SAINT ANDREWS

STANDARD,

NEW-BRUNSWICK.

Volume 2, Number 7. QUID VERUM ATQUE DECENS CURO ET ROGO. *Thursday, November 6, 1834.*

WEEKLY ALMANAC.

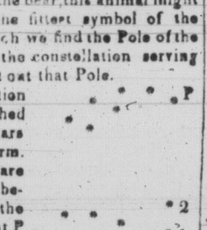
1834 NOV 30	SUN. rises h. m.	sets. h. m.	Moon sets. h. m.	H.W. even. h. m.	Watch slow. m. s.
Thurs. 6	7 6	4 54	9 30	2 40	16 12
Friday. 7	7 7	4 53	10 35	3 40	16 9
Satur. 8	7 8	4 52	11 40	4 50	16 5
Sunday 9	7 9	4 51	morn.	6 0	16 0
Monday. 10	7 10	4 50	0 45	7 5	15 55
Tuesday 11	7 11	4 49	1 48	8 0	15 48
Wednes. 12	7 12	4 48	2 50	8 45	15 40

Sun's Declination,	6th	15° 59' 50"	South.
Do. Right Ascension,	"	14h 45m 18s	Ap. N.
Venus— Sets,	"	6h 41m	— P. M.
Mars— Rises	"	8h 28m	— P. M.
Jupiter " —	"	5h 44m	— P. M.
Georgium—South	"	6h 39m	— P. M.
Pleiades—rise	"	5h 0m	— P. M.
South —	"	0h 45m	— A. M.
Moon 1st qr.	8th	1h 50m	— A. M.

PRACTICAL ASTRONOMY.

(11.) Ursa Major, the *Great Bear*, is said to be Calisto an attendant of Diana, the goddess of hunting. Calisto was changed into a bear by Juno, and placed in the heavens by Jupiter. Another account, however, makes Ursa Major to be Arcas, the son of Jupiter and Calisto. Every one knows the story of Lycaon, king of Arcadia, being changed into a wolf, for killing his grandson Arcas, and setting him before Jupiter to try the divinity of the father of gods and king of men. The ancients, it is said, represented the constellations of the Bears, each, under the form of a waggon, drawn by a team of horses. Ursa Major is well known to the country people at this day by the title of *Charles's Wain*: in some places it is called the Plough, an agricultural machine, which it certainly resembles.

In the oldest planispheres of the Egyptians, we find the celestial Bears, but no trace of a waggon. Ursa Major occupied the line of the summer solstice, when astronomy was first cultivated in the East. Some of the monuments of antiquity carry back the origin of the science to a period so remote as to place that solstice in Virgo. The Wain then might be the symbol of the husbandman's reward,—the patriarchal harvest home. The ancient zodiacs of the Egyptians prove, that the Greeks generally copied their astronomical symbols from the Egyptians, but that those symbols were invented at a very early period of time. The Greeks on receiving their astronomy from the Egyptians, changed part of the emblems that had already been allotted to the constellations, but some of them were as certainly preserved. Of these the Bear is one. And were it not a mere repetition of what I have mentioned elsewhere, I might assign for the introduction of this animal among the constellations, reasons similar to those which have accounted for the appearance of Leo among the signs of the zodiac.—After all as the polar regions of the earth are the noted haunts of the bear, this animal might thence be deemed the fittest symbol of the constellation in which we find the Pole of the World, and also of the constellation serving as an index to point out that Pole.



This constellation is easily distinguished by seven brilliant stars in the annexed form. The stars 1 and 2, are called the *Pointers*, because they direct the eye to a bright star at P called *Alruccabah*, or the *Polar Star*. This diagram represents the Great Bear when under the Pole. The seven stars in the Upper figure of the diagram, represent *Ursa Minor*.

This constellation contains 87 stars, of which one is of the 1st magnitude, four are of the 2d. magnitude, three of the 3d. ten of the 5th. &c. And as this constellation never sets to New Brunswick, except a part of the animal's right hinder leg, it has always a very splendid appearance in our northern latitudes.

Dubhe No 2 has 10h 53m 25s Right ascension, and 62° 38' 30" North declination. Meridian altitude above the Pole 72° 26' 30" under the pole 17° 43' 30". It culminates or comes to the meridian above the Pole on the 15th of every month in the year, at St. Andrews as in the following table:—

	Ho. Min.			Ho. Min.	
Jan. 5	6	A. M.	July 5	16	P. M.
Feb. 0	58	A. M.	Aug 1	15	P. M.
Mar. 11	13	P. M.	Sep. 11	22	A. M.
April 9	21	P. M.	Oct. 9	33	A. M.
May 7	27	P. M.	Nov. 7	32	A. M.
June 5	20	P. M.	Dec. 5	23	A. M.

