SAINT ANDREWS

STANDARD,

NEW-BRUNSWICK.

Volume 2, Number 4. QUID VERUM ATQUE DECENS CURO ET ROGO. *Thursday, October 16, 1834.*

WEEKLY ALMANAC.

1834. OCT. 31		SUN. rises. h. m.	sets. h. m	Moon rises h. m.	H.W. morn. h. m.	Watch slow m. s.
THURS.	16	6 35	5 25	4 56	10 30	14 18
FRIDAY.	17	6 36	5 24	morn.	11 0	14 30
SATUR.	18	6 38	5 22	5 28	11 30	14 42
SUNDAY	19	6 39	5 21	6 22	11 45	14 53
MONDAY.	20	6 40	5 20	6 50	12 0	15 4
TUESDAY	21	6 41	5 19	7 23	0 25	15 14
WEDNES.	22	6 43	5 17	8 4	1 10	15 23

SUN'S DECLINATION, 16th 8° 53' '07 South.
DO. RIGHT ASCENSION, — 13h 24m 25s Ap. N.
VENUS— SETS, — " 6h 59m — P. M.
MARS— RISES — " 9h 32m — P. M.
JUPITER — " — " 7h 23m — P. M.
GEORGIAN— SOUTH " 8h 2m — P. M.

PLEIADES, commonly called the cluster or seven stars.
RISE — " 6h 27m — P. M.
SOUTH — " 2h 13m — morn.
MOON FULL, 17th 11h 46m — A. M.

SAINT ANDREWS MAIL

Departs for	
St. John,	Tuesday, at 10 A. M. and by Steam Boats.
Saint Stephen,	Tuesdays and Thursday at 10 A. M.
United States	Mon. Wed. Frid. at 10 A. M.
Arrives from	
St. John,	Monday, 10 A. M. and by Steam Boats.
St. Stephen	Wed and Fri. at 4 p. m.
United States	Mon. Wed. Frid. at 2 P. M.

GEO. FRED. CAMPBELL P. M.

PRACTICAL ASTRONOMY

CONTINUED.

(3.) TARANDUS, the *Rein Deer*, situated between Cassiopeia and the Polar Star, has been formed by Le Monnieur out of some small and remote stars usually assigned to Cepheus and Cassiopea.

Boundaries and Contents.—N. by Ursa Major, W. by Cepheus, S. by Cassiopeia, and E. by Cameleopardalis. Right ascension 30°, declination 75° N. there are but 10 stars in this constellation and these are chiefly visible with a telescope.

(4.) CEPHEUS. This constellation perpetuates the memory of an ancient king of Ethiopia, or India, said to be the father of Andromeda, and husband of Cassiopeia. *Hyk* (a king) was the old Ethiopean name for this asterism, which the Arabians call *Keiphus* and *Cheis*, an evident corruption from the Greek.

Boundaries and Contents.—N. by the Pole of the world, E. by Cassiopeia, and Tarandus, S. by Lacerta and Cygnus, and W. by Draco. Right ascension 8°, and declination 60° N. It contains 35 stars *viz* three of the 3d magnitude, seven of the 4th magnitude.

(5.) DRACO, the *Dragon*, represents, according to the fables of some of the poets, the monster which watched the garden of Hesperides. Others maintain, that, in a war with the giants, this dragon was opposed to Minerva, who threw it round the axis of the earth, before it had time to unwind its contortions. Whoever attends to the situation of Draco, surrounding the Pole of the Ecliptic, will perceive that its tortuous folds are symbolical of the oblique course of stars. Draco also winds around the Pole of the world, as if to indicate in the symbolical language of Egyptian astronomy, the motion of the Pole of the Equator around the Pole of the Ecliptic, agreeably to the precession of the equinoxes and the moveable zediac of the stars. The Egyptian hieroglyphic that represented the heavens was a *serpent*, whose scales denoted the stars; and Draco was the *Polar Constellation*, when Caldea became the cradle of Astronomy. The Greeks therefore did not invent this constellation.

Boundaries and Contents.—N. by Cynosura and Cepheus, W. by Cygnus and Lyra, S. by Hercules, and E. by Ursa Major. There are 80 stars in this constellation *viz.* four of the 2d. magnitude, seven of the 3d magnitude, and ten of the 4th, &c.

(6.) CUSTOS MESSIUM. Monsieur de la Lande introduced this asterism in honour of the celebrated Astronomer *Messier*, and in allusion to his name it has been called, the *Guardian of the Harvests.*

Boundaries and Contents.—S. by Cassiopea, E. by Cepheus, N. by Tarandus, and W. by Camelopardalis. Right ascension 35°, and 68° declination N. The stars about ten in number, are mostly invisible to the naked eye.

