

THE GLEANER:

AND NORTHUMBERLAND, KENT, GLOUCESTER AND RESTIGOUCHE
COMMERCIAL AND AGRICULTURAL JOURNAL.

OLD SERIES]

Nec araneorum sane textus ideo melior, quia ea se fila gignunt, nec noster villior quia ea alienis libamus ut apes.

[COMPRISED 13 VOLUMES.]

NEW SERIES, VOL. VI.]

MIRAMICHI, TUESDAY EVENING, JANUARY 25, 1848.

[NUMBER 16.]

Victoria House,

OCTOBER, 1847.

GREAT BARGAINS,

Selling Off at reduced prices
For Thirty Days Only!!

Just Received, a Supply of FALL and WINTER
Goods, consisting of

Broad Cloths, pilot and beaver CLOTHS,
Cassimeres, Buckskins, & fancy Trowerings,
Vestings, in satin, velvet, and cashmere,
Ladies' dress materials, newest winter style,
Coburgs, Cashmeres, Merinos, and Orleans,
plain and figured,
Ladies' Winter Shawls and Scarfs, newest
designs,
Hosiery and Gloves of every description,
Furs in Muffs and Boas,
Gala Plaids and fancy Winter Cloakings,
Blankets, red and white Flannels,
Garments and Furniture Prints,
Scotch and French Gingham and Printe,
Twill'd and plain Shirtings, stripes & checks,
Grey and White Cottons,
Irish Linens, Hollands, Papers, &c.,
Gents' silk and satin Scarfs, Opera Ties,
Socks, &c.,
Gents' cloth and fur caps,
Black Indiana Cashmere and Downe Shawls,
Fancy Woolen Handkerchiefs,
Silk and Cotton Veilings,
Fancy silks of all shades,
Jackonet, Mail and Book Muslins,
Ready made Clothing, consisting of Coats,
Pants, Vests, Reefing Jackets, Mackintosh
Coats, &c.
Books, Jewelry and Cutlery: white, black,
and colored Thread, Ladies' winter boots,
Chubb's ALMANACKS for 1848, with a va-
riety of other articles

E. DALEY & SON.

STAGE COACH.

Summer Arrangement.

The subscriber will continue to run the Mail
Stage between

Fredericton and Miramichi

During the present season, ONCE PER WEEK
EACH WAY.

The Stage will leave the subscriber's resi-
dence, in Chatham, every MONDAY MORNING,
at 9 o'clock; Douglstown at half past nine
and Newcastle at 10 o'clock, and arrive in
Fredericton the following morning at 9 o'clock.
Will leave the North American Hotel, Frederi-
ceton, the following FRIDAY morning at 11
o'clock, and arrive in Chatham the day follow-
ing at the same hour.

The subscriber has on this line, at all times,
a comfortable covered Coach, and a careful
driver, who will afford every facility and ac-
commodation to travellers.

Fares—22. Each passenger will be entitled
to carry with him 40 lbs of luggage; anything
over that weight, 2 1/2 per lb.

Any person wishing to procure an Extra
Conveyance from Chatham to Fredericton, can
obtain the same on reasonable terms, at any
time, by applying to the subscriber. He also
keeps on hand Extras for the purpose of for-
warding passengers by the above coach,
desirous of getting to Shediac in time for the
P. E. Island steamer.

WM. M. KELLY.

Miramichi, June, 1847.
N.B. Passengers will please be punctual to
the hour of starting. All luggage to be at the
risk of the owners.

The Northern Stage

Until further notice, will leave the Royal
Hotel, CHATHAM, for

BATHURST AND DALHOUSIE,

at 8 in the evening, every Monday and Friday,
and DALHOUSIE on Monday and Thursday at
the same hour.

For the greater comfort and convenience of
the public, who do not wish to travel at night,
AN ACCOMMODATION STAGE

will leave the same place, in CHATHAM, at 8
o'clock, every WEDNESDAY morning, and
BATHURST every FRIDAY morning at 7 o'clock.

Families wishing to remove to any part of the
province, will be forwarded by him on the
most liberal terms.

WILLIAM JOHNSTON.

Chatham, May 17, 1847.

Sheriff's Sales.

On the second SATURDAY in April, 1848, in
front of Hamill's Hotel, Newcastle, between
the hours of 12 and 5 o'clock, P. M., will
be sold at Public Auction,

All the Real Estate, Right, Title, Inter-
est, Property, Claim and Demand

Of Daniel Becket, in and to certain Land
situate on the Little South West branch of
Miramichi; and all other the Real Estate of
the said Daniel Becket, in the county of
Northumberland. The same being taken by
me under Execution issued out of the Supreme
Court at the suit of Peter Mitchell against the
said Daniel Becket.

JOHN M. JOHNSON,

Sheriff of Northumberland
Sheriff's Office, 4th October, 1847.

