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

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Agricultural Journal.

THE PLOUGHMAN.

BY MOSES FOSTER, JR.

The twilight grey or early morn
Appears in eastern sky,
And ushers in the new born day,
In bright imagery.

Old chanticleer his shrill-toned notes,
Is pealing forth in praise;
And from each tree the songsters sing
Their most melodious lays.

The ploughman rises from his couch,
Refreshed by slumber's balm,
And hastens to his daily toil,
With renovated arm.

A fearless heart, a spirit brave,
Attends him in the field,
Where he with strong and steady hand
The honoured plough doth wield.

He strives not as the soldier strives
For victory by the sword,
But that his house and granary
With plenty may be stored.

His house the poor and needy ones
A blest asylum find,
Peace, comfort, health and charity,
Are there in concord joined.

No king beneath his palace dome
Enjoys a happier lot,
Than to the ploughman is bequeathed,
Within his lowly cot.

A rich reward has meted him,
For long and wearied toil;
To crown his labours, pleasantness
Springs from the fruitful soil.

The seed time and the harvest days
Bring tidings of delight,
To make the ploughman glad of heart,
Through winter's gloomy night.

The ploughman has a promise sure,
And never looks in vain,
As looking the merchant for the prize,
He trusteth on the main.

The vessel of the ploughman sails
At dawning of the spring,
And autumn's winds a rich increase
Have never failed to bring.

He builds no castles in the air,
To vanish like a dream,
He risks no cargo on the wave,
Of fortune's giddy stream.

With honest cheer he earns his bread,
By toil and sweat of brow,
Pays homage due to God alone,
And honor to the Plough.

From the Albany Cultivator. ROTATION OF CROPS.

At the request of my valued friend Mr. Norton, I propose, should my time permit, and your columns afford room, to give you a series of short papers on the Agriculture of the Lothians, in the hope that they may prove interesting to a portion at least of your numerous readers.

I am unwilling to suppose that there is nothing in the experience of a district, so long famous for its agriculture, that may not be studied with profit, even by individuals possessed of great skill and knowledge in that most useful of arts; but at the same time I am aware that the most valuable parts of our system may have already been transplanted, and may even now be flourishing in the United States, with all the luxuriance which a virgin soil imparts. Had I been ignorant before, the perusal of some late numbers of your excellent periodical must have convinced me that your countrymen are applying their favorite maxim, "go ahead," in a most emphatic way to this branch of industry—a course in which all men most wish their good speed. Having these considerations before me, it is with considerable hesitation, that I venture to make my appearance in the columns of the "Agricultural Literature" of America.

Trusting to your indulgence, I shall therefore devote this letter to some introductory remarks on the rotation of crops. I am fully aware that the sanguine expectations of some, as to the application of chemistry to agriculture, lead them to believe that at no distant day, rotation of crops will be numbered with the things that were—that the finger of science will point out to us, not only the substances removed with each crop, but also how we may replace them in an economical manner. I am too ardent an admirer of chemical science to doubt its power to do this, but I cannot believe that it will very materially affect the axiom that a sound and philosophical system of all judicious and profitable agriculture; for even were we so far advanced in chemical knowledge, as to be able to grow luxuriant crops of wheat year after year, on the same land, without deteriorating it, it is evident that the supply of this sort of grain would soon exceed the demand. From thus being the most remunerating of crops, owing to the limited extent of land on which it can be grown, it would gradually become less so, while the supply of the other crops which are less remunerating, owing to the fertility with which they can be grown on moist land, would be shortened, and the price of course enhanced; and when that point was reached, at which the profits were equally balanced, the further application of the principle would be arrested. I apprehend therefore, that the legitimate occupation of chemistry, is to point out to us how we may avail ourselves of the large amount of inorganic substances laid up for us in our own soils, by supplying those of which they may be in want—to show us how to draw upon nature, so that our drafts may be honored—how to pay the interest, that we may have the use of the principal, rather than that we are to look upon our fields, as a mere extension of space—the floor of a manufactory, all the raw materials required for the production of the substance we propose to obtain.

