THE CHIGNECTO POST

IS PUBLISHED

EVERY THURSDAY,

—AT—

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W. C. MILNER, Proprietor.

CHIGNECTO POST AND BORDERER.

SACKVILLE, N. B., MARCH 8, 1883.

Municipality of Westmorland.

Statement of Receipts and Expenditures for the year ending January 8th, 1883.

RECEIPTS.—AMOUNTS RECEIVED FROM ASSESSMENTS.

Parish of Botsford	$1,719.34
" Westmorland by collector	1,664.42
" " Delinquents	92.10
" Sackville by Collector	3,883.40
" " Delinquents	26,77
" Dorchester Collector	4,738,65
" " Delinquents	62.18
" Shediac Collector	2408.52
" Moncton Collector	5808.68
" " Delinquents	69.41
" Salisbury Collector	2241.92
" " Delinquents	215.00
Provincial warrants for Jury fees	1539.60
W. W. Wells, " "	98.00
A. E. Oulton rents	39.49
Auctioneers licenses	100.00
Joseph Hickman rent	6.50
Samuel Sharp fines	2.00
James Hamilton "	1.00
Total Receipts	$24,716,98

EXPENDITURES.

School drafts	$10,054.84
Jury fees	1,618.38
Constable fees	243.96
Witness fees	291.86
Councillors fees	277.50
Poor Shediac	380.57
" Salisbury	591.95
" Moncton	2,072.34
" Dorchester	798.76
" Sackville	622.82
" Westmorland	64.62
" Botsford	329.20
Refunded surplus rates Sackville	346.64
" Taxes R. C. Church Shediac	52 08
Salaries Secretary	423.00
" D. Chapman	4.00
" C. E. Knapp	125.00
Salary &c. of E. V. Tait, jailor	617.00
Salary Treasurer	150.00
Commissions on paying school warrants, &c., $10,058.00 1 per cent	100.58
Rent of safe, stationary, &c	20.00
Auditor	20.00
County printing	90.83
C. E. Boxall, Esq., plans, &c.	25.00
Road damages	429.37
Court House painting	184.00
Furnaces	200.00
Fuel, &c., &c	118.19
Incidentals	132.05
Insurance on County buildings	164.00
Interest on bonds	348.00
Lunacy	177.50
Coroners	86.00
Criers fees	44.10
Clerk of court fees	38.00
Assessors Dorchester	95.99
" Shediac	55.94
" Westmorland	28.44
" Moncton	155.98
" Sackville	72.22
" Salisbury	49.42
" Botford	32.04
Collector, Botsford	18.81
Paid by order of Council	248.19
Bill for medical attendance	81.25
Interest paid Bank	621.75
Express charges	18.53
Bank discount on money	12.05
Remitted—Balances excess of receipts	79 32
	$24,716 98

PARISH ACCOUNTS, 1882.

Dorchester assessment	$5,279.75		
Amount paid	4,966.93		
		Bal. due	$ 312.81
Moncton assessment	8,573.42		
Amount paid	5,756.09		
		Bal. due	2,817.33
Shediac assessment	3,071.94		
Amount paid	2,663.65		
		Bal. due	408.29
			$3,538.43
Westmorland assessment	$1,564.20		
Amount paid	1,567.79		
		Surplus	$303.59
Botsford assessment	1,762.56		
Amount paid	1,762.56		
Sackville assessment	3,972.85		
Amount paid	3,906.42		
		Surplus	33.57
Salisbury assessment	2,718.93		
Amount paid	2,811.75		
		Surplus	92.77
			429.93
Net balance due on assessments			$3,108.50

Dorchester, January 16, 1883.

SUMMARY OF BANK ACCOUNT.

MUNICIPALITY.

1882, Jan. 11, to balance	$ 1 675.22
Express charges	25
Amount cheques paid	19,950.55
Interest	626.83
Balance to credit	2,011.59
	$24,264.29

CR.

