Sources of Cornwallis and Annapolis Kivers.

There is an excellent article written for and published in "The Farmer's Advocate," under the caption, "The Annapolis Valley; Eden of Nova Scotia," says a correspondent in the Register, of Berwick, N. S. "It is an article well worth reproduction in our local papers, and appeared in the Register of Dec. 27th. In referring to the two principal rivers (Cornwallis and Annapolis) of the Valley as having their source in the Caribou Bog, evidently the writer has been misled by errors taught in our early geographies. Perhaps this may matter but little, but those familiar with the lay of the land of the surrounding country may regret that this error should be perpetuated."

The writer of the article referred to must plead guilty to having secured his information upon the point in question from common report in the Valley and certain unofficial literature, and is glad to make the correction. Though the point is not one of much practical importance, it is always well to have things accurate.

We gather from our contemporary's contributor that the Cornwallis River takes its rise as a rivulet issuing from the side of the North Mountain at a point called the Black Rock Road, five miles or more north-east from Berwick. Pushing down the southern slope, it veers to the west, following the foot of the mountain, where it is known as "Millstream." Thence, after inclining first south, then west, it sweeps to the south again, and then takes up an easterly course back towards Minas Basin. A tributary of this river springs from the mountainside near Long Point Road, crosses Welsford, making its way south through Weston, and, finally sweeping east, passes near the Caribou Bog, in doing which it takes up dead water, and joins the main stream at Berwick. The Annapolis River takes its rise at the eastern extreme of Rockland, some three miles south-east of Berwick. Flowing down the mountainside, it is known as Margeson Mill Brook. At Buchanan's Mill it turns abruptly to the west and moves along the foothills past the Caribou Bog, quite independent of its waters. Thence it runs west and empties into Annapolis Basin.

In conclusion, our Nova Scotia correspondent notes that in the eastern center of the Caribou Bog is a small lake, whose waters, pure and clear as crystal, are evidently supplied from a subterannean source. Its outflow is northward. Leaching its way through peat and bog down a gentle slope a full half mile, when it may be called bog-water, it finds temporary lodgment in turbid pools until finally wasted away in every

Seed Testing at Ottawa and Calgary.

The Seed Commissioners' Branch of the Dominion Department of Agriculture has a well-manned, wellequipped laboratory at Ottawa, where seed testing is carried on free on an extensive scale, while a branch office has lately been opened at Calgary to serve the Provinces of British Columbia and Alberta. During the season of 1906-1907, seeds of all kinds of field and garden crops will continue to be tested for purity and vitality free of charge to farmers and seed merchants. Ordinary samples sent to be tested for purity should be not less than: One ounce of grass seeds of all kinds, or of white and alsike clovers; two ounces of red clover, alfalfa, millet, or other seeds of like size; one-half pound of cereal grains, or other large seeds.

A sample sent for purity test, under the Seed Control Act, must be in a sealed package, accompanied by statement of information or complaint, as required under section 12 of the Act, and should contain not less than twice the above-named quantities. The samples for such test must also be obtained according to instructions as follows to insure that they are representative of the bulk to be tested; in fact, any sample for test should be selected in this way The seed should be well mixed, and small quantities taken from different parts to make the sample. If it be impracticable thus to mix the seed, small quantities may be drawn by means of seed triers from the top, middle and bottom of each bag, when there are not more than six bags, or of every second bag when there are from seven to twelve bags, or of every fourth bag when there are more than twelve. The small quantities thus drawn may then be well mixed to the the sample for analysis.

For germination test only, samples of smaller size will suffice; but, in any case, these should be not less than about 2,000 seeds of grasses and clovers, 1,000 seeds of cereal grains, or of radishes and other vegetable seeds of similar size or 500 seeds of the cucurbits and other large vegetable seeds.

All seeds sent for test should be enclosed in a strong paper or cotton bag, bearing the name and address of the sender; the number, or some other designation by which the seeds from which the sample is taken may be known to him; the name of the kind, or kinds, of seeds and a label, or other mark, with either of the words, purity or germination, according to which test it is desired to have made. It is unnecessary to send a letter with samples of seed thus sent. It is desired that persons shall not send seeds for germination tests unless the information is really needed, as the staff of the Seed Commissioners' Branch is already hard-worked.

