

THE GLEANER:

AND NORTHUMBERLAND, KENT, GLOUCESTER AND RESTIGOUCHE.
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OLD SERIES]

Nec aranearum sane textus ideo melior, quia ex se fila gignunt, nec noster vilior quia ex alienis libamus ut apes.

[COMPRISED 13 VOLUMES.]

NEW SERIES, VOL. V.]

MIRAMICHI, TUESDAY EVENING, FEBRUARY 23, 1847.

[NUMBER 20.]

Agricultural Journal.

From the British American Cultivator.
A WET DAY.

The highly complimentary manner in which you noticed my former communication has induced me to take up my pen a second time, to offer a few remarks for your consideration; and if you think them worthy of a column in your paper, they are at your service. I had intended writing you some two months ago, but having an unusually large harvest to attend to, my time has been so much taken up, that I have had little inclination for writing. I make this remark, lest you might think this the only wet day that has elapsed since I last wrote to you.

My feelings are still deeply interested in aiding and forwarding the cause of agriculture, and raising our farmers to that standard which their calling and station demands; and that which I think to be the most effectual means of increasing their prosperity and improving their social condition, is an earnest appeal to their intellect for improvement. Not that a man should go to a book to learn to hold a plough, but to understand the nature and foundation of the soils, their component parts, their susceptibilities of varied culture, and what crops are suited to their varied character—all these things, and they are essential to the profitable occupation of our soils, should be perfectly understood, and yet how few so understand them. I am fully satisfied that our farmers do not read enough on these subjects as relate to their own personal interests. I am often amused with the prejudice which exists against innovation, and blush for my calling, when I hear men possessing an ordinary share of common sense, talking of killing pork in the new of the moon, planting potatoes in another stage, sowing peas in a third stage of it, and a hundred other equally ridiculous and absurd assertions. If you ask them the reason of all this, they say, my father did so or said so, and I always did so, whereas two hours attentive reading of a common-sense author, and an hour or two of abstract thought, would convince them of the error and folly of the prejudices they act upon.

The business of husbandry, says an author in drawing a comparison, may be likened to the healing art; the farmer, as well as the physician, may plod on mechanically without the aid of study or of science, happy, if you please, in his own conceit, and in his ignorance, both may have tolerable success, by adopting the example of enlightened neighbors, or follow the impulse of their own discriminating minds, yet, both would do better, were they to understand perfectly the organization and properties of the subjects upon which they are to operate or are to employ. Generations have been engaged in investigating the business of both professions, and have handed down to us the results of their observations and experience; these lessons of wisdom are considered indispensable to the student of medicine—they are no less beneficial to the student of agriculture.

A farmer can be, and when he understands his rights and privileges, is one of the most independent men on earth. The life of a farmer is one of labor, it is true, but labor unless carried to excess, is far from being prejudicial to the body or mind; vigorous exercise, such as the law of our nature, is necessary to the full development of either our body or mental powers; and unless the necessity is forced upon us in part, we are apt to evade it. I trust you will bear with me, Mr. Editor, if my remarks are verbose, when I tell you that the subject of mental culture deeply interests me, and it affords me a secret satisfaction in giving an expression to some of my ideas upon it. I sincerely wish that more of our farmers knew the calm satisfaction of taking an improving volume by the peaceful fire side, or the luxury of improving the mind. How few men who love their homes and their books, that are vicious! Employment,

roused by some noble object, is the secret road to happiness, and of all employments, mental labor lasts the longest. The body soon wears but the mind is immortal.

The man, says Robert Hall, who has gained a taste for books, will in all likelihood become thoughtful; and when you have given him a habit of thinking, you have conferred on him a much greater favour than by the gift of a large sum of money, since you have put into his possession the principle of all legitimate prosperity.

But I will conclude: in my next I propose giving some of my own experience and observations on farming. Though I make no pretensions to philosophy or science in my practical experience, yet I trust to be benefited by an investigation of them, and am not afraid of their practical application to my profession.

Yours respectfully,
CHARLES E. CHADWICK.
Dereham, Brock District,
September, 1846.

From the London Farmers' Magazine.
ON THE ADVANTAGES OF CHEMISTRY TO THE FARMER.