The theory upon which the rotation of crops is based, is, that different plants require different series of the inorganic substances contained in the soil, for their growth and development; but as these substances require the action of tillage and the seasons to reduce their particles to that minute state of division, in which they can be absorbed by the spongioles of plants, therefore the less frequently those plants which require the same series of inorganic substances are reared on the same soil, the more copiously will they be supplied with properly prepared food, when they are reared.

The following table from the Transactions of the Ag. Chem. Association of Scotland, shows the amount of inorganic substances contained in three different soils, and that a fertile soil contains at least 9 or 10 of these substances.

| | Very fertile. | Fer. with manure. | Barren. |
|---|---------------|-------------------|---------|
| Organic matter | 97 | 59 | 40 |
| Silica (in the sand and clay) | 648 | 833 | 778 |
| Alumina, in clay | 57 | 57 | 91 |
| Lime | 59 | 18 | 4 |
| Magnesia | 5 | 8 | 1 |
| Oxide of iron | 61 | 39 | 81 |
| Oxide of manganese | 1 | 3 | 1 |
| Potash | 2 | a trace | a trace |
| Soda (chiefly as chloride) | 4 | 0 | 0 |
| Chlorine (as com. salt) | 2 | 0 | 0 |
| Sulphuric acid | 2 | 3 | 0 |
| Phosphoric acid | 4 | 13 | 0 |
| Carbon acid combined with the lime & magnesia | 40 | 44 | 0 |
| Loss | 14 | 0 | 3 |
| | 1000 | 1000 | 1000 |

Now it must be evident to every one, that if we go on for a length of time raising any particular crop which carries off a larger quantity of any of those elements than the relative proportion of it in the soil, we must by and by reduce the fertile soil to the state of the barren one. As an example, we may take potatoes, which contain a large quantity of lime, magnesia, potash, soda, and phosphoric acid.

Now it will be seen that these very substances are almost all wanting in the barren soil; we may therefore conclude that if we go on raising potatoes year after year without adding the whole of the substances removed, we will reduce the fertile to the state of the barren soil.

From what has been stated it must be obvious that a proper course of rotation, is that which removes equal relative quantities of the different substances composing the soil, and which places those plants which feed on the same substances, at as great distances from each other in the vicinity of large towns, where, from the facility of obtaining manure, a large portion of, if not all the substances carried off, are returned to the soil; as by adhering to a judicious rotation even in this case you present such a profusion of aliment to the different classes of plants as to convert good crops into luxuriant ones. In forming a correct judgment of any course of rotation, we must also take into consideration the facilities it affords for eradicating weeds, and keeping the land in that state of absolute freedom from them, which, while it adds profit, so it ought to be the pride of every agriculturist.

JOHN GIRDWOOD.

Colonial News.

New Brunswick.

From the Fredericton Reporter.
SACKVILLE WESLEYAN ACADEMY.

The Public examination of the above Institution was held on Monday and Tuesday the 22nd and 23rd of June; and the next day most of the pupils set off for their respective homes, in full anticipation of that pleasure which the "happy time of life" thrice happy feelings of the heart; for they bring no recollections of guilt and suffering; they are associated only with verdure and sunshine.

Having the pleasure of being present during the whole of the examination, we give a brief outline of the order in which it was conducted, and of the impressions noted at the time—which we felt throughout the exhibition.

The whole number of pupils entered for the last term was one hundred; but there were a few, we think four or five, absent. Of those in attendance, 48, comprising 5 classes, are studying Latin;—the same number in four classes are learning French; and ten, in 3 classes are reading Greek.

The examination commenced with the primary department, including 3 classes in Arithmetic, 3 in English Grammar, 3 in Geography, and one, of the whole, in writing. This occupied the whole forenoon of Monday, and drew many expressions of satisfaction from the audience which at this period was not numerous. In the afternoon the Literary and Scientific Department came up and displayed an intimate acquaintance with the following useful branches:—Book-keeping, Geometry, Trigonometry, Practical Geometry, Natural Philosophy, Astronomy, Rhetoric, Logic. We speak only from memory when we mention Thomas W. Wood, Esq. as having the particular superintendence of these classes, believing this to be the case, we cannot refrain from paying that gentleman a well deserved compliment for the efficiency which he has given to the important course of studies over which he presides.