(7.) ANDROMEDA, The story of Andromeda, from whom this constellation derives its name, is well known. She was the daughter of Cepheus, who abandoned her to a monster to be devoured, but she was rescued by Perseus. According to Grecian fable Andromeda was, after her death, made a constellation by Minerva.

Boundaries and Contents.—N. by Cassiopia E. by Perseus and Triangula, S. by Pisces, and W. by Pegasus and Lacerta: right ascension 15°, declination 35° N. There are 63 stars in this constellation, three of which are of the 2d magnitude, two of the 3d magnitude twelve of the 4th &c. The southern part of this constellation sets to New Brunswick, the northern does not; Andromeda is a parsnatellon to Cancer and Sagittarius.

(8.) TRIANGULA, the *Triangles.* The poets feign that Jupiter assigned the island of Sicily a place in the heavens, under the figure of a triangle. Hevelius has added to Jove's labour, by introducing another triangle in this asterism. The old triangle is also said to owe its origin to the Delta in Egypt. Both of these figures are easily distinguished by the stars on which they are formed, as well as by their position relatively to Andromeda, Cepheus, and Aries.

Boundaries and Contents.—N. by Andromeda, W. by Andromeda and Pisces, S. by Aries and E. by Musca and Perseus. There are 16 stars in this constellation, three of which are of the 4th magnitude, and the remainder of inferior magnitudes.

ACCOUNT OF THE GLOBE

CONTINUED.

OF PEAT, AND THE VARIOUS REMAINS FOUND IN IT

Peat bogs are formed in those situations which admit of vegetables decomposing without putrifiying. A vast extent of surface in Europe is covered with these mosses, and in Ireland they are said to extend over one-tenth of the whole island. One of them, which borders on the Shannon, is fifty miles in length, and from two to three in breadth.—Many of the peat bogs in the north of Europe occupy the place of immense forest of pine and oak, which have many of them disappeared within the historical era. "Such changes" observes Mr Lyell, in his able work on geology, "are brought about by the fall of trees, and the stagnation of water caused by their trunks and branches obstructing the free drainage of the atmospheric waters, and giving rise to a marsh. In a warm climate, such decayed timber would immediately be removed by insects, or by putrifaction; but in the cold temperature now prevailing in our latitudes, many examples are recorded of marshes originating in this source." A species of moss constitutes a considerable part of the peat found in marshes; and reeds, rushes, and other aquatic plants, can be traced. It would appear that many of the peat bogs are not more ancient than the age of Julius Cæsar. A great number of Roman coins, axes, arms and other utensils, have been found in British and French mosses: and several of their famous roads (for even in road-making the Romans built "not for a day, but for all time,") are now covered with peat several feet in thickness.

Peat possesses the remarkable quality of preserving animal substances for, it would appear, any length of time. In June 1747, the body of a female was discovered in a peat moore in the Isle of Axholm, in Lincolnshire. Her feet were furnished with antique sandals, and it has been supposed that she was an ancient Briton. Her nails, hair and skin, are described as having shown scarcely any symptoms of decay. In Ireland, a human body was dug up which was completely clothed with garments made of hair. The clothing of the inhabitants was manufactured from this material before the introduction of wool; but many ages have transpired since this took place, so that the body must have lain an immense time, yet it was perfectly fresh and unimpaired. Amongst a number of cases of this description which might be brought forward, we shall quote the following, as particularly interesting:—"At the battle of Solway, in the time of Henry the Eighth (1542), when the Scotch army, commanded by Oliver Sinclair, was routed, an unfortunate troop of horse driven by their fears, plunged into this morass (the Solway moss), which instantly closed upon them. The tale was traditional, but it is now authenticated, a man and horse in complete armour having been found by peat diggers in the place where it was always supposed the affair had happened. The Skeleton of each was well preserved and the different parts of the armour easily distinguished."

Besides the human body, there have been found in peat bogs bones of the stag, ox, hog horse, sheep and other animals that feed on herbs, and in Ireland and the Isle of Man skeletons of a gigantic elk. There are no remains, however, of animals such as the elephant and rhinoceros, which are only now to be found in warm countries, though, as we shall shortly see, they are quite common in mud and other rubbish. Upon this Mr Lyell remarks, "that they had ceased to live before the atmosphere of this part of the world acquired that cold and humid character which favours the growth of peat." This reasoning appears perfectly conclusive.