BY DR. DAUBENY.
We alluded in our last to the benefits which were already beginning to dawn on agriculture by the adoption of chemical expedients and resources—we promised to revert to the subject again; and an admirable paper from the pen of Professor Daubeny, of Oxford, appearing in this number of our journal, naturally calls our attention to the matter of which it treats.

Among the various manures which are known to the farmer, and have been employed for time immemorial in the fertilization of soils, lime occupies a very conspicuous place. Yet most conflicting are the opinions of farmers as to the proper condition in which it should be employed—some advocating its use whilst yet in a caustic state, others on the contrary, taking every precaution to destroy this causticity; and each in his turn, citing the all weighty authorities of experience and precedent. Doubtless the advocates of both sides are quite correct—neither experience or precedent has played the farmer false; but the conditions differed—the data were not the same. The so-called destructive effects of lime are well known—we mean its property of disintegrating organic matters, whether animal or vegetable, and reducing them to a convenient state to be assimilated by vegetables; and hence one valuable quality with this alkaline earth possesses in an agricultural point of view. Its operation, however, on mineral substances has not hitherto been so clearly studied, or the value of its agency appreciated. Professor Daubeny has directed the agriculturist's attention to the change which caustic lime exercises on disintegrating granite, and his experiments taken conjointly with those of Professor Fuch's, of Munich, and Mr. Prieaux, of Plymouth, may be considered as satisfactorily establishing the fact that caustic lime exercises a most potent agency in liberating alkaline matter from the subsoil, and thus furnishing an element which is absolutely essential to the composition of vegetables.

We need scarcely remark that lime enters as a constituent into the composition of most vegetables, but not in its caustic state, and in proportions, which are exceedingly small in comparison with many other bodies. Were the value of the material alone dependant upon this latter circumstance—namely, of its assimilation—that lime would never be employed with propriety in its caustic state. An analysis of any of the common vegetables which are produced on farms will prove beyond question that only a small portion of the value of lime as a manure can depend on its assimilation, and that we must seek for its value in other causes. If we select wheat as our example, we find that by analysis it yields about three per cent merely of lime, but something more than twenty six per cent. of phosphoric acid,

and nearly twenty five per cent. of potash; and yet notwithstanding the enormous per centage of the two latter substances, their artificial use to any extent is of very moderate origin. Lime, however, has been employed from time immemorial, and the remarks which are made in the treatise of Professor Daubeny will fully account for its value.

We have already pointed out in our last number that the basis on which the theory and practice of manures rest in a correct analysis. Thus, in the case of wheat, seeing the large amount of alkali and of phosphoric acid which this cereal requires to minister to the necessities of its organization, substances containing these materials in a loosely combined state, should be employed as manure.

Thus we have indicated powdered bones and ashes—the former to supply the phosphoric acid, and the latter to yield alkali. Without this artificial supply the necessary elements must be obtained by decomposition of the subsoil—an operation that would be facilitated by the employment of caustic lime. In this sense, then, lime may be called an exhausting manure, drawn on the resources of land itself, and unlike guano, bone, ashes, compost, &c., and adding but little absolute pabulum to the soil. In the first application of science to the necessities of any art, we require some guarantee that the experimenter's means are fully adequate to accomplish the end proposed; the mind must be satisfied that its speculation are founded on truth—that its premises are tenable—that its sequences have not been hastily deduced. Regarded in this point of view agricultural chemistry presents many difficulties. Vegetables are long in coming to maturity; the experimenter must be contented to wait patiently for no inconsiderable portion of his life; his investigations can only be partially transacted in the laboratory—he must watch the play of vegetation in the fields. Hence in addition to the science of a chemist he should possess the practical knowledge of the farmer, an union of qualities which remains yet to be perfected.

Notwithstanding all these disadvantages, the ordinary practice of agriculture has revealed some striking facts in illustration of the chain of causes and effects as regard the food of plants. One of the most interesting of these is the well known circumstance that wheat—indeed all grasses—produced in land that has been long manured with guano, is very weak in the stalk. The explanation of the circumstance is easy, it being referrible to the absence in guano of silica or siliceous matter, which is necessary to the substance of the stalk. Here is an interesting sequence traceable to a cause, which should alone be sufficient to inspire the farmer with confidence in the suggestive advantage of chemistry, and should encourage him to push his inquiries still further in the very interesting field.

