

### Agricultural Clubs.—Important Notice.

The agricultural clubs already in existence and those shortly to be instituted, are requested to apply to the secretary of the Department of agriculture, who will forward to them, gratuitously, for the use of their members, certain pamphlets on agriculture, and all the information on that subject that the department is able to afford them.

H. G. JOLY DE LOBINIÈRE,  
Pres. Council of Agriculture.

### IMPORTANT NOTICE.

The tour of inspection of Canadian cattle, for the purpose of making entries in the stud-book, will take place in July. Those who have animals for entry are requested to send their names and addresses to the undersigned before the first day of July *prox*, if they wish their stock to be inspected this year.

(Signed) J. A. COUTURE, D. M. V.  
49 rue des Jardins Quebec.

### Beet-Sugar Production in Canada

The question of the possible production of beet-sugar in Canada is one of no ordinary importance. It is more than an agricultural problem. In fact, it should be considered as of national import. Therefore, it fully deserves the attention of every public spirited man in Canada.

As far back as 1870, the undersigned was honored by the Quebec Government with an official mission to Europe, in order to study and report upon this question, in its various aspects. (1) Later on, in 1872, the Federal Government requested him to return to Europe and to report, specially, on the matter. (2) Ever since, he has carefully noted events in America relating to the production of beet-sugar, but at no time had he, nor has he now, any pecuniary interest whatever in the various schemes and undertakings which have been mooted on the subject. Under these circumstances, and after a careful, disinterested consideration of the matter, he begs leave to call attention to the following, his conclusions, which he respectfully submits, with the hope that they may be accepted by every careful, impartial student. Every statement made herein is corroborated by official evidence and can be proved to be exact.

1.—The production of beet sugar, as a successful industry, dates back to about 1820 only. In Germany—the leading beet sugar producing country in the world,—some 1500 tons of beet sugar were produced in 1836-37, giving a return of  $3\frac{1}{2}\%$  of raw sugar, per ton of beets. In 1889-90, the production in Germany amounted to 1,264,607 and in Austria, 787,989 making a total of 2,052,396 of tons of sugar for Germany and Austria alone. Until 1840, beet sugar was not taxed. On the contrary, it had been fostered, at considerable expense, in various countries, as an abstruse, difficult scientific problem, but of great national import. And so it finally proved, for 10 years later, in 1850, it already gave a return to the International State's Revenue, of over a million of dollars annually. Again, sixteen years later, in 1866-67, it gave that State an annual revenue of nearly nine millions of dollars (\$8,874,724.00). In the mean time, the consumption of sugar in Germany had increased nearly 300 per cent viz: from

3.99 lbs. per head per annum, to 10.69 (1). And yet the processes of manufacture are still far from perfect, and improving from year to year.

The average production of raw sugar per ton of beets did not exceed over 7 per cent up to 1880, whilst now it is about 12 per cent, with still a large possible margin, of fully 40 per cent, left for improvement (2). Improved varieties of beets are now grown on a large scale, containing an average of 18% of pure sugar, which leaves a possible improvement of from 40 to 50% in the sugar to be extracted from beets in a near future.

2.—Until beet sugar became a commercial commodity, cane sugar had been a golden monopoly, in the hands of the wealthiest merchants, shippers and refiners all over the world. It remained, for a long time, an expensive luxury which the rich alone could afford. It will therefore be apparent what a revolution has been created in the sugar trade, through beet-sugar production alone. But beet-sugar producers had to fight their way up, step by step, against terrible odds. They have been winners all over Continental Europe. As to Great Britain, it has given beet sugar producers the best market in the world. Northern America, including Canada, cannot hope to win such laurels without an effort, and therefore it behoves our future beet-sugar producers and their numerous friends to do their best in order to obtain a prompt and a fair hearing.

3.—It is now admitted that fully 70 per cent of the total production of sugar in the world is beet-sugar. (3) It must equally be admitted that, through beet-sugar production, even the poorest in the land can enjoy its sweets in plenty. This is a fair showing for an industry, working against such odds as it had to contend with. And it is yet in its infancy as a business, since it has been, so to speak, built up within 70 years.

4.—Through selection and proper cultivation, beets can now be produced on common farm lands of equal richness in pure sugar as the best of sugar cane, in its most favorable habitat. The processes of beet-sugar production are still constantly improving, such improvements amounting often to a complete transformation in the system of manufacture and a total change of machinery. The cost of manufacturing is being lowered from year to year, and yet the annual production, on the continent of Europe alone, amounted to the enormous quantity of 3,619,678 tons of beet-sugar in 1890, and has again increased considerably since (4). Wherefore, it has been truly said that the sugar-beet is as much the natural sugar producer of the North, as Canada or Prussia, as cane-sugar is the principal blessing and wealth producing power of the sunny South.

5.—Beet-sugar production is entirely, the output, the scientific application, (so to speak), the child of Agricultural Chemistry, a science still at its *début*, still as it were, groping in the dark, still fostered by all wise and progressive governments, that of Canada, of course, included. It may be safely assumed that as much progress can be made in the future in the improvement of the sugar-beet as the most

(1) See Agricultural Report, Washington (Walkhoff), 1868, page 161.

(2) See Prof. Saunders' Report, page 9.

(3) See Prof. Saunders' Report, page 34.

(4) To move this amount of sugar would require a fleet of 3619 ships of 1000 tons capacity, and this in order to carry the product of one year's crop of beet sugar alone.

(1) See Quebec Departmental Reports Agri &c., 1871 to 1884.

(2) See Report Agriculture, Ottawa, No. 21, year 1872.