

tle and farm stock, for the introduction of which we are indebted to many enterprising men, and which I am happy to say are now being scattered through almost every part of the Province, must have fully doubled the value of the foregoing estimate. These tables furnish no valuation of the square and sawed timber, which is made in Upper Canada, or of the produce of the mines, which two items must add a large amount to our national resources.

The beneficial results of farmers' clubs in agricultural societies are fast attracting general attention, and the reports of them, through the *Canadian Agriculturist*, and Journal of Transactions of the Board and Association &c., are conferring benefits upon our farmers of incalculable value. But the greatest good that will eventually arise from the discussions of these clubs will be the showing of the relative merits of the labor saving machines which are being introduced and manufactured in the Province, and which will enable our agriculturists to contend successfully with any country on the globe. Mr. Rives, from whom I have previously quoted, states "that even in England where labor is so cheap, the recent invention of new implements and the improvement in old ones have caused within the last twelve years a saving of nearly one-half the expenses of English farm labor. What then must be the beneficial effect of their introduction into a country where the price of labor is so exorbitant as in ours. The reduction would be still greater should Mr. Mechi's opinion prove correct, that in seven years steam will supersede horse-power in agriculture."

The system of surface draining which has long been practised, although imperfectly, is, I am happy to say, beginning to give place to subsoil drainage. I hope that the course adopted in Britain immediately after the repeal of the corn laws, in chartering private companies and in obtaining assistance from the Government, may be followed by us. I am happy to recommend to the favorable notice of the Legislature of the Province as well as the public generally, Mr. Charnock, who has established himself at Hamilton, and who is desirous to form a company for the better carrying out of this important object. This gentleman has also introduced a tile machine for subsoil drainage; and he confidently expects that when in complete operation he will be able to furnish tiles for any section of the Province.

Draining about farm houses is no doubt highly conducive to health, and is thought to have a very favorable influence in ameliorating the climate.

I would beg to recommend to the public an excellent article on this subject of which I would urge the republication, by one of our most worthy ex-presidents, Col. Marks:—

"Subsoil and trench ploughing has been practised in some instances on the banks of the Ottawa, and has been attended with astonishing success, and I have no doubt that it is practised in other parts of the Province."

It is to be hoped that many of our indigenous plants may yet be made available in medicine and the arts. For instance gentian, which is a native of Canada, was once a very considerable

article of export, at a time when our exports were trifling to what they are at present, but owing, I believe to a want of care in preparing it for the Chinese Market (no inspector being appointed to examine it) the export of an inferior article ruined it in the market. It is found also in some part of China and Chinese Tartary, and is considered by the inhabitants of those countries a sovereign remedy for all diseases, but from its high price, it is only used among the highest orders. Its use among them was discovered by the Jesuits who went as missionaries to China, and they also discovered it in the forests of Canada, where it grows in large quantities. At this time, with proper care, a good trade might again be carried on in this commodity.

The introduction and growth of chicory is also a matter of importance. This root, if properly prepared, as it is in France and Belgium, and mixed with coffee, makes it more palatable, less expensive and far more healthy as a beverage. Its roots and leaves are also useful in dyeing. It agrees with the climate of Canada, and should be generally cultivated, and I am confident would prove highly remunerative.

When we advert to the Great Exhibition established in Hyde Park, under the patronage of His Royal Highness Prince Albert, and the advantages which Great Britain and her colonies, as well as the whole civilized world would have derived from it, as has been chiefly shown by the lectures delivered upon its results before the Royal Society of Arts in London, by many eminently scientific and practical men, we rejoice that like the fabled phoenix of old, another has risen from its remains, and while it promises greater permanence, we hope it may be successful. Whilst the former Exhibition showed Great Britain the numerous advantages which she possessed over other nations, it at the same time discovered her weaker points, which will be, no doubt, better strengthened and sustained in the present one.

The lectures to which I have just alluded are disseminating a vast amount of valuable information; it would ill become me to express an opinion as to which of them are most advancing the interests of mankind. Sir Henry de la Beche, in his lecture, favorably notices the minerals and metals of Canada. Their development at no distant day must be an object of the greatest importance.

Professor Solley, in lecture No. 7, urges the adoption of a system of professional education for practical men, each man to obtain all that is necessary for him in his own position. In this respect he admits that France is far in advance of Great Britain. I should here remark that every young man commencing his career in life, should carefully consider what profession or calling is best suited to his position and his mental and physical qualifications, then diligently and perseveringly pursue such a course as will enable him to arrive at eminence in it.

The last to which I would refer is that of Prof. Wilson, being lecture No. 13, on agricultural products and implements. As this gentleman was with us at our last Exhibition, and many of