It has often occurred to us that the chemist would do well to testify the efficacy of manures on fictitious soils, the composition of which he knows exactly; then he might make specific soils of silica, alumina, lime, &c., alone or in combination; thus he would fix his data, and form for himself, so to speak, a zero, or starting point, by which all his subsequent experiments on natural soils might be regulated. He would thus, we take it, be enabled to speak with positive confidence on matters that are now but probable, and would reduce to system and regularity the whole theory of manures.

Provincial Legislature

OF NEW-BRUNSWICK.

EXTRACTS FROM THE JOURNAL.

HOUSE OF ASSEMBLY, February 9.

COPY RIGHT ACT.

Fredericton, 20th July, 1846.
My Lord—A sensation having been excited in the Province by the recent enactment of the provisions of the act of Parliament (5 & 6 Vict. cap. 45, 46, 47) for the pro-

tection of Copy Rights on books, I am prompted to explain to Your Lordship the situation in which these communities are placed by the restrictions which are thus imposed on the introduction of English books, reprinted in America, and on certain newspapers through the medium of which they have hitherto obtained circulation, by what is called the privilege of the Deputy Post master General, who at his discretion, has dispensed with the law for imposing on them full letter rates at Postage.

In the Report of the commissioners of the Post Office Inquiry in Canada, it was observed that no printed matter coming from England, except Stamped Newspapers, could pass through the post unless charged by weight at the rates of letters exceeding an ounce, when in the case of English Reviews, Magazines, and Pamphlets, acted as a complete prohibition, and that the American reprints of Miscellanies, under the privilege referred to, had obtained an extensive circulation.

The limited means and opportunities of acquiring books has led, in these provinces, as well as in the United States, to the publication of a great number of cheap Newspapers containing with the usual matter of Advertisements, Correspondence, and extracts from English and American Journals, selections from books and miscellanies. These selections which are for the most part, taken from the lighter productions of the English and American presses, are generally unexceptionable, and tend to encourage a taste for reading, amongst those who have no access to books, and are cut off from social intercourse of an improving nature.

Some publishers in the United States, taking advantage of the increased demand for publications of this nature, have undertaken the publication of entire works in consecutive numbers, or in extra sheets; and as examples of the works thus circulated in the Provinces as well as in the United States, may be mentioned, Allison's History of Europe, Leibig's Animal and Agricultural Chemistry, Arnold's Lectures on Modern History, Borrow's Bible in Spain, &c.; and it may be remarked, that the papers which are engaged in these republications, and depending on support in these Provinces, have taken no part in the acrimonious discussion which often pervades the political Journals in the United States.

The claim to protection of the English publishers being the ground on which the circulation of these papers has suddenly been arrested by the charge of letter postage, and by the seizure of the "extras" the public attention has been drawn to the high price of English books, which has operated as entirely to prevent their circulation in these Provinces.

The encouragement given in the United Kingdom, from the numerous libraries, clubs, and societies, which are supplied with copies of books as they issue from the press, and to whom the price of a book is less an object than the early supply of new works to their numerous subscribers and readers, renders it practicable in most cases for an English publisher to attach such a price to a book which would command any sale in the provinces, as nearly to remunerate him from this source alone, independently of the demand from individual purchasers, according to the merit or interest of the work.

The increasing demand of a more numerous and less affluent class of readers, has led to some reduction in the price of works, by their publication in less expensive forms; but the price even of these books, enhanced by the charges attending their transmission, excludes them from circulation in the colonies, especially during the winter months. Hence the restrictions imposed by the Copy Right Act, operate in no manner to the benefit of the English publisher, while by excluding the inhabitants of the British provinces from the opportunities they have hitherto enjoyed of becoming familiar with the productions of the English press through the medium of the reprints, chiefly in the newspaper form, they are led unavailably to contrast their situation with that of their fellow countrymen in the United States, where such a restriction cannot be enforced.

The protection of publishers in the United Kingdom is a question altogether distinct from the extension of the Copy Right Acts, by authority of Parliament, to the Colonies, and especially to those having separate Legislatures, who, if it devolved on them to consider of the local application of those laws, would, in affording a reasonable protection to the English publisher, be disposed to provide also for the interests of the community, whom it cannot be just to exclude from all access to English literature, except by an evasion of the exorbitant charges to which they are subjected by law.

I do not undertake to determine how far their interests may admit of being reconciled by the imposition of such a moderate duty on