On the third Tuesday in March, 1848, in front
of Hamill's Hotel, Newcastle, between the
hours of 12 and 5 o'clock, P. M., will be sold
by Public Auction—

All the Estate, Right, Title, Interest,
Property, Claim and Demand, of Lewis Ur-
quhart, in and to a certain Lot of Land situate
on the Tabasatic, on which he recently
resided, and in the occupation of William Ur-
quhart, senior, in the parish of Alnwick. Also

—all other the Real Estate of the said Lewis
Urquhart, in the county of Northumberland;
the same having been seized by me under
Execution issued out of the Supreme Court at
the suit of the Honorable Joseph Cunard
against the said Lewis Urquhart.

JOHN M. JOHNSON, Sheriff.

Sheriff's Office, Northumberland,
4th September, 1847.

On the fourth TUESDAY in February, 1848, in
front of Hamill's Hotel, Newcastle, between
the hours of 12 and 5 o'clock, P. M., will
be sold at Public Auction—

All the Estate, Right, Title, Interest,
Property, Claim and Demand of John Haw,
in and to Lot No 2, granted to Robert Jap-
son, containing 400 acres, situate on the north
side of Cam's river, in the parish of Black-
ville, and on which he at present resides

Lot Z, containing 60 acres, adjoining the
last mentioned LOT.

Also—all other, the Real Estate of said
John Haw, situate in the County of Northum-
berland, the same having been taken by vir-
tue of an Execution issued out of the Supreme
Court against him at the suit of the Honorable
Joseph Cunard

JOHN M. JOHNSON, Sheriff.

Sheriff's Office, Northumberland
14th August, 1847.

On Monday the 29th May, 1848, in front of
Messrs. M Samuel & Son's store, Chatham,
between the hours of 12 and 5 o'clock,
A. M., will be sold at Public Auction,

All the Real Estate, Right, Title, Inter-
est, property, claim, and demand of William
McKinnon, in and to the lower half of a Lot, now
in the occupation of Hugh McKinnon, situate
at the mouth of Bay de Via River, in the pa-
rish of Glenside.

Also—all other the Real Estate of the said
Wm. McKinnon, in the County of Northum-
berland, the same having been seized by me
under an Execution issued out of the Supreme
Court at the suit of J. T. Williston, Esquire
against the said William McKinnon.

JOHN M. JOHNSON, Sheriff.

Sheriff's Office, 23d November, 1847.

Lands for Sale

To be sold by private sale, on liberal terms,
the following Tracts of Land, viz:

All that valuable Farm situate on the north
side of the North West branch of Miramichi
river, known as the Wild Cat Brook farm,
containing 200 acres, presently under lease to
James Leddy.

Also—the lot of Land No. 36, on the south
side of the South West branch of Miramichi
river, in the Parish of Nelson, eighty rods in
front, with a Dwelling House and Barn there-
on, presently occupied by Thomas Dougherty

Also—the lot of Land next adjoining, on the
lower side of the last mentioned lot.

Also—numbers 43, 44, and 49, in Block B,
of the Chatham Joint Stock company, in the
town of Chatham

Also—Pasture Lots number 63 and 65, con-
taining four acres, fronting the Old Napaa
road, in the parish of Chatham

Also—Lots number 6 and 10, on both sides
of Renous river, in the parish of Blackville,
each lot measuring in front 100 rods, and
containing 250 acres, more or less

The one-half of Lot A, on the Samivagan
ridge, containing 250 acres known as the Se-
nivagan Meadows

For terms and particulars apply to Messrs.
TERRY & DAVIDSON, Newcastle.

Agricultural Journal.

From the British American Cultivator.
THE APPLICATION OF SCIENCE
TO AGRICULTURE.

Botany is a science, with which every
farmer must have some partial acquain-
tance, whether he is conscious of it or not.
The selection of plants, in the rotation
he adopts, and the choice of the best va-
rieties to particular soils, climate, &c.,
necessarily imply some acquaintance, at
least, with their habits and characteris-
tics. It is not necessary that the farmer
should become a scientific and systematic
botanist, in order to be an improving and
successful cultivator. But it is obvious,
that the more he understands of the laws
and conditions of vegetable phenomena,
particularly as they relate to the cultiva-
ted crops of the farm, the greater will be
his chances of success.

A knowledge then of this beautiful and
attractive science materially assists the
farmer in comprehending the nature and
requirements of the various crops he raises,
and consequently, to adopt the most
suitable system of cultivation, as regards
both soil and climate, so as to ensure the
largest amount of vegetable productions.
It is true that some questions connected
with the organization and nutrition of
plants are yet involved in considerable
obscurity, so that the practical farmer
cannot avail himself of all the aids which
a more advanced state of physiological
botany will most assuredly one day afford.
The chemist and the botanist have been
too widely separated. Many of the in-
teresting and important facts connected
with the germination and growth of plants
—facts elicited by long and patient obser-
vation, can receive from modern chemis-
try only such light and explanation as to
adapt them to the use of the practical
cultivator.