With regard to the question whence peat derives its antiseptic property, it has been conjectured by some, that the carbonic and gallic acids which issue from decayed wood, and also charred wood, which occurs in the lower parts of many peat mosses, may account for it. Vegetable gums and resins will also have an effect. Dr Macculloch states, in his work on geology, that the occurrence of tannin in peat is too casual, and its quantity too small, to produce effects of any importance.—The power of tannin to prevent decay is well known, and its presence in almost all trees, but particularly, and in considerable quantities, in the oak, is also well known. Now, as has been already observed, many peat beds occupy the sites of forests, especially those of *oak* and pine; so that tannin, in these at least, must have been present in great quantities. It may have entered into various combinations, but that it really is to be found in such peat bogs, and to a considerable extent; either in a simple or compound state, appears to us beyond a doubt.

DENSITY AND TEMPERATURE OF THE EARTH.

Various opinions have been entertained on the density of the earth; but its attraction is such, that it is now no longer disputed that the density must continue to increase, in a somewhat regular manner, from the surface downwards. The mean density of the earth is about five times greater than that of water.

Whether the temperature of our planet be entirely owing to solar heat or not—for philosophers still differ upon this point—there can be no doubt of its being very materially influenced thereby. We have only to recollect; that the difference of seasons and climates depends upon the more or less vertical descent of the sun's rays. Local circumstances, such as the proximity and size of mountains and seas, have certainly a very considerable influence in varying the temperature; but the principle seems incontestible, that, under equal circumstances, the temperature decreases from the tropics to the poles.

That the temperature of the earth is not the same at present as it was formerly, but has considerably decreased, is proved by the organic remains of vegetables and animals having been found in situations of latitude, where, from a want of congenial temperature, they could not now exist. Plants and animals, now peculiar to a tropical climate, have been discovered imbedded in various rocky formations in Scotland, England, and other places even farther north. These may be collected, will be described when we come to treat of the internal structure of the earth. Various causes, but none completely satisfactory, have been assigned for this change of temperature. By one party it is insisted upon, that the axis of the earth was by some cause or other shifted, and, consequently, that the poles were differently situated formerly from what they are at present. Sir J. F. W. Herschel supposes that a diminution of temperature might have been effected by a change in the ellipticity of the earth's orbit, which, though slowly, becomes gradually more circular. The theory of an internal heat has also been had recource to for the explanation of this point. From the earliest periods, philosophers have entertained the opinion that a central heat exists; but it was only at a comparatively recent period that direct experiments were made; in order to put the hypothesis to the test. The temperature of mines has particularly attracted attention: and, notwithstanding that the experiments made on them are liable to error from various causes, they would seem to indicate an increase of temperature from the surface downwards.

The temperature of springs has also been appealed to in support of this theory. Many of these, rising from considerable depths, have a heat independent of solar influence, which heat varies from the boiling point of water downwards. They occur in all situations, and sometimes far removed from volcanos.—In many parts of the Himalaya range they have been found, and Bakewell discovered them among the Alps. A great burst of thermal or hot springs takes place near the base of the Ozark mountains, in North America, and at a short distance from the Washita, from which they derive their names. They are about seventy in number, and occur in a ravine between two slate hills. The hot springs of Iceland are well known; those called the Geysers are the most remarkable. Sir J. Mackenzie witnessed an eruption of the great Geyser, which commenced with a noise resembling the distant discharge of a piece of ordnance. "The sound," says he, "was repeated irregularly and rapidly; and I had just given the alarm to my companions, who were at a little distance, when the water, after heaving several times, suddenly rose in a large column, accompanied by clouds of steam, from the middle of the basin to the height of ten or twelve feet. The column seemed as if it burst, and, sinking down, it produced a wave, which caused the water to overflow the basin in considerable quantity. After the first propulsion, the water was up again to the height of about fifteen feet.—There was now a succession of jets to the number of eighteen, none of which appeared to me to exceed fifty feet in height; they lasted about five minutes. Though the wind blew strongly, yet the clouds of vapour were so dense, that, after the first two jets, I could only see the highest part of the spray and some of it that was occasionally thrown out sideways." The water at last sunk into the pipe in the centre of the basin to the depth of ten feet. It rose again, gradually however, and was found to have a temperature of 209°, only three degrees below the boiling point. There can be no doubt that heat is communicated to these springs at some distance from the surface of the earth, but whether or not from the supposed great fountain of central heat, is yet uncertain.

It has also been attempted to account for the superior temperature of the earth in remote ages of its history, by supposing that volcanic influence was formerly more active, and that, consequently, a more copious communication of internal heat to the surface would take place. But we have no proof that an activity in volcanos, sufficient to account for the phenomena, did ever really exist.