On Tuesday morning, the Classical Department under the immediate superintendence of the Rev. Principal, and the French classes taught by Mr. Joseph Hea, underwent a rigid examination, in the course of which the Rev. Mr. McLeod assisted. The books used are, Latin Lessons, Greek Reader, Latin do. Caesar, Virgil, Livy and Tacitus, Antigone of Sophocles, &c. &c. This as far as we could judge, was a highly satisfactory trial; the perfect ease with which the different classes read portions of the respective authors which we have named—selected as they were by ballot at the moment—

shewed that there was nothing superficial in the course of their instruction, and reminded us of an examination of the Collegiate School of this city, which we once had the pleasure of witnessing; when it appeared evident that the powers of the understanding rather than the memory, had been cultivated.

In the evening, the large Lecture Room became densely filled, and after a short recess, the students commenced their course of declamation.—The first was an original composition by Rufus Palmer, and saving a little embarrassment arising from his modesty,—a true sign of merit—Master Palmer acquitted himself extremely well. Next came the "young orator," in the person of Master C. E. S. Balloch of St. John; a fine little fellow who gives abundant promise of future talent. Every one was pleased with him. The next, "an address to a student," by W. H. Perley of Woodstock, was well received; he did not forget throughout, the impressive manner which became his subject. The fourth was "a lecture on Medical Humbug" delivered by J. H. Counter, of Kingston, Canada. This young gentleman is, we believe, the son of the Ex-mayor of Kingston, and in reference to himself, (although we are utterly ignorant of what his attainments may be, except by his high standing on the record of the Academy) it is not too much to say that nature designed him for an orator. It is said he designs to engage in the study of Medicine;—this may suit his inclination, and it is a noble profession; but Mr. Counter appeared to us better calculated to engage in the law. The fifth exercise was a French dialogue—"L'Avare," selected, by C. N. Wright, J. L. Moore, E. Cogle, and H. G. Pineo.—This was a merry dialogue and aptly sustained.—The pugnacious French character was kept up to admiration,—"le soldat" by James Hardy—a dialogue (no less volens) by C. N. Wright and H. G. Pineo—"the Exclusive system in Ireland" by W. Evans—the "Death of Buckingham," by J. T. Smith—the "Leper," by J. H. Counter, and, "Inconstancy" by J. N. Fairbanks and J. L. Marsh, were all well recited,—the latter, we thought done to admiration.

Next came several originals, two of which will be found on the fourth page of today's paper; and we can assure the reader, that many of them would have reflected high credit in any quarter, where they might be produced.

"The classics" by William Campbell, "The study of nature" by S. M. Empee, "Philosophy" by William Goodwin, (very good) "The importance of uniting moral with mental culture" by a young gentleman named M'Kewen, (who had previously assisted in the examination) "The pleasures of memory," by H. B. Johnstone of St. John, a production which we thought so well of that we would most willingly have given it publicity, but he was modest enough to decline, assigning as his reason "that it was not fit for publication." The last was a "French Dialogue" (translated) by George J. Chubb, A. R. M'Leelan, J. N. S. Marshall and D. J. Merritt. This was exceedingly well performed; the humour, ease, and vivacity of the performers were well sustained throughout—young Chubb appeared to be the favourite.

We have now given a brief notice of the examination; and will only add a few words on the general arrangements of the Academy.—Every thing is kept in good order, and nothing out of place. The will of the Principal is the law of the student. At table they act with the greatest propriety; in fact like so many gentlemen; and outside, during their hours for recreation, they exhibit the unerring symptoms of their good keeping. We believe that Mr. and Mrs. Trueman, who have charge of the domestic part of the Establishment, have always conducted it with much satisfaction to all concerned.

The Audience, on the last evening might have amounted to from 5 to 6