There are few things that occasion the
farmer more trouble and expense than
weeds; and their thorough extirpation is
a matter of the greatest practical difficulty.
The loss occasioned by weeds is to no-
torious to need but a bare mention—and
notwithstanding, the many great im-
provements that have lately been made
in the best cultivated districts, the loss
and anxiety to the farmer occasioned by
these unwholesome intruders, are far
from being removed. A slight acquaint-
ance, however, with the organs and func-
tions of plants would materially assist
him in keeping within due bounds these
robbers of his cultivated crops. The
roots and leaves of a plant are indispen-
sible to its existence, since they are the
organs of nutrition. It follows then, that
to eradicate a weed you have only to
destroy its roots. This, however, is
frequently found in practice a difficult
thing, particularly in cases of deeply root-
ing plants. In such instances then the
object may be attained by the destruction
of the leaves—these being the breathing
organs, as it were, of the plant. We
have seen hundreds of acres of some of
the richest pasture lands in England cov-
ered with thistles, (the same variety,
apparently, as is denominated in America
the Canada thistle,) which, by repeatedly
destroying the leaves, have been in a few
years completely eradicated. No weeds
found on the farm can long survive the
frequent cutting away of their leaves.
A heavy crop of grain, particularly peas
or vetches, thickly covering the ground,
will materially check, if not destroy, the
growth of most kinds of weeds; the latter
being in such cases, deprived in a great
measure of air and light, which are essen-
tial agents in vegetation. Laying down
to grass frequently occasion the extinction
of thistles.

A knowledge of the trees and plants
indigenous to any particular country or
locality, enables the careful observer, to
form a pretty correct estimate of the
composition and capabilities of the soil,
either for pasturage or tillage. Now,
what is this but botanical knowledge in
one of its special applications? Aque-
ous plants, accordingly afford some cor-
rect information as to the saline matter,

which the water holds in solution. For
example the luxuriant growth of water-
cresses in the bed of a sluggish stream,
denotes the presence of lime; and such
waters are found by experience, to be
admirably adapted to the purposes of irri-
gation,—a practice extensively and ben-
eficially adopted, particularly in arid cli-
mates. In a word, there is a constant
and uniform connection between the soil
and its various productions, modified of
course by the effects of climate. Plants
which contain much lime, such as lu-
cerne and sainfoin, for instance, when
removed from their native calcareous soils
are found to sustain only a stunted
growth when placed in a cold stubborn
clay. The like differences are found to
obtain in regard to elevation, moisture
and temperature. Plants of one region,
where the conditions are such as to en-
able them to attain to full perfection,
would as signally fail if they were re-
moved to another. The art of the horti-
culturist, it is true, enables him to modify
upon a small scale these natural condi-
tions; and by means of an artificial tem-
perature and climate, to imitate nature
in her tropical productions; but this he
does in a very humble degree, by a heavy
expenditure and the constant exercise of
much ingenuity and care. The case of
the horticulturist, indeed, presents such
an exception only, as illustrates and con-
firms the general law; namely, a uni-
form and indissoluble connection between
the endless variety of living plants and
the soil which supports them, so modified
by climate, to adorn the earth by the
most beautiful and varied productions.

The most practically and useful depart-
ment of botany to the farmer, is that
which treats of the anatomy and functions
of plants, designated vegetable physi-
ology. This science, as interesting as it
is useful, explains the structure and func-
tions of a plant, and traces the numerous
and wonderful changes it goes through,
from its germination as a seed, to the
full maturity of its organs of reproduction.
When we consider the immense mass of
organic vegetable matter, which is con-
tained in our forest grasses, and culti-
vated crops, it surely becomes a ques-
tion of intense interest, not only to the
farmer and gardener, but to every reflect-
ing and enquiring mind, whence are the
materials derived for building up this vast
assemblage of organic structures? What
is the nature of their composition, and by
what force is the living plant enabled to
assimilate them into its own structure?
These are questions not merely of specu-
lative interest to the philosopher, but of
the deepest importance to the practical
farmer. Vegetable physiology, aided by
the recent investigations and discoveries
of chemistry, invests these mysterious
processes with more than ordinary inter-
est, and imparts a light to subjects hith-
erto shrouded in obscurity, that is ad-
mirably adapted to excite the curiosity,
and improve the practice of the intelli-
gent cultivator of the soil.

One-half of the matter of which our
forests and cultivated crops are composed
consists of carbon, an elementary sub-
stance, the most common variety of
which is well known as charcoal. This
solid substance previously to its being
assimilated by the plant, existed and
floated in the atmosphere as a gas.
How is this astonishing change accom-
plished? To answer this question, we
must invoke the aid of two sciences—
chemistry and vegetable physiology.
The former informs us, that carbonic
acid gas is a chemical compound, consist-
ing of carbon and oxygen, and that it
forms a very small portion of the atmos-
phere. Vegetable physiology shews by
what organs plants are enabled to de-
compose the carbonic acid floating in the
air, imbibe the carbon and convert it
into a solid in their own structure, while
they have means of expelling what to
them is the superfluous and useless oxy-
gen. This important and astonishing
process is effected chiefly through the
agency of the leaf. This organ is a con-
tinuation of the stem and bark, and con-
sists of membranes and vessels which
have a direct communication with the
pith and wood. The surface of the leaf,