Packages of five pounds or under will be carried free by mail to the address of the Seed Commissioner, Department of Agriculture, Ottawa. Packages addressed to the Seed Laboratory, at Calgary, will not be accepted from the post office unless the postage on the samples has been prepaid.

A line to the above addresses will secure the 1906-1907 circular announcement about seed testing.

Notes from Ireland.

STATE AID AND SELF-RELIANCE.

"The Department and the I. A. O. S." This phrase, which has formed the title, recently, of innumerable articles, discussions and reports of meetings in the Irish agricultural and general press, has reference to a subject, not only of very great interest, but one involving very important issues for the farming industry of the country. To make the matter at all intelligible to readers of "The Farmer's Advocate," a few words of explanation are needed. "The Department " is none other than the Government "Department of Agriculture and Technical Instruction," and the body designated by the four letters "I. A. O. S." is the Irish Agricultural Organization Society, a voluntary institution, the latter being about twice as long in existence as the former. By the way, it may be here mentioned that the gentleman who acts as vice-president of the Department, Sir Horace Plunkett, was the founder of the Organization Society, and has always been a most enthusiastic and generous supporter of its work; indeed, it is an open secret that every penny which the right hon. gentleman receives as his official salary is handed over to bulk the funds of the I. A. O. S., and more than this need not be said in proof of his genuine and practical sympathy. It is also believed that the actual establishment of the Department was due in no small measure to the preliminary work of the I. A. O. S. Now, it happened that when the Department was formed, about six years ago, the authorities considered it advisable to make use of the then existing machinery of the voluntary Society, while laying down the foundations for their own schemes. This was, at any rate, done, and, to make a long story short, it led to the granting of a yearly subsidy, a total amount of close on £19,000 being handed over out of the Department's funds in the past five years. Latterly a strong feeling arose that it was about time these subsidies came to an end, a frequent argument being that if the I. A. O. S. was all that it claimed to be, and had such a parental influence over the farmers' combines throughout Ireland, it ought to be self-supporting. Suspicions then began to grow that the I. A. O. S. was interesting itself in an unwarranted attack upon the traders, and in other ways it fell into disfavor with a not insignificant section of the community. As things went on, questions were asked in Parliament, and the subject was widely discussed in all parts of the country. Eventually a crisis was reached by the calling together of the Council of Agriculture-a representative body, two-thirds popularly elected from the county councils and onethird nominated by the Department-to decide the points at issue. In view of his interest in both bodies, Sir Horace Plunkett's position as Chairman was not one to be envied, but he acquitted himself with characteristic impartiality and credit.

Bound by the terms of a former resolution, the Council was unanimously in favor of the principle of co-operation as applied to agriculture, but the same identity of opinion did not exist with reference to the formal proposal that this co-operation should be promoted by the Department through the instrumentality of the I. A. O. S. Having admitted the first, how ever it was to see, having regard to all the circumstances of the case, how escape could be found from sanctioning the second.

In the course of an able speech, Sir Horace Plunkett contended that the prosperous cortion of the foreign rivals of the Irish father two main causes—State aid, and organized voluntary effort. The functions of the Department were to concern itself not only with the things that the Irish farmers could not do for themselves, but also with the more important things that they could and must do for themselves if they were to meet their competitors in the market. The only ways in which the Department could fulfil its duties in this latter respect were: (1) To attempt the organization of the farmers itself; or (2), to make the utmost use of the voluntary society, which for over 12 years had been actually engaged in the work. The question would, in his opinion, have to be decided from the point of view of economy. Then followed a striking passage in his speech, which will bear reproduction: "We know that the more farmers combine together for the improvement of their business, the more technical assistance they will require. In fact, paradox as it may seem, the more self-help there is in the coun try, the more State aid will be demanded and utilized. So, while developing self-help, we enormously increase the value of State assistance and at the same time in crease its cost. Therefore, not only must the farmers contribute something at the outset, but they must in creasingly contribute towards the cost of reorganizing their commercial methods. We must also give every inducement to the farmers' friends to give financial as sistance to this work, as they have done with such lavish generosity in former years. Now, I will tell you plainly that if the work is done by the Government directly, neither the farmer too his friends will put

their hands in their pockets to relieve the pressure on public funds. That is human nature. And, quite apart from the question of economy, it is absolutely essential that there should be maintained in Ireland a democratical-constituted voluntary association for the protection and promotion of the farmer's interests. Such an association they have in the Irish Agricultural Organization Society, and the country will be the poorer if you wantonly destroy it. You will be giving a direct inducement to the farmers to look to the Government for help in a matter in which it were better they should look to themselves."