1882, Dec. 81, by am't. received from County Treasurer	$24,264.29
By balance	$ 2,011.59
Jan. 17, 1883.	
MEMO.—Am't. by checks issued	$21,909.75
Floating checks of last year paid this year	427.64
	22,337.39
Amount paid this year	19,950.55
Floating checks Jan. 1, 1883	$ 2,387.84

MUNICIPALITY OF WESTMORLAND.

FINANCIAL SUMMARY.

To net balance, Jan. 10, 1882	$ 1,275.94
" Cheque A. E. Oulton (cr. last year)	39.49
" Floating checks paid this year	427.66
" Am't. expenditure account	22,837.66
" Balance in bank Dec. 31, 1882	2,011.59
" Balance Treasurer account, Jan 8, 1883	510.36
" Difference in account to balance	1.12
	$27,103.82

CR.

Jan. 8, 1883.—By am't. receipts for year	$24,716.98
By am't. floating checks	2,386.84
	$27,103.82

LIABILITIES.

Jan. 8. 1883.—Amount checks issued and not paid brought down	$2,386.84
Am't. school warrants due	3,596.34
	$5,983.18

ASSETS.

Jan. 8, 1883.—Cash bal. brought down	$2,011.59
Cash do. do. do.	510.36
Jan. 16.—Cash received since 8th inst.	755.00
Due on parish assessments	3,108.50
	$6,385.45

GEORGE CAMPBELL, Warden.
R. A. TRUEMAN, Auditor.

Dorchester, Jan. 18, 1883.

AUCTIONEERS LICENED FOR THE YEAR 1883.

Wm. Simpson.
W. W. Price.
Lovell Lewis.
Joseph Warren.
Patrick McGinley.
Jacob Wortman.
R. C. Tait.
W. B. Deacon.
Alexander McVay.
I. H. Hebert.
Patrick McSweeney.
Blair Estabrooks.
Willard Lawrence.
W. C. Cole.

A. E. OULTON.
Sect. Municipality, Westmorland.

Dorchester, Feb. 13, A. D. 1883.

CHIGNECTO POST.

Deserve Success and you shall Command it.

VOL. 13.—NO. 44. SACKVILLE, N. B., THURSDAY, MARCH 8, 1883. WHOLE NO. 667.

Mt. Allison Agricultural Course.

Tenth Lecture.

Soils.

In the preceding lecture the composition of the ash of plants was studied with a view to ascertaining what plants take from the soil, and what chemical compounds are needed by the various crops. In this lecture it must be our aim to study the nature, and origin of soils, so that we may have data for determing generally at least, their fertility and special capabilities. When a portion of soil is heated, part of it burns away,—the organic part, and the mineral or inorganic remains. The organic part varies in quantity in different soils. In boggy soils it may reach as high as 50 per cent., but in ordinary cultivated land it is much lower. Oats will grow readily where there is only 1½ per cent. of organic matter, barley thrives with 3 per cent., but wheat requires from 4 to 8. The organic part of the soil is derived from the decay of animal and vegetable remains. It is useful in two ways; in the first place, by its decay it supplies carbonic acid, inorganic salts, and ammonia to the plant; in the second place, it has a great power of retaining the soluble salts which would otherwise be quickly washed out by rain. Ammonia is also retained by the organic portion of the soil.

The inorganic part of the soil is partially soluble in water, partially insoluble. The soluble part is very small, only about 50 grains to the pound. It consists principally of common salt, gypsum, sulphates of soda and magnesia, salts of potash and soda, nitrates, phosphates, &c. From these small quantities, the plant derives in a great measure the substances which form its ash. The soluble parts of the soil have a tendency to sink into the subsoil when rain falls; but when warm weather dries the surface soil it soaks up the water from the wet subsoil and thus obtains a fresh supply of the inorganic part of the plant food. The insoluble portion which forms by far the great part of the soil consists of sand (silica,) clays (silicates of alumina, &c.,) carbonates of lime and magnesia, phosphates (principally of lime and magnesia) oxides of iron, &c., giving the color, &c.

A rough analysis of soil can be made by any farmer in the following way: Stir up half a pound of the soil with a gallon of water, allow it to settle for a few minutes, when the sand will be found on the bottom of the dish, while the clay floats in the water. Pour the muddy water off into another vessel and allow it to settle until it is clear. Pour off the clear water, dry and weigh both sand and clay. If less than one 1 oz. of clay is obtained the soil is a sandy soil; between 1 oz. and 3½ oz. of clay to the half pound of soil makes a sandy loam; from 3½ oz. to 6 oz. a loamy soil; from 6 oz. to 7 oz. a clay loam; and from 7 oz. to 7½ oz a strong clay soil. A marl is a soil containing more than 5 per cent. of carbonate of lime. A chalky, or calcareous soil contains more than 20 per cent. It is thus seen that soils vary consider ably in their composition, and soils may be found which, answering to the description of, say, a loamy soil, are yet different in their composition and of different degrees of agricultural value, owing to the varying proportions in which the valuable constituents are present. The subsoil also determines to a certain extent the suitability of the surface soil for particular crops. Thus, a sandy subsoil allows the water to drain off quickly and thus would not be suitable as a foundation for a soil in which to grow a crop requiring much moisture.

A study of the origin of soils will explain this diversity and at the same time afford a means of judging as to the probable fertility or barreness of any tract of land. Soil is produced by the crumbling and gradual decay of rocks under the influence of moisture, frost, &c, in fact by that process, known in common language as weathering. Therefor, we would expect the soil to be chemically similar to the rock on which it lies. Thus, the farmer calls in Geology to his aid. In this course of lectures there is no place for even an outline of the principles of Geology; and I shall content myself with reminding you that the outer part of the crust of the earth consists of layers or strata of rocks, each layer differing in its chemical composition and other characters from the rest. It rarely occurs that the layers are placed horizontally as they were formed, since the upheavals and convulsions which the earth has since undergone have caused them in most cases to be inclined at various angles. These layers are arranged in regular and invariable order, i. e. it never happens that a certain stratum is in one place above and in another below a certain other. Now as the soil at any place has been formed by the weathering of one or more of these strata, we can from the Geological features of a country predict the nature of its soil. For example, we know that in the south eastern part of New Brunswick and in the adjoining part of Nova Scotia, the coal measures consist of alternate layers of sandstone, shale, coal, and occasionally limestone. When the sandstone alone comes to the surface the soil is thin and poor. Shale alone gives a stiff clay soil, wet and cold. But it may happen in some places that the inclined edges of a shale and a sandstone come to the surface together, and produce an excellent soil by the moisture of their ruins. In like manner, a limestone layer may mingle the products of its decay with those of a shale or sandstone and thus form a good soil. A farmer who knew these facts would never think of paying a high price for land when only one of these layers come to the surface.

The physical properties of soils (as distinguished from chemical) will next occupy our attention. The most important are (1) density, (2) capacity for absorbing and retaining water, (3) porosity, and (4) temperature.

Sands and marls are the heaviest of all soils, while dry peat or bog is the lightest. Stiff clay is lighter than sand. A clay soil absorbs much more water than a sandy soil and retains the water most tenaciously. A boggy soil absorbs still more. These facts point to the necessity for draining in clay and peaty or boggy soils, i. e. not a single draining but a good system of drains always kept open. Every farmer knows too how much more readily a sandy soil dries than does a clay soil; the air circulates more freely in the former, carrying away the moisture. The drier a soil the more easily is it warmed. This accounts for the great coldness of stiff clay soils as contrasted with sandy soils. The color of a soil exerts considerable influence on the absorption of the sun's heat. The darker the soil, other things being equal, the more heat will it absorb from the sun. It is plain from the above statements that mixing any one of these soils with any other tends to improve its physical properties. A cold, wet, clay soil would be much improved by mixing it with sand.