By adding 12 hours to the times given in this Table, we determine the times when *Dubhe* is on the meridian below the Pole.

(12.) Bootes and Mons Maenalus.—Grecian fable makes Bootes to be Arcas, a son of Jupiter and Calisto. Juno, who was jealous of Jupiter changed Calisto into a bear; and she was near being killed by her son Arcas in hunting. Jupiter to prevent further mischief from huntsmen, made Calisto the constellation Ursa Major, and on the death of Arcas transferred him to heaven, with the title and office of bear guard. Thus Aratus sings:

Behind, and seeming to urge on the Bear,
Arctophylax, on earth Bootes named,
Sheds o'er the *arctic car* his silver light.

Hence it is that Bootes appears in a walking posture, grasping in his right hand a spear, and having his left extended upwards, holding the leash of the dogs Asterion and Chara, which seem to be barking at the Great Bear. By some, however, he is called the Waggoner; and hence the allusion of Thompson.

Wide o'er the spacious regions of the North,
Bootes urges on his *tardy wain*.——

Mons Maenalus, a mountain in Arcadia, sacred to Pan, and frequented by shepherds, received its name from Maenalus, a son of Lycaon.

Virgil looks upon Bootes to be the same with Erichthonius, who first invented coaches, and the manner of using them.

Primus Erichthonius currus et quatuor ausus
Jungere equos, rapidusque rotis insistere victor.

This, however, confounds him with Auriga. I shall therefore offer another account of the origin of this constellation; in which if any obscurity should arise from an uncommon word, it may be surmounted by the reader's research; whereas the ambiguity of the poets, by misleading us ere we are aware, confounds our notion of the subject altogether.

I go back to the Greeks' instructors for the origin of this constellation. Bootes is a paranatellon of Virgo. The splendid star Arcturus, is frequently named in Holy Writ, particularly in the Book of Job. This star is placed near Virgo, in a line with Spica, on the meridian of the Ecliptic. The ancient Greeks called this constellation Lycaon, a *wolf*. The Hebrews call it *Caleb Anubach*, "the Barking dog," in allusion to *Latrator Anubis*; and the Egyptians (as appears from Kircher's planisphere) made Anubis "the slayer of the wolf," which constellation we now combine with that of Centaurus. The Latins, among other names called Bootes *Canis*. Going back to the time when Taurus opened the year, and when Virgo was the fifth of the zodiacal signs, we shall find the brilliant star Arcturus so remarkable for its red appearance corresponding with the time of year remarkable for its heat. Pythagoras, who introduced the true system of the universe into Greece received it from Oenuphis, a priest of On, in Egypt. And this college of the priesthood was the noblest of the east, in cultivating the studies of philosophy and astronomy. Among the high honors which Pharaoh conferred on Joseph, he very wisely gave him in marriage "a daughter of the Priest of On."—Joseph is said to have died 1635 years B. C. the supposed era of the history of the Book of Job, is fixed 1513 years B. C. These facts are 900 years prior to the age of Pythagoras. And it is 4000 years since the Bull ceased to be the leader of the celestial host. The Greeks cannot then claim the invention of the constellation Bootes.

On Sunday last the 2d inst. Arcturus and the sun had the same right ascension and consequently came to the meridian at the same time; but the sun having 15° south declination and the star 20° north, the star rose 2h 20m before the sun, and set as much later, consequently we can only see Arcturus at present for a couple of hours after sunset. It is a bright sparkling star and culminates to St. Andrews as follows:—

	Ho. Min.			Ho. Min.	
Jan.	6 40	A. M.	July	6 50	P. M.
Feb.	4 20	A. M.	Aug.	4 50	P. M.
Mar.	2 48	A. M.	Sep.	2 57	P. M.
Apr.	0 56	A. M.	Oct.	1 10	P. M.
May	11 02	P. M.	Nov.	11 07	A. M.
June	8 55	P. M.	Dec.	8 55	A. M.

ACCOUNT OF THE GLOBE

Continued.

I. Modern Group.

This name distinguishes the detritus, or waste of various kinds produced by existing causes, such as have already been described under the head "Alternations of the surface." It likewise includes the coral reefs, submarine forests, and peat bogs, which have also been noticed.