Mr Lyell has examined the subject with his usual philosophical acuteness, and his opinion is, that such a change in temperature may be accounted for according to the present order of nature. The degradation of old, and the elevation of new continents, is a demonstrated fact; and the influence of such a change in the relative position of land and water upon climate, is unquestionable, from what we know of it by actual observation.

If we compare the two continents of Europe and North America, we shall find that places situated in the same latitudes differ very considerably in temperature; sometimes to the amount of seventeen degrees of Fahrenheit's thermometer. The principal cause of the difference observed in corresponding latitudes of North America and Europe, is, in the first place, the connexion of the former country with the polar circle, by a tract of land of considerable height; and, in the second place, in the separation of Europe from the arctic circle by an ocean. All large bodies of water have a tendency to preserve an equilibrinm of temperature, which is communicated to the contiguous land; and hence the climate of Islands and coasts differs very materially from that of the interior of continents. Mountains which rise into the colder regions attract and congeal vapour, which communicates its cold to the adjoining country. Greenland, stretching northward to the 82d degree of latitude, experiences under the 60th parallel a more rigorous climate than Lapland under the 72d parallel.

Upon this subject Mr Lyell observes—"If for example, all other circumstances being the same, the land is at one time more divided into islands than at another, a greater uniformity of climate might be produced, the mean temperature remaining unaltered; or if, at another era, there were mountains higher than the Himalaya, these, when placed in high latitude, would cause a greater excess of cold. So if we suppose that at certain periods no chain of hills in the world rose beyond the height of 10,000 feet, a greater heat might then have prevailed than is compatible with the existence of mountains thrice that elevation."

To the Editor of the Portland Eastern Argus.—

ROAD BETWEEN QUEBEC AND AUGUSTA (MAINE.)

MR. EDITOR.—This road is now beginning to be travelled in the summer time, and with a little improvement would afford a communication by Post and Stage between Quebec and Augusta in two days, and Boston and Quebec in four.

The Commissioners appointed under an act of the Provincial Parliament of Lower Canada to visit the United States, to obtain information relating to the Penitentiaries, have lately come through this road in wheel carriages. They were 5 days between Quebec and Augusta, only fifty-four hours of which were spent in travelling.

After crossing from Quebec to Point Levi, the road is by St. Henry across the Etchemin to the Chaudiere at St. Mary's, along the east bank of the Chaudiere, to the River-du-Loup, where it falls into the Chaudiere, thence along the east bank of that river, to David Bell's, about 75 miles from Quebec; thence to the boundary, 18 miles; thence across the west branch of the Penobscot by the Bald Mountain, and across the Moose River to the Forks of the Kennebec to Augusta, 87 miles; in all 212.

From Quebec to the Boundary of Maine,	93
Thence to Augusta	119
Thence to Portland,	60
Thence to Boston by land,	110

From Skowhegan Falls, 180 miles on this route from Quebec, Stages run daily, and from Portland Steam boats run four times a week to Boston, and make the passage in 12 hours.

An United States mail is sent once a week to Hilton's, near the boundary. The British mail comes only once a week to St. Mary's, 30 miles from Quebec.

About nine miles of the road on the Canada side, the nearest to the boundary is bad. The worst road is through the million acres of Bingham's purchase, for about thirty miles; then below Capt. Jackman's, about 15 miles without a house. The road above, through the State lands, is very good, but the tract already mentioned renders the whole expences of the State road nearly useless.

The land on the road, both on the Canada and Maine side, is fit for settlement, and to an immense extent, still in a state of wilderness.—The Maine lands towards the Canada line are better than those lower down.—On the Canada side, particularly on the Chaudiere between the River-du-Loup and Lake Megantic, the lands are excellent. The whole tract, however, as far as the eye can reach, in every direction, from the highest grounds on the River-du-Loup, are fit for settlement, well timbered and wattered, and may be had cheap—for about three dollars for ninety acres, per annum, in the Seigniories, and half a dollar in free and common soccage in the Townships.

Mill sites, and pine and spruce timber are in great abundance; some Americans are now erecting saw mills on the River-du-Loup, and have hauled logs to float down the Chaudiere to Quebec. The road will probably soon be opened from near Bell's, in Jersey, to the adjacent settlings in Cranborne and Frampton, which will shorten the distance to Quebec, about ten miles, and take it through a more level country.

SUBSTANCES USED FOR HUMAN FOOD.

There are several sorts of the Rheubarb plant: There is the *true* or *medicinal* Rheubarb; the roots of which are much used in medicine.

