

means the Valley of the Saskatchewan, that is a country I have always supposed to consist of nothing but prairies.

I would ask you another question, a little nearer home. Would you please to give us (us, for there are others besides myself) your opinion of Farmers' Clubs, their utility and desirability, in as lengthy and elaborate an article as your columns will permit. I intend to establish a club in this section as soon as possible; but as I know little about their rules and regulations, I will abide by your opinion on the subject.

BRUCE.

Langside, March 2, 1868.

ANS.—Our correspondent should apply to the Crown Lands Department for information as to the extent and whereabouts of the public domain that is yet for sale. Wheat requires, for at least two months in the year, a mean temperature of 65°, in order to its successful culture. This temperature is not attained on the Atlantic coast of Nova Scotia, but it is almost throughout the interior of New Brunswick; and as the isothermal lines tend northward toward the interior of the continent, we should imagine wheat might be grown as far north as Fort William, but we have no facts at hand to verify this opinion. We doubt if wheat can be raised more than one hundred miles north of Lake Nipissing. It is a mistake to suppose that the Saskatchewan Valley is one vast prairie. There are stretches of timber land interspersing the prairie.

The subject of Farmers' Clubs must be deferred to another issue.

Buckthorn for Hedges.

To the Editor of THE CANADA FARMER:

SIR,—Seeing from time to time, in your publication, notices of various methods of raising a hedge for the purpose of supplying an expected deficiency in fence material, I would draw special attention to one which, so far as I know, has been overlooked, that is what is called the buckthorn here. It very much resembles the hawthorn in blossom, and haw or berry, but the berry is a great deal larger. It is indigenous in this neighborhood, not easily killed, and from what I have seen of it, I have no hesitation in saying that it would answer the purpose admirably; and if cared for and attended to with the hedge bill, no pigs will ever attempt going through it, nor cattle either, as it has very long prickles.

There are quantities of berries here every fall; but I do not understand the raising of quicks; some of the nurserymen, however, in the country, might find it to their advantage to commence operations in that line, or let it be known how the thing can be done.

I am going to begin, this spring, to transplant some of the youngest that I can find, for a garden fence; they are very plentiful all over the fields here, and very troublesome also.

Dunville.

T. HUMDURGAN.

NOTE BY ED. C. F.—The buckthorn has been found to answer perhaps as well as any other shrub for a hedge plant, in this section of the Province.

COST OF BOILER.—A subscriber from Lanark wishes to know the "cost of a four horse-power boiler, to build into stone-work." A boiler, such as we presume is referred to, would cost, we understand, about \$100; but we recommend our correspondent to apply to some manufacturer for full and specific information. Mr. Neil Currie, Boiler-maker, of this city, would no doubt answer his enquiries in this matter.

CANADIAN HERD BOOK.—W. C. Smith writes, "Please let me know, through the columns of the CANADA FARMER, if the Canadian Herd book has ever been published, and the price."

ANS.—The Canadian Herd Book is now ready, and may be had on application to H. C. Thomson, Esq., Secretary to the Provincial Association, Agricultural Hall, Toronto. The price is \$4.

TAXIDERM.—A subscriber asks:—"Would you, through the medium of your valuable columns, inform me what is the best work on taxidermy?"

ANS.—Captain Thomas Brown's work on this subject is a good one. The price is about seventy-five cents. Samson's also (price one dollar), is perhaps equally good. They may be procured through the principal booksellers in any of our large cities. The Messrs. Chewett, to our knowledge, can furnish them.

SHELL MARL.—A "Constant Reader" sends us a specimen of shell marl with the following note:—"Will you be good enough to examine the specimen of limestone herewith, and to say in your next issue if you think it would be valuable as an agricultural manure or dressing; also in what soils it would be most useful, and with what kind of fruit and plants? Would it make a good dressing for grape vines in light sandy soil?"

ANS.—Shell marl consists principally of carbonate of lime, with slight traces of phosphate. It is of some utility as a fertilizer, especially on stiff clay soils. See CANADA FARMER, Vol. 4, page 153.

DETERMINATION OF SEX IN BREEDING.—A correspondent wishes to know if there is any trustworthy method of influencing and controlling sex in breeding stock.

ANS.—Not that we are aware of. Several theories have been propounded, and supposed proofs of their soundness furnished, but thus far all have proved imaginary. It would often be a great advantage to the farmer and stock-breeder if he could take this matter into his own hands, but we are not as yet competent to do it. Intelligent stock men are continually experimenting and investigating on this point, and possibly at some future day perseverance may be crowned with success.