The organic remains of this group, of course, for the most part consist of existing animals, and are hence of not so interesting a character. Those, however, which are most important, belonging either to extinct animals, or those which are at present found on the globe, will be noticed in the next group.

2. Erratic or Transported Block Group.

This group, says De la Beche, is merely one of convenience, formed for the purpose of presenting certain phenomena to the reader's attention, which, in the present state of science, could not so easily be done under any other head. It comprises all those gravels, sands, blocks of rocks, and other mineral substances which have been scattered over hills, plains, and on the bottoms of valleys, and which, though often referred to one epoch, may belong to several.

In various parts of Britain, and also of the Continent, great quantities of rocks, sometimes of considerable size, are to be found strewed upon the sides of mountains, and in hollows, which, as far as can be at present ascertained, must have been conveyed there by the influence of "moving waters." The fact of their having been transported from a great distance, is proved by their differing from any rocks in the neighbourhood, and their identity with others of the same formation far separated from them. Between the rivers Thames and Tweed there have been peebles, and even blocks of rock, found, which, according to their mineralogical character, must have been transported from Norway.—From these, and various other circumstances which might be mentioned, it seems probable that a body of water has proceeded from north to south over the British Isles, and that by this means these fragments of mountains have been conveyed across seas. Whether this current may correspond with the Mosaic deluge or not, is still a matter of great uncertainty. Indeed, the facts are not sufficiently numerous to justify us in drawing any conclusion on this difficult point. It is very dangerous to impress the Bible into the service of philosophy; it was not given for any such a purpose, and religion has almost invariably suffered by the connexion. Many cases in proof of this might be enumerated, but that of "the starry Galileo" stands conspicuous. He maintained that the earth revolved round the sun, and for this the holy see of Rome imprisoned him, because it was in opposition to certain expressions in Scripture, which they had an over-scrupulous desire to preserve intact. The fact is so well authenticated now, that, were any clerical personage to maintain the contrary before the same see, it would consider him as hopelessly unqualified for a mitre.

The remains of animals discovered in the gravels, sands, clays and other rubbish, referable to a passage of water over the land, and hence called in scientific works *diluvial* are very numerous and interesting. They consist not only of animals which at present exist either in the same country where they were found, or in tropical climates, but also of those which differ altogether from any living thing that moves upon the face of the earth at present. A description of them all cannot be expected here: indeed, a full account of those which were found in the Kirkdale cavern, in Yorkshire, would alone more than occupy the whole of this journal. This cavern was discovered by cutting back a quarry in 1821, and was shortly afterwards visited by Professor Buckland, to whom the world is indebted for a minute and able description of it. Its greatest length is about 245 feet, and its height so inconsiderable, that only in a few places will it permit of a man standing upright. The following are the animal remains found in it: Elephant, rhinoceros, hippopotamous, hyæna, tigor, bear, horse, wolf, fox, weasel, ox, three species of deer, hare, rabit, water-cat and mouse. Of birds, there were the raven, pigeon lark, a small species of duck, and a bird about the side of a thrush. It is the opinion of Professor Buckland, from the manner in which the remains were strewed about the cavern, and the great portion of hyæna teeth over those of other animals, as well as the way in which they were gnawed and fractured, that this was a den of hyænas for a long succession of years. It may be inferred from appearances, that they brought in as prey those animals whose remains are now intermixed with their own, and that this state of things was put a stop to by an eruption of muddy water into the cave; for the latter is covered with a stratum of mud, and in it the bones were found.

At other places in England various interesting remains have been dug up, such as those of the mammoth and bison. Amongst the numerous animals found, which differ in some part of their structure from any living thing that now exists, there are several of immense size. The mammoth, or fossil elephant, demands particular attention, as the entire body of one was discovered in an iceberg, near the embouchure of the river Lena, in Siberia. It was a good deal multilated by bears; but from what remained of its flesh and hair, and from its physiological structure philosophers were enabled to determine that the animal had belonged to a race of elephants inhabiting cold regions, but which is now extinct. The remains of great numbers of the same species have been found in the same country, and in other nothern regions. Its height appears to have been from ten to twelve feet, and its length from sixteen to twenty. Its tusks are larger than those of the common elephant; one was discovered which measured fourteen feet in length. In every respect the extinct species appears to have been stronger, larger and clumsier, than any which is now to be met with on the globe.