But there are other sorts of Rheubarb used as articles of human sustenance. One kind was first brought into Europe in 1610, and has been since introduced into N. America. The stalks of the leaves, when young, contain a very agreeable acid; and are used for pies and tarts. Another sort was not known, even in England, till about 50 years ago. This is remarkable for the size of its leaves; some of them being more than 20 feet in circumference, without including the foot stalk; and nearly four feet in diameter. One leaf, being cut, has been known to weigh, along with its foot-stalk, four pounds, this species is the best; though either kind is easily cultivated.

KALE or COLEWORT has some resemblance in its nature and character to cabbage; but is not much used for food, in this country.—The plants, when vegetating in a rich soil, grow vigorously, and attain to large dimentions; but, as it is in many other instances, the plants of moderate size are the best for culinary purposes.

It is rarely necessary—in a country of such abundance as the United States, to resort to the cultivation of Rheubarb for human support. It were far better to use the soil for potatoes, or better still, for grain. There is little reason or good sense in cultivating such vegetables as rheubarb or kale, or even cabbage; as long as our fields, with little labour, may be variety, abound with wheat, rye, Indian corn, gardens with potatoes, turnips, and onions, and carrots; and our orchards and hops and cherries, peaches, apricots and plumbs;—and while in addition to all this, our ships bring us, every hour, the rich and wholesome and nutricious fruits and vegetables of other climes. We are bound to select our food within a more reasonable range than one which will include plants containing little nutriment, and much that is known to be innutricious and indigestible. With raw fruits, course and stringy leaves, pods, and husks of vegetables, and succulent grasses. That these things may afford some nutriment, when well cooked, we do not deny; but they are in no respect so useful as the most doubtful articles of the foregoing list. And why use the worst, in preference to the better?

As to taste, this is chiefly a thing of habit. Every individual who has made the experiment knows that custom soon renders food, habits, manners &c. agreeable, which were at first indifferent, if not disgusting. The great point is to fix on that food and drink which, after consulting our own experience, along with the testimony of mankind, appears to be best for us. Habit will very soon attach us to it: and the more strongly, in proportion as the course is more rational.

Saint Andrews Standard.

SATURDAY, 11th OCT. 1834.

We received Demerara papers to the 17th Sept. just as our last number was struck off, and now insert a few extracts in the present publication.

The Barbados *per capita* petition was rejected by the House of Commons, and has given great satisfaction to the other islands which contended for the fairer principle of ad-valorem compensation.

A Temperance Society is about to be established in British Guiana under the designation of a Society for promoting sobriety industry, and moral habits, among the poorer classes of the population of Georgetown.

Since the publication of our last number, no local event worth recording has come to our knowledge. The Colony has been perfectly quiet, and the apprenticed labourers are, generally speaking, acting up to the promise, which a large number of them made his Excellency in our presence, and are, indeed, furnishing an example worth imitating by the negroes of the Colonies.—*Barbados Globe Sept. 4.*

We observe that the Barbados petition for a *per capita* distribution of the Compensation Fund, was presented in the House of Commons, on the 4th of August, by Sir RICHARD VYVYAN, and was disposed of without receiving any support, whatever, from any quarter of the House. We trust that the reception, in such a manner, of the Barbados petition, will prevent any further attempts in opposition to the just principle laid down by the Slavery Abolition Bill of an *ad-valorem* Compensation.

We have the satisfaction of learning by our Island files received per Mail boat, that the neighbouring Colonies are quietly settling down to the new system. In Antigua where unqualified emancipation had been granted by the local Legislature, many of the labourers were standing out for higher wages than the land owners considered they were justified in offering; but it was expected that the difference would shortly be adjusted.

Temperance Warning.—A Blacksmith, of Rochedale in Lancashire, of the name of Lesley, and his wife were reputable and orderly people, in very comfortable circumstances, and members in communion with the church. Lesley was quite a temperate man and an advocate for temperance, but thought there was no harm in keeping Wine, Gin or Brandy in his house to regale a friend with, or occasionally to partake of himself. His only son, a child of 8 years, was regularly sent to the Sunday School, but his parents finding that on one occasion he had absented himself reprimanded him severely and locked him up in a bed chamber. In about two hours afterwards they went to relieve him and discovered him lying on the bed insensible. He had found a bottle of gin in the room, and drank about a gill of it. A Surgeon was sent for but the boy died immediately. What must be the sufferings of these poor mistaken parents! In a frenzied determination of purpose Lesley threw every jar and bottle of liquor into the sink, and never was known to taste wine or ardent spirits afterwards. This is the true way He who retains a glass of wine within his house, entertains a lurking enemy, that sooner or later will certainly betray him; but he who discards exhilerating liquors altogether, stands safely on the Citadel and fears no overthrow.

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