In conclusion, Sir Horace contended that the grants to the I. A. O. S. were not illegal, and he also repudiated the charges that the I.A.O.S. (1) was a mere trading body, (2) was an irresponsible body, (3) was a political body, (4) was an inefficient and useless concern, with no results to show commensurate with the money expended on it.

The debate which followed was interesting in the extreme, being taken part in by a great number of speakers. It was eventually decided by a vote of 52 to 25, "that the Irish Agricultural Organization Society, which is the only existing body having a special knowledge of this work, should be aided in carrying out an improved scheme of agricultural organization, subject to effective supervision of all expenditure in connection therewith by the Department; and that, with a view to stimulating contributions from societies and subscribers, and thus securing greater economy, as well as evoking a greater measure of local effort, the subsidy granted by the D. A. T. I. should be in the form of a pro rata contribution."

The terms of the foregoing embody the arguments brought out in favor of the continued subsidization of the I. A. O. S. Those urged on the other side may be gleaned from the following, the defeated resolution: That this Council considers it inadvisable to have further moneys expended through any irresponsible society, and that all work in connection with the interests of agriculture generally be carried out directly by the Department itself and through the representative bodies provided by the law for the purpose, viz., County Councils and County Committees.'

The result of the decision is, therefore, that the I. A. O. S. will continue to be subsidized by the Department, but that the latter will have to exercise full supervision for the expenditure of the moneys allotted. It is to be hoped that the arrangement will work out beneficially, and lead to the furtherance of the co-operative movement on a firm basis. However, if things are to go harmoniously, it will behoove the officials of the I. A. O. S. to keep within the limits of their legitimate duties as organizers, and not to encroach in any way upon the educational functions of the Department. Their attitude towards the trading fraternity will also need their constant watchfulness. Thus ends our brief history of an affair that is calculated to exert a widespread influence on Irish agriculture.

SEED POTATOES FROM IRELAND.

As if to cheer him on when prices for some of his produce are not so high as could be wished, there arises from time to time before the Irish farmer the prospect of a new source of revenue from his land. Such, undoubtedly, was the lucky discovery a few years ago. that the soil and climate in different Irish counties were admirably favorable for the cultivation of early potatoes, and that, with judicious care and treatment of his crop, the farmer could forestall the Scotch raisers by getting his produce into the markets at London and elsewhere a fortnight or three weeks earlier. advantage of, this gave rise to an industry which has made very satisfactory progress. The humble tuber now appears in yet another form as a moneymaker. As a result of numerous tests in Englandhave been referred to by "Scotland Yet" in previous issues of "The Farmer's Advocate"—it has been shown that Irish-raised seed potatoes have beaten in yield the produce of seed raised in Great Britain.

Quite a flutter of pleasant excitement prevailed as these facts (fully authenticated as they had been) were brought home to the attention of our farmers. With a readiness that augured well, the Department of Agriculture, at whose instance the trials had been conducted. took an effective step towards bringing Irish potatogrowers into touch with one another, by calling together a conference. This was duly held, and gave promise of yielding permanently successful results, as from it emerged yet another new organization, viz., the Irish Seed Potato Growers' Association. It is firmly believed that there is a bright future before the proposed industry, provided, of course, our farmers act with intelligence and foresight. In English agricultural circles there are evidences of a readiness to obtain changes of seed from Irish sources, and though some of our Scottish friends-with perhaps natural reluctance to suffer any loss of trade—seem inclined to throw doubts upon the accuracy of the tests, there is, taking everything into consideration, a hopeful outlook for the establishment of a remunerative new industry in "the EMERALD ISLE Dublin January 11th, 1907.

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for

Pennsylvania lines in Indiana by the Purdue University Experiment Station. The train will cover 1, 00 miles of the Pennsylvania system, and more than

Arrangements have just been completed for the oning of a special seed-corn train over the 165 staps will be made, at which lectures will be given and printed literature distributed.