The megatherium is another gigantic remnant of the past. It is found in few places, but four nearly complete skeletons have been collected. In height it would appear to have been about seven feet, and in length about seventeen. In structure it is between the ant-eater and the sloth. Its bones are of great size and strength; and from some parts, of its conformation, it would appear to have been a climbing animal. Its neck is long, and, Cuvier is of opinion that it had a trunk. It is furnished with that which no other quadruped has—*a chin*. There are other animals of nearly similar dimensions, such as the mastodon and megalonix, as well as great numbers of smaller size, but our limits will not permit of us describing them.

Besides the Kirkdale cavern, above noticed many others of a similar description have been discoversd; and the ascertaining the relative ages of these accumulations of animal remains, is at present occupying the attention of the geologists. This is a question of vast moment; for should the remains of man be discovered in them—which has never yet occurred—and if the mouths of these cavers be closed with detritus and fragments of rock brought from a distance, such transport not being due to actual causes, and there being no other communication between the outside and the place where the bestial and human bones are entombed, there would appear to be no doubt that man was a contemporary with the extinct species of elephants rhinoceroses, hyænas, and bears. Upon this interesting subject, Mr de la Beche has the following remarks:—

"If the co-existence of man and these extinct animals should ever be satisfactorily proved, it would become a curious question whether his so found remains are those of an extinct species or undistinguishable, like the bones of the horse, from these which now exist. It is a singular circumstance, and one which demands attention, notwithstanding the ingenious remarks that have been made on the subject, that the remains of the monkey tribe should not yet have been discovered among the undisturbed bones and other substances in caves, or in the old transported gravel, or *diluvium* of Professor Buckland.—It has been objected, to a remark that man and the monkey tribe were created about the same period, and were of comparatively modern appearance on the earth's surface, that the countries have not been geologically well examined where the monkey rave now exists. This is perfectly true. But is there any reason why monkeys should not have lived in climates and in situations where elephants, rhinoceroses, tigers, and hyænas abound, which are those where monkeys are now found. To the objection, that if they did then exist, their bones would not be discovered, as their activity would secure them from falling a prey to hyænas and other predaceous animals, it may be opposed, that they must have died like other animals, and that their dead carcasses must have fallen to the ground, and that they were quite as likely to have become the food of less nimble creatures as the birds found in the cavern of Kirkdale."

Supracretaceous or Group above Chalk.

This group is identical with tertiary rocks of most English authors. It consists of a number of substances, such as sands, marls, plastic clays, &c., in which there is a great abundance of organic remains. In France, M M. Cuvier and Brongniart first pointed out the importance of these rocks, and, during their observations on the beds around Paris, they discovered that the organic remains were not all marine, but that a number of fresh water shells, and terestial animals of a description now unknown, were by no means uncommon. They also found that these remains were deposited in beds, each holding a certain place in a certain series. In England Mr. William Smith was employed upon more ancient rocks, and was in the habit of identifying certain formations or beds contained the same organic remains embedded in them. These facts instantly led to a generalization; and it was a theory received for a long time, that particular formations or beds contained the same organic remains which were not to be found in the rocks either above or beneath. The opinion, however, gave way before after observations; and it is now generally admitted, that certain shells are not peculiar to certain strata, but that they are, nevertheless, to be found in far greater abundance there than in any other place. It would also appear to follow, as a necessary consequence, that the older the series, the more, the newer the series, the less, the uniformity. However, this is merely a conjecture, and the truth of it can only be determined by an accurate examination of rocks in distant parts of the world.

The varieties of the supracretaceous group and the theories which have been advanced to account for their formation, it will be impossible to give here. A description of the Paris rocks, and also some of those in England, with the organic remains peculiar to them, will suffice to convey a pretty accurate idea of this part of our subject. The rocks of the Paris basin have indeed long been considered the most perfect specimen of the kind to be found; and the following is their classification according to the illustrious philosophers, whose labour has been so essential to the advancement of the science, M M. Cuvier and Brongniart—(order ascending):—

1. Fresh-water formation,—Plastic clay, Lignite, and First sandstone.
2. First marine formation,—Calcaire grossier.
3. Second fresh-water formation,—Siliceous, limestone, Gypsum, with bones of animals, Fresh-water marls.
4. Second marine formation,—Gypseous marine marls, Upper marine sands and sandstones, Upper marine marls and limestone.
5. Third fresh-water formation,—Millstone without shells, Shelly millstone, and Upper fresh water marls.

