be stated that the College need not be expected to pay its way; no school, college or university is expected to; neither would it be fair to expect an agricultural school to do so. The following schedule will suffice to show how the