

which are absorbed from the soil, by the roots, and which in process of time become exhausted by frequently cropping the ground with the same plants, which must again be restored to the land by manures or by the application of other modes of improvement, in order that plants of the same kind can be profitably cultivated. This discovery, by far the greatest for the human family that attracts attention at the hands of the man of science of the present day, is yet far from being completed, nor do the practical farmers avail themselves, as they might do, of the facts that have been elucidated by the experiments made by practical and scientific chemists, all of which have gone to prove the necessity of adapting the crops to the character and condition of the soil upon which they are cultivated.

Agricultural societies might do much towards making this subject attractive to those who have heretofore given it comparatively no consideration; and if only a small sum was annually set apart by each society for prize essays on the best systems of rotation of crops, within their several circles of influence; and also a small sum for the most scientific course of cropping the land, being practically carried out and extended over a period of at least five years, most favourable results would doubtless follow from such an enlightened practice. An interest of such vast importance as this requires all the assistance that can be employed in its favour. Individual and voluntary aid should not be relied upon, when any great result is required to be achieved. Well organized and corporate bodies are in being, in the Province, which might, with a very little exertion, effect vast changes in the condition of its agriculture: and portions of the country that are either naturally noted for their unprofitable agriculture, or have become such by inferior cultivation, might be made to yield three or four times the produce they do at present, simply by the introduction of a more scientific course of rotation of crops. Let the Canadian farmers once be taught the necessity of suiting their crops to the condition and quality of their land, and give them thoroughly to understand the principles upon which a well regulated farm practice is grounded, and our word for it, there will then be no occasion for

raising the "hue and cry" of *hard times*; nor will there then be any difficulty in exporting sufficient produce from the soil to pay for the annual imports of the country. Land that annually produces only an average crop of fifteen bushels of wheat might, without much difficulty, be made to produce forty bushels per acre. Such a result as this successfully achieved over a breadth of a few hundred thousand acres of the best wheat lands of Canada, for the next five years, would go a long way towards liquidating the individual and commercial indebtedness which at present has assumed such a threatening and truly formidable aspect. To an inland country like Canada, where capital is scarce, population scattered thinly over a great breadth of country, and where the people are not distinguished for their skill nor enterprise in manufactures, its agriculture is of the first importance. All other interests being dependent upon it for support, should occupy a position on the scale just in proportion to their several relative merits. This, however, is rather straying from the subject under consideration, and the remark was made in this place to show that in order to make great achievements in agricultural improvement it is necessary to make the movement a fashionable and popular one; and to do this effectually, in a country where the great mass of the population have scarcely received an ordinary common school education, the work must not be left to the action of individual effort. The General Government, the Municipal Councils, and the Agricultural Societies of the country have each a portion of the work to perform. The only way by which the country can receive permanent relief, or be extricated from its present financial embarrassments, is by the improvement of her agriculture. Auxiliary aids may certainly be employed, but, after all, they will prove of small moment when compared to what is obtained from an enlightened system of agriculture. Hence the necessity of diffusing among the mass of cultivators a thorough knowledge of the principles which govern their ancient and honourable profession.

Although it is unwise for the government of an agricultural people to allow great questions, like the one under discussion, to be treated