Plastic Clay.—This substance has been so named from its easily receiving and preserving the forms given to it, and, from possessing this property, it is used in the potteries. It rests upon a surface of chalk, which is very irregular, and furrowed out so as to present an alternation of hills and vallies. This clay is of various colours; and above it, and separated by a layer of sand, there frequently occurs another bed of clay, which scarcely can be called plastic. It is black, sandy, and sometimes contains organic remains. In this deposit, considered as a mass, it is stated that organic remains do not occur in the lower parts. In the central portion, fresh-water animals commonly occur, and in the upper part there is a mixture, sometimes an alternation, of marine and fresh-water remains.

To be Continued.

Royal favourites are often obliged to carry their complaisance further than they meant. They live for their master's pleasure, and they die for his convenience.

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.

TEMPERANCE.

Nova Scotia.

Meeting of Delegates.—On Thursday last at 11 o'clock, the Delegates from various Temperance Societies waited upon His Excellency the Lieut. Governor at Government House where they were most graciously received, and an address was read by J. Leander Starr, Esq. President of the Convention, and presented to His Excellency as follows:

To His Excellency Major General Sir Colin Campbell, Knight Commander of the most honourable Military Order of the Bath, Lieutenant Governor and Commander in Chief in and over His Majesty's Province of Nova Scotia and its dependencies &c. &c. &c.

The humble address of the undersigned Delegates, representing various Temperance Societies established throughout the Province of Nova Scotia, in general Convention now met at Halifax.

Most respectfully showeth: that we represent fourteen thousand of His Majesty's loyal subjects in this Province, and are convened this day for the purpose of concentrating our influence upon the magnanimous enterprize of Temperance Reform—that we feel sensibly the need of the countenance of the exalted and influential in order to succeed in our important and arduous task.—That we hail with emotions of peculiar gratitude and satisfaction the advancement to the Government of this Colony of a personage of your Excellency's character destinguished alike by the highest attributes of Military renown, and for the benevolent efforts which have already marked your Excellency's conduct since your arrival amongst us.

We therefore most respectfully beg to solicit the co-operation of your Excellency in this cause which has enlisted among its supporters in Great Britain men eminently distinguished by the highest rank and talents, and where the benefits of its effects have been so irrefragably tested.

Were it necessary to urge any thing further upon your Excellency's attention, we might advert to the direful effects of intemperance so fearfully developed during the prevalance of Cholera in this town, and the universally acknowledged fact that its influence is strong in perpetuating and cherishing the existence of that dreadful scourge wherever it has once appeared.

We have the honor to subscribe ourselves (in behalf of the Societies we respectively represent). Your Excellency's most obedient and humble Servants.

J. Leander Starr, President.
J. Waddell } Committe on behalf
R. Knight } of the Delegates.
Halifax, N. S. 16th October, 1834.

His Excellency then returned the following very gratifying reply, and afterwards in the most frank and condescending manner conversed freely with the different Delegates upon the importance of the cause they were engaged in.

Halifax, 16th October, 1834.

Gentlemen,

I have received with much satisfaction the address from the Delegates representing the various Temperance Societies established throughout this Province.

I should consider myself unworthy the situation which his Majesty has been graciously pleased to appoint me to fill, if I did not by every means in my power give my support and countenance in forwarding the laudable object of the Societies which you represent.

I have long seen the baneful consequences of intemperance, and since my arrival in this Province the effects of it among the lower classes have in many instances proved fatal.

I have reason to believe that many individuals indulged in Intemperance (who were not before addicted to that vice) under the mistaken idea that it would guard them against the Epidemic which has proved so destructive among us, but it is to be hoped that those who have escaped will now be convinced that Temperance is the best and only antidote against all diseases, as well as most irregularities. Gentlemen, with your praise-worthy exertions and example in enforcing Temperance and cleanliness in your different situations, and amongst those whom you employ, I trust that with the blessing of God this Province may not again be visited by the Epidemic which has proved so destructive, but should it unfortunately be so, the measures which you are now adopting and recommending will in a great measure tend to mitigate the disease, and afford the pleasing consolation that the Temperance Societies in this Province have been the means of inducing many individuals to support their families by industry, and frugality, instead of squandering their earnings in dissipation and irregularities.

Gentlemen, you may always rely upon my best exertions and giving every support to the Societies from which you are delegated.

I have the honor to be, Gentlemen, your most obedient Servant.

C. Campbell, Lieut. Governor.

To the Delegates &c.