Chemical analysis shows that nearly all soils contain all the substances found in the ashes of plants, but in variable quantities: thus some soils contain so little potash as to be of little valfie. Although mere traces of the chief ash constituents are sufficient to keep the plant alive, yet in order to get the best crop the plant must be able to get an abundant supply of food readily, without being obliged to seek too widely for it. If the supply is scant the plant may not be able to grow to its full capability during the season. This accounts for the good effects of increasing the supply of a certain article of food already present in considerable quantity in the soil.

A careful chemical analysis of a soil will in most cases decide whether or not it is fertile, and if barren will show the cause. Such an analysis is a long and tedious process when complete and exhaustive, but data for decision may be often obtained by a partial analysis.

Subjoined are analysis of three soils of various degrees of fertility. No. 1 is a fertile soil which has been cropped with grain and vegetables for sixty years without manure; No. 2 gives good crops but only after manuring with gypsum; No. 3 is very barren.

The analysis gives the number of parts in 1000 of the finer part separated from the sand and soluble portion.

	No. 1.	No. 2.	No. 3.
Organic Matter,	97	50	40
Silica,	648	883	778
Alumina,	57	51	91
Lime,	59	18	4
Magnesia,	8½	8	1
Oxide of Iron,	61	30	81
Oxide of Manganese,	½	3	½
Potash,	2	—	—
Soda,	4	—	—
Ammonia,	—	—	—
Chlorine,	2	—	—
Sulphuric Acid,	2	3½	—
Phosphoric Acid,	4½	13½	—
Carbonic Acid.	40	4½	—
Loss,	14	—	4½
	1,000	1,000	1,000

No. 1 owes its great fertility to the presence in considerable quantity of all the constituents of a plant's food. It contains a large quantity of organic matter and also of lime. It is also rich in potash and phosphoric acid, but a large proportion of the former would be extracted in the process of washing away the soluble portion. No. 2 is less fertile because of its deficiency in lime, potash, and soda; and No. 3 is still more deficient, but owes its barrenness also to the presence of too large a quantity of iron.

It is a fact familiar to all who have any practical acquaintance with farming that each crop grows best in some particular kind of soil. Thus, for example, wheat prefers a clay soil; oats, a heavy loam, barley and turnips, an open, free loam; while beans and peas will thrive in stiff clays if well-drained. The natural growth in any region varies from point to point as the chemical characters of the soil vary, and if the chemical characters be changed by applying a fertiliser the growth will also change. White clover requires lime, and does not grow in an acid soil. Thus, if a sour bog in which no clover is growing be limed, clover will probably spring up and flourish. It is necessary then to choose carefully the soil in which to grow to the best advantage any particular crop.

The next lecture will deal with the subject of improvement of soil.

RACKED BY INNUMERABLE PANGS, restless by day, sleepless at night, rising unrefreshed in the morning, without appetite, and pestered by varying and perplexing symptoms, the dyspeptic takes indeed a gloomy view of human existence. For him the zest of life seems gone. Heartburn, oppression at the pit of the stomach, and the attendant annoyances of constipation and biliousness, combine to render him utterly wretched. But there is, if he will but take advantage of it, a reliable source of relief from all this misery. NORTHROP & LYMAN'S VEGETABLE DISCOVERY and DYSPEPTIC CURE is, as its name imports, a botanic preparation, free from mineral poison, and an all-sufficient remedy for the indigestion in its most obstinate form. It not only enriches the blood by enabling the digestive organs to convert the food received into nutriment, but depurates it by increasing the action of the bowels and kidneys, the natural outlets for its impurities. But while it relaxes the bowels, it never does so violently and with pain, like a drastic cathartic. It aids, but never forces, Nature, invigorating as well as purifying and regulating the system. It thoroughly removes those diseased humours which tend to vitiate the blood, purifies the urinary secretion, and promotes a flow of healthy bile into the natural channel, besides expelling it from the circulation. Experience has proved that this standard medicine is a thorough remedy for dyspepsia, scrofula, erysipelas salt rheum, lumbago and all impurities of the blood. Price, $1.00. Sample Bottle, 10 cents. Ask for NORTHROP & LYMAN'S Vegetable Discovery and Dyspeptic Cure. The wrapper bears a *fac-simile* of their signature. Sold by all medicine dealers.

THE MEDICAL FACULTY were among the first to recognize the value of Northrop & Lyman's Emulsion of Cod Liver Oil and Hypophosphites of Lime and Soda as a remedy for throat and lung affections, premature decline and generally debility. Physicians not only recommend it for incipient consumption, bronchitis, asthma, and minor pulmonary and bronchial troubles, but speak in the highest terms of it as a means of enriching the blood and counteracting a hereditary tendency to consumption. In every part of the Dominion and throughout the United States it has attained a popularity as wide spread as it is deserved, and the evidence attesting its efficacy is voluminous and convincing. The Cod Liver Oil, which is its pulmonic constituent, is absolutely pure, and does not nauseate the stomach; while the Hypophosphites, superadded to and chemically blended with this ingredient, possess invigorating properties which render it most desirable in diseases involving such a tremendous waste of tissue and loss of bodily substance as incipient consumption, which it checks with a promptitude truly marvellous. In addition to its pulmonic effects, it imparts tone to the whole system, and being a fine blood depurent, counteracts a tendency to scrofula. Moreover, it is sold at a reasonable price, the cost of the smaller bottles (the contents of one often sufficing to break up a bad cold) being 50 cents, and of the larger, $1.00. Prepared by NORTHROP & LYMAN, Toronto, Ont.

Age of Enlightenment.

In an age of enlightenment like the present, the value of electricity, and of compounds containing an electric principle as remedial agents, is widely appreciated. Foremost among the latter, both as regards the thoroughness and safety of its effects, and the rapidity of its action, is THOMAS' ECLECTRIC OIL, a widely popular external and internal remedy for coughs, colds, sore throat, asthma, croup, and other affections of the breathing organs; an invaluable outward specific for lame back, soreness and contraction of the muscles, and every variety of sore or hurt; a prompt source of relief for pain, and a medicine upon which the public can also implicity depend in cases of rheumatism, neuralgia, piles and kidney complaints, inflammatory affections, dysentery, and many other ailments. Its persistent use eradicates the most obstinate of the disorders to which it is adapted. Physicians speak of it in the highest terms. Moreover, horsemen and stock raisers administer it with the greatest success for diseases and hurts of horses and cattle. Sold by all medicine dealers.

Prepared only by NORTHROP & LYMAN, Toronto, Ont.

It Stands the Test of Time!

Time tries all things, and few are the customs, habits or adjuncts of life that are not swept away before its remorseless march. Remedy after remedy for corns have been introduced, tested, and found wanting. PUTNAM'S PAINLESS CORN EXTRACTOR alone holds undisturbed sway, gathering new strength as years roll on, and holding it with the power that merit alone can give. Take no substitute. Putnam's Painless Corn Extractor never fails to make a complete cure. Sold everywhere. N. C. POLSON & CO., Kingston, Proprietors.

It seems impossible that a remedy made of such common, simple plants as Hops, Buchu, Mandrake, Dandelion, &c., shou'd make so many and such great cures as Hop Bitters do; but when old and young, rich and poor, pastor and doctor, lawyer and editor, all testify to having been cured by them, you must believe and try them yourself, and doubt no longer.

Popularity.

Why they are popular. The reason that National Pills are so universally popular is because they are certain in their action, mild and painless in their operation, and never leave the bowels constipated. They are sugar-coated, and contain no mineral poison.

A Remarkable Fact.

It is a remarkable fact that W. A. Rogers, of Frankville, who was so far gone with liver and kidney complaint that his life was despaired of, was cured with four bottles of Burdock Blood Bitters. At one time he lay a fortnight without an operation of the bowels.

A Wonderful Change.

Rev. W. E. Gifford, while pastor of M. E. Church, Bothwell, suffered from chronic dyspepsia so badly as to render life almost a burden. Three bottles of Burdock Blood Bitters cured me.

How to Help a Man Who Swears Off.

A large audience assembled at Franklin Institute Hall, Philadelphia, recently to hear the last lecture of the New Century Course for Women. Suggestions contributed by Dr. Joseph Parrish, of New Jersey, Dr. R. P. Harris, of the Franklin Home, Dr. Jos. Klapp, of the Washingtonian Home, Dr. T. D. Crothers, of the Hospital for Inebriates in Hartford, Conn., Dr. Chas. Mohr, Secretary of the Pennsylvania Homœopathic State Society, and many others, were read.

Mr. C. Gibbons, Superintendent of the Franklin Home, made an earnest appeal to women for patience with the men whose weakness has tried them so sorely, and who suffer so deeply themselves in their efforts to reform. Very interesting addresses followed from Mr. S. P. Godwin, founder of the home, and the Rev. Chas. G. Ames. All agreed that the safest of all ways to stop drinking is to stop short off from all stimulation whatever, hot drinks, cold drinks, bitters, and all the list.

The Philadelphia *Ledger* sets down some of the advice given for the benefit of those to whom such a break would be an impossibility. For such let the house mother always have on hand something hot, or tonic, or refreshing, to tide over for the hour the agonizing demand of the body for stimulation. Hot drinks—coffee, sometimes tea, cocoa, either ground or in the form of shells or cracked cocoa. This is nutritious as well as satisfying. Hot broth, beef tea, or beef essence can be bought, but are far better made at home; hot milk, ginger tea, cayenne pepper tea, and an article called tabasco, which is hotter than ordinary cayenne. Aerated drinks—lemon soda, zoedone, and ginger ale can be kept in the house, and are harmless, the tang being given by fixed air; the home-made beers, on the contrary, are treacherous, the life depending directly on fermentation. Refreshing drinks are cold milk, buttermilk, whey, drinks from lemon and other acid fruits, Horsford's acid phosphate, and what is just as effectual and much cheaper, dilute phosphoric acid. A few drops in water, sweetened, makes a pleasant drink, and ten cents' worth will last for months. Oatmeal water, just a handful in a pitcher of water. This is both refreshing and strengthening, especially in summer.

In the Baldwin locomotive shops, where about 5,000 men are employed, this is kept on hand in large quantities, and, strange to say, even drinking men grow fond of it. They say that when they drink it they don't seem to want their beer. Juicy fruits—apples, oranges, melons, etc. The surest way to bring up children not to care for alcohol is to accustom them early to liking all sorts of fruit. The lecturer spoke in the strongest terms of the misery caused by physicians by the reckless prescribing of alcoholic stimulants to patients, without a word of enquiry as to the habits or the inherited tendencies of the individual.

—It is estimated that from 450,000 to 500,000 tons of charcoal are annually made in the United States. No wonder the necessity for forestry culture becomes daily more apparent.

NOTICE!

APPLICATION will be made at the next Session of the Legislature of this Province to amend the Act Incorporating "The Board of Governors of the Mount Allison Wesleyan College and Academies," so as to increase the said Board by the addition of eight members—four Ministers and four Laymen.

A. A. STOCKTON, Secy. to Board, &c.
St. John, N. B., 5th Feb., 1883. 4i

NOTICE!

NOTICE is hereby given that application will be made to the Legislature of the Province of New Brunswick, at its next sittings, for an Act empowering the Municipality of Westmorland to appoint a Health Officer for any Parish applying for one, which Act shall define the duties of said Health Officers.

A. E. OULTON, Secretary.
Office of the Municipality, Dorchester, Feb. 12, 1883. } 8i

Bill Heads, Letter Heads, Business Cards, &c., neatly printed at this Office.