The Canada Farmer.

TORONTO, CANADA, APRIL 1, 1868.

The Agricultural Statute.

WE published in our last the new Agricultural Bill, recently passed by the Legislature of Ontario, thinking that so important a document should find a permanent record in the CANADA FARMER, for the information and convenient reference of our numerous readers. We now proceed to make some remarks, chiefly of an illustrative character, in reference to what may be termed the new and more prominent provisions of the statute.

For the last quarter of a century the Government of Canada has evinced a growing liberality in promoting, chiefly through the instrumentality of societies, the great interests of agriculture, as constituting the basis of our wealth and prosperity. No one practically acquainted with the history of Canadian agriculture during this period, but must deeply feel that much of the progress that has been achieved can be traced to those numerous agencies which the public grant first called into existence, and afterwards, in conjunction with voluntary individual support, in many cases so efficiently sustained. The progress made in the art of agriculture, the increase and improvement in stock, the Provincial Exhibitions, from a very humble beginning to the high position which they have now for several years occupied among similar institutions both in the old world and the new, afford demonstrative evidence that their efforts have, on the whole, been signally successful. Notwithstanding, as is the case, more or less, with all human arrangements, imperfections and shortcomings were apparent to close observers; and when, under Confederation, this wealthy and prosperous Province of Ontario became invested with a separate Legislature, it was thought to be a fitting time for taking a

calm and impartial view of the past, and adopting such changes and improvements as would better meet the growing wants of the future. Accordingly, a convention of leading agriculturists and others was held in Toronto, in the beginning of winter, when most of the questions affecting this great measure were pretty fully discussed. And although the Government and Legislature did not subsequently adopt all that was carried by this convention, yet the results arrived at by that respectable body formed the basis of the new Bill, modifications and additions being made, with the view of bringing it into closer harmony with the growing wants of all the great industrial pursuits of our people. One of these modifications will, no doubt, be generally approved, namely, the retaining of the Township Societies in their former position, as regards the grant, three-fifths being apportioned to the Township, and two-fifths to the County Societies.

Among the most striking characteristics of the present statute, as compared with the past, is the enlarged basis on which it is constructed. The old statute provided for the organization of Horticultural Societies, but made no provision for granting them pecuniary aid. Agricultural Societies, it is true, from the Townships to the Provincial, have in practice, more or less, patronized horticulture and the mechanical arts; but the present law puts Horticultural Societies, organized in accordance with its provisions, in the same position as Township Agricultural Societies; and it also provides a money grant to the Fruit Growers' Association. This is undoubtedly an improvement; for we find almost everywhere, at least in all the older settled portions of the Province, a constantly increasing desire for those comforts and embellishments which horticulture, in its widest acceptance, can alone supply. The cultivation on approved principles of the best varieties of fruit adapted to the different sections of the Province, is a matter of daily increasing importance, and there is good reason to hope that this valuable object will be materially promoted by the substantial aid now first offered by the Government to the Ontario Fruit Growers' Association. When the Executive deemed it expedient to discontinue the grant to the Board of Arts and Manufactures, they wisely provided in the new Bill for the recognition of Mechanics' Institutions, and for granting them aid under certain defined conditions, to put within the reach of our artisans such books and instruction as will better enable them to understand and practise the principles on which their respective arts are founded. The Board of Arts, we believe, made a wise and economical use of their small annual grant, in diffusing, particularly through its monthly journal, valuable information to the mechanical and manufacturing classes, and we trust that under the new regulations those important interests will be still further fostered and promoted.

It is possible that some of our readers may grudge this extension of aid, and argue that, however desirable it may be to encourage horticulture, arts and manufactures, yet if the Bill does this at the expense of agriculture, the origin and basis of our wealth, the result, instead of being beneficial, will be most disastrous. Happily there is no ground for doubt and suspicion on this head; the Government, unanimously sustained by the Legislature, evinced an enlightened and discriminating liberality in constructing and carrying the measure. At, and subsequent to the convention, it was assumed that the accustomed amount of the public grant would not be increased, and a serious practical difficulty was felt—when it was considered that under the Act of Confederation seventeen new Electoral Divisions had been made in Ontario. After due deliberation, the Government decided to include the additional Electoral Divisions, fixing \$700 as the maximum to each society; an amount to most of the societies quite equal to that they received under the old